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Master's Thesis  
Academic Year 2016

Memosong: A Music Website Which Retrieves  
Individual's Memories Through Music and  
Stories.

Graduate School of Media Design,  
Keio University

Cao Shiyuan

A Master's Thesis  
submitted to Graduate School of Media Design, Keio University  
in partial fulfillment of the requirements for the degree of  
MASTER of Media Design

Cao Shiyuan

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Abstract of Master's Thesis of Academic Year 2016

## Memosong: A Music Website Which Retrieves Individual's Memories Through Music and Stories.

Category: Design

### Summary

*Memosong* retrieves individual's memories through music and stories. Targeting on people among 20s, *Memosong* is a website which allows music lovers to post and exchange their memories. Using storytelling as a way to communicate, it hopes to address personal values and enhance people's emotion connections with music. The goal of *Memosong* is to encourage content creators and music industry to bring valuable musical experience to people.

The design of *Memosong* follows Design Thinking method. Two field researches were conducted in order to understand people's subconscious behaviors on treating memories. One is towards content provider- a special second-hand goods store *Pass the Baton* and another one was an interview with a young music lover. The concept of *Memosong* was made according to the mental models got from field researches. Finally a working website prototype was successfully according to the concept made and be used in the evaluation session.

### Keywords:

Music, Social Network, Storytelling, Memory, Emotion, Website

Graduate School of Media Design, Keio University

Cao Shiyuan



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# Chapter 1

## Introduction

### 1.1 Background and purpose

*Memosong* retrieves individual's memories through music and stories . *Memosong* is a website that collaborates with music platform *Youtube* <sup>1</sup>. It offers a social network for music lovers to easily share and exchange their precious memories that evoked by music. Using "storytelling" as a way to communicate, it hopes to address personal values and enhance emotion connections with music. The goal of *Memosong* is to encourage content creators and music industry to bring valuable musical experience to people. For this purpose , understanding towards relationship between music and emotional memories, existed music platforms, storytelling are necessary. Based on these understanding , fieldwork will be focused on the behaviors of content providers and individuals on preserving memories in daily life.

It is almost universal consensus that music is important that work as a crucial media brings enriching emotional rewards to people.<sup>2</sup>. In people's daily life, music can be used for various purpose. Personally, music is used as a technique for mood management ,a medium helping to deal with internalizing problems, such as depression and anxiety or to cope with feelings of alienation and anger. Music its lyrics and artists, also provide models for living, making music culture an important source for the construction of identity. For socializing, music is connected with people's daily life. A mass of cross-cultural and cross-history evidence shows that within human culture any ceremony or festivity is inconceivable without music, be it solemn, energizing, comforting , or simply ,a hard to resist invitation to sing or dance.<sup>3</sup>

Possibly due to the emotions elicited by music, some music could be remembered even years later. As music evokes strong emotions, emotions enhance memory. Music could be involved in forming memories, either about pieces of music or about episodes and information associated with particular music<sup>4</sup>. With regard



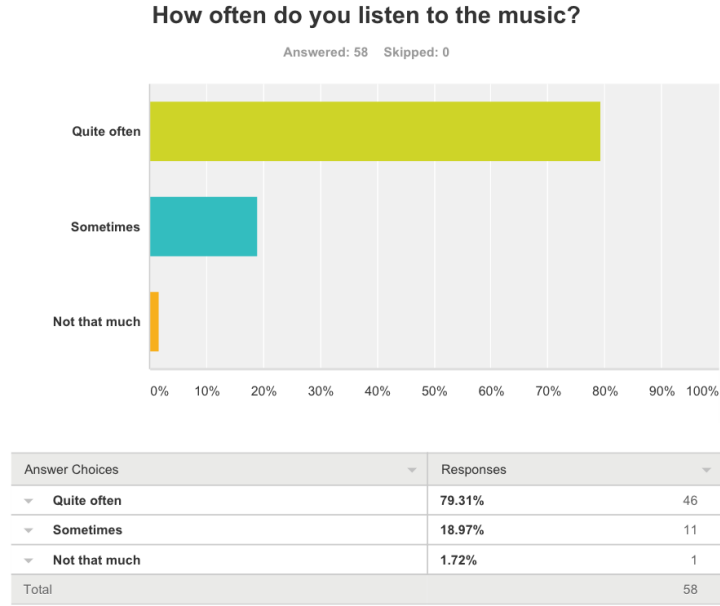


Figure 1.1: Question One

to autobiographical events, the perception of music associated with that even can evoke the emotional memory representation of that event.<sup>5</sup> As the past events contains emotional value for people, the memories related to the music may soothing for one person may remind of the happiness or excitement in the past .This function of music has been applied in the field of medicine with some patients with Alzheimers disease.

In order to have a more accurate understanding on how music is important for most of the people, a questionnaire was conducted towards 58 interviewees. Questions and results are shown below.

The first question : How often do people listen to the music. As the graph shows, for most of the people, they listen to music very often.

The second question is about if the interviewees have memories related to the music. More than 2/3 interviewee answered that they had many or some memories related to the music.

While considering whether the interviewees want to share those memories or not, the interviewees showed ambiguous attitude, more than half of the interviewees answered "Maybe" as they don't have a appropriate place to share memories , and only want to share memories to particular group of person.

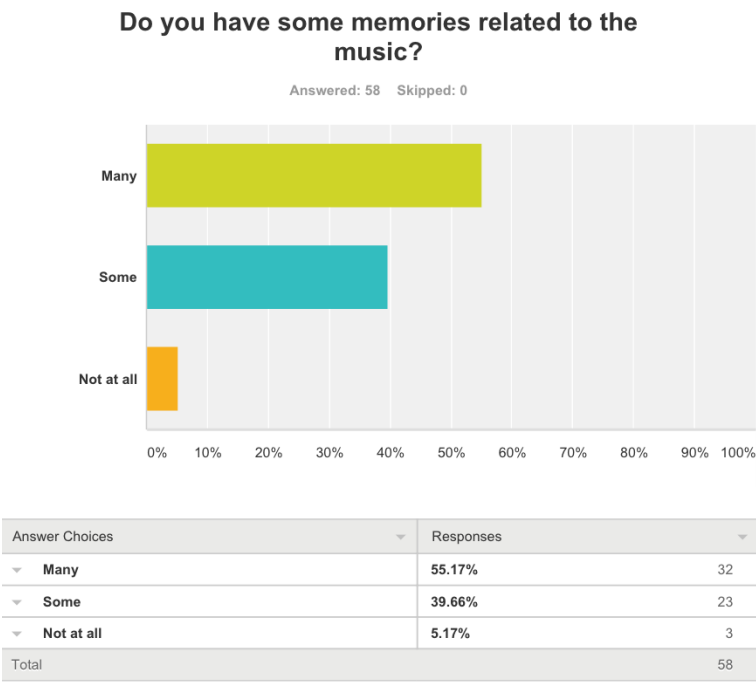


Figure 1.2: Question Two

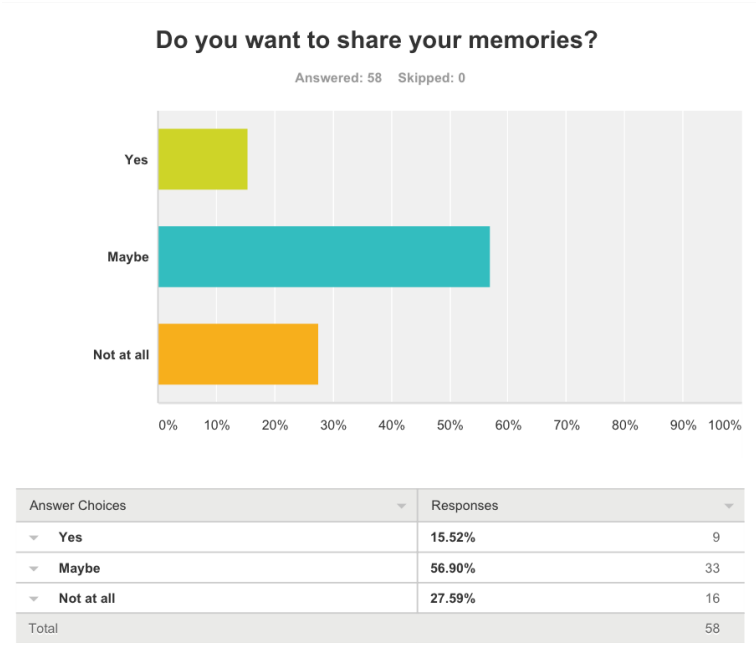


Figure 1.3: Question Three

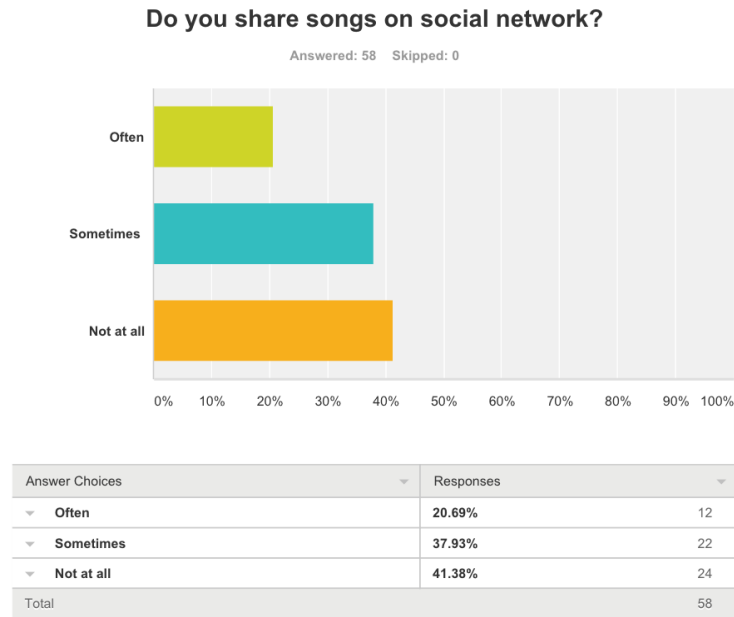


Figure 1.4: Question Four

As social network became the main platform for people to connect with each other, the interviewer asked the interviewees about how much they would like to share those memories on social network, the interviewees shows negative attitude about sharing songs and memories on social network. The main reasons are these two:

1. Social network are filled with various kind of information, The music is not the only media to be focused on. Sharing songs on the social network means having risk on memories being ignored by friends, which decrease the motivation on sharing this behaviour.

2. Some memories are private and could be shared to only specific group of people. Social networks are not the ideal place to share those private thought to,

Therefore due to the findings got from the questionnaire session, there are few music media could fit people's needs on reserving and retrieving memories behind the music. During the last century the invention and penetration of radio ,record and cassette ,players , hi-fi equipment and TV booted the spread and accessibility of music. Recent technological developments such as portable audio, digitalized music formats and the use of the internet for exchanging audio files altered the music landscape.<sup>6</sup> Consumers have a myriad of music platform choices with widely



Figure 1.5: Coca-cola : Share your story

Image source:<https://twitter.com/worldofcocacola>

different characteristics in terms of business model (advertising-supported, fee-based, etc.), delivery mode (streaming, downloading, etc.), and other areas.<sup>7</sup>

Considering about in what kind of way should memories be expressed, *Memo-song* decided to use storytelling. Even though storytelling haven't been applied in music platforms yet, it is already tested to be an effective way to express contents to its audience in marking and branding area. As there are two characteristic of music : the information goods nature of the product and an experience good. Referring to examples in product branding and marketing seems like a applicable way to realize the idea of retrieving people's memories. According to research, stories and storytelling are showed to be central to achieving a deep understanding of consumer psychology<sup>8</sup>. For example, the James Bond<sup>9</sup> film series have resulted in the emergence of three different and contrasting brand narratives relating to the Bollinger<sup>10</sup>, Aston Martin<sup>11</sup>, and Jaguar<sup>12</sup> brands. Each of these brand narratives reinforces a particular archetypal myth of lover, hero, or outlaw, respectively. The story reinforces the brands images and make the customer agree with the image the brands want to transfer. Companies like Coca Cola<sup>13</sup> ( Figure1. 1) have campaigns to invite consumers to tell their stories about the brand. When people share their stories about the brand, they actually have a better understanding towards the history, the culture, the goal of the company.

Looking back into history, storytelling as a tool for communication is not new. Anthropologists find evidence of folktales everywhere in ancient cultures, written in Sanskrit, Latin, Greek, Chinese, Egyptian and Sumerian. People in societies of all types weave narratives, from oral storytellers in hunter-gatherer tribes to the millions of writers churning out books, television shows and movies.<sup>14</sup>. To this day people spend most of their conversations telling personal stories and gossiping. A 1997 study by anthropologist and evolutionary biologist Robin Dunbar, then at the University of Liverpool in England, found that social topics accounted for 65 percent of speaking time among people in public places, regardless of age or gender. Anthropologists note that storytelling could have also persisted in human culture because it promotes social cohesion among groups and serves as a valuable method to pass on knowledge to future generations. Therefore, inviting users to share their stories about the music could be effective to reach the goal of this research.

## 1.2 Online music story sharing platform

Creating an online music story sharing website, *Memosong* will allow users to preserve and share their memories by telling personal stories about the music. In a society where music is rapidly produced and consumed, *Memosong* hopes to help music lovers to keep valuable and meaningful music memories with them all the time. Good memories should be cared for and valued despite the passing of time. *Memosong* aims to eventually encourage the music industry to produce high quality music contents in the future.

*Memosong* followed Design Thinking Method- a method of meeting peoples needs and desires in a technologically feasible and strategically viable way. Different from traditional design which put the market first, design thinking focus on human needs and put user at the center of the design.

Therefore the focus points of *Memosong* are understanding the ways people choose to listen to music, what they will do to keep their music memories and what difficulties they are facing when share the music memories to others. Two field works have been conducted. The first field work was an interview conducted with Keiko Ogawa, a student who is also a music lover. The second field work was conducted in a second hand store called "Pass the baton"<sup>15</sup>. After understanding the mental model of the users, the concept of *Memosong* is designed.

Considering about the target group, this research will pick college students among 20s as the main target at this stage. It has several reasons. Firstly, people

in this age group have the willing to express themselves. Secondly, they serve as the active users of social networks. Finally it will be easy for researcher to find large number of people who are among 20s. Therefore, college students in 20s are picked as the target group.

*Memosong* mainly contains two parts:

1. Front page, the "Square", where all the music videos shared by people the user is following will show. Each music video will come with the story and the person who posted the video. In the front page, the user could also search for the music in the search engine. There is a share button on the top right of the page. By clicking on this button, the chart for sharing will pop up on the front page. The user should cope the url of the video which they want to share and write their personal story in the chart and share.

2. Personal page. Inside the personal page, there are the user's information, the music videos the user shared, each with a story, and the followers and people the user is following. It is a personal place for user to save and look back on their music memories.

By offering those features, *Memosong* hopes to offer users a great experience to share their music memories and read the music memories of their loved ones.

### 1.3 Significance

As noted, creating *Memosonga* website specially for people to share their music stories can help music lovers to retrieve their memories.

Compared to other existed music platforms and social networks, *Memosong* contributes a number of features.

First, it is a website particularly for sharing music memories. The stories and music are the only things be focused on. Second, for the first time, users could shared their personal stories which may contain the explanations such as cultural background, which will be helpful for people to understand the value of music. Finally the users could follow other people 's music memories, which offers opportunities for people to understand each other 's music.

### 1.4 Organization of Thesis

This thesis is organized into 4 chapters, plus appendices.

Chapter 1( this chapter) introduces the rationale, background and purpose, the power of story telling , provide a brief review of the design concept.

Chapter 2 reviews the literature and examines related works.

Chapter 3 describes the design of Memosong, including the primary investigations and fieldworks, the evolution of the design concept , and implementation of the functional prototypes.

Chapter 4 details the evaluation of Memosong through experiments that were conducted within the target demographics.

## Notes

- 1    <https://www.youtube.com/>
- 2    Zentner, Marcel, Grandjean, Didier, and Scherer, Klaus R (2008). “Emotions evoked by the sound of music: characterization, classification, and measurement.” In: *Emotion* 8.4, p. 494.
- 3    TerBogt, Tom F. M. et al. (2010). “Moved by music: A typology of music listeners”. In: *Psychology of Music*. URL: <http://pom.sagepub.com/content/early/2010/08/23/0305735610370223.abstract>.
- 4    Jncke, Lutz (2008). “Music, memory and emotion”. In: *Journal of biology* 7.6, p. 21.
- 5    Juslin, Patrik N and Sloboda, John a (2013). “Music and Emotion”. In: 26.4, pp. 583–645. URL: <http://www.sciencedirect.com/science/article/pii/S1094996812000217>.
- 6    Hargreaves, David J and North, Adrian C (1999). “The functions of music in everyday life: Redefining the social in music psychology”. In: *Psychology of music* 27.1, pp. 71–83.
- 7    Weijters, Bert, Goedertier, Frank, and Verstreken, Sofie (2014). “Online music consumption in todays technological context: putting the influence of ethics in perspective”. In: *Journal of Business Ethics* 124.4, pp. 537–550.
- 8    Woodside, Arch G, Sood, Suresh, and Miller, Kenneth E (2008). “When consumers and brands talk: Storytelling theory and research in psychology and marketing”. In: *Psychology and Marketing* 25.2, p. 97.
- 9    British spy movie series.Originally it is a fiction series which created in1953 by writer Lan Fleming
- 10   A Champagne house, a producer of sparkling wines from the Champagne region of France
- 11   British manufacturer of luxury sports cars and grand tourers.
- 12   A brand of Jaguar Land Rover, a British multinational car manufacture.
- 13   An American multinational beverage corporation and manufacturer, retailer, and marketer of nonalcoholic beverage concentrates and syrups, which is headquartered in Atlanta.
- 14   Hsu, Jeremy (2008). “The secrets of storytelling”. In: *Scientific American Mind* 19.4, pp. 46–51.
- 15   A second-hand goods selected shop in Japan. <http://www.pass-the-baton.com/>

# Chapter 2

## Related Work

As discussed in Chapter 1, *Memosong* retrieves individual's memories through music by letting users to share and exchange music and stories on the website. By designing a social network for people to focus on communicating music value and identity, *Memosong* hopes to encourage music industry to produce more valuable contents in the future.

Conceptually, this idea is broken down into the essential aspects of music retrieves memories, stories enhance emotion connection to the memories. In this chapter, relevant literature and existing works related to these two aspects are examined with respect to three areas: music, emotion and memories ; music and social network; storytelling.

### 2.1 Review of Literature

This section examines relevant literature related to music, emotions, memories, social media and storytelling.

#### **Music,emotion and memory**

Music could retrieve memory and the emotion evoked by the music also plays an important role in forming the memory. The relationship between music, emotion and memory has been summarized by former researches as emotions enhance memory processes and music evokes strong emotions, music could be involved in forming memories, either about pieces of music or about episodes and information associated with particular music.<sup>1</sup>

One of the most frequently mentioned functions of music in daily life is as a reminder of a valued past event<sup>2</sup>, music has been identified as important in the construction of autobiographical memories. Even though many researches believe that music is encoded in the brain by the perceptual memory system which encodes



meaning, musical information could be associated with emotional and semantic information (associative memory) either directly or indirectly, even if it is not directly related to semantic information<sup>3</sup>

Emotion evoked by the music also plays an important role in forming memories and the stronger emotion music has, the better the memory being retrieved. The semantic associative network model of memory by Bower<sup>4</sup> which proposes that emotions are used as contextual information linked to the to-be-remembered item. The semantic associative network model assumes that emotions are represented in a network of nodes together with words, pictures or music. Stimulation of emotion nodes creates spreading activation that lowers the threshold of excitation of all associatively linked nodes and thus helps to retrieve an emotional item from memory. Among music, emotional music is remembered better than less emotional music. Eschrich<sup>5</sup> did an investigation about recognition of 40 musical excerpts as a function of arousal<sup>6</sup>, valence<sup>7</sup>. In the first session the participants judged valence and arousal of the musical pieces. One week later, participants listened to the 40 old and 40 new musical excerpts randomly interspersed and were asked to make an old/new decision as well as to indicate arousal and valence of the pieces. Musical pieces that were rated as very positive were recognized significantly better. Therefore, the conclusion of the investigation is that musical excerpts rated as very positive are remembered better. Valence seems to be an important modulator of episodic long-term memory for music. Evidently, strong emotions related to the musical experience facilitate memory formation and retrieval.

Music and emotion could help memory formation while another study examined that listening to the music from one's past can also evoke memories and emotions.<sup>8</sup> In the experiment, subjects were presented with a large set of short musical excerpts of past popular songs which are shorter than 30 seconds per excerpt. By using the questionnaires, the authors found that, on average, 30 of the presented songs evoked autobiographical memories. In addition, most of the songs also evoked various strong emotions, which were mainly positive ones such as nostalgia.

Former research also shown that self-chosen music could aroused more intense emotions in listeners than randomly sampled music. In terms of the guideline set by former researcher, this effect was large<sup>9</sup>, and supports the suggestion that researchers may be able to arouse more intense emotions to music if the participants are asked to bring their own music to the laboratory<sup>10</sup>. In addition, self-chosen music produced an increase in positive emotions. The emotions that

increased the most correspond to the emotions that seem most prevalent for music in general; that is, happiness-elation, calm-contentment, nostalgia-longing, interest-expectancy, and enjoyment-pleasure<sup>11</sup> There are a number of possible explanations for these effects of music choice. The results revealed that self-chosen music was more familiar and well-liked than randomly-selected music, which may partly account for the observed effect on rated intensity. As noted earlier, familiarity with the music enables a larger number of underlying mechanisms for emotion induction to be activated, including evaluative conditioning and episodic memory. In addition, self-chosen music might bring a greater sense of control over the situation, which enhances positive emotions. Future studies should attempt to disentangle the various factors that may account for the observed effects of music choice<sup>12</sup>

Another recent research summarized memory as one of the 7 principles underlying the evocation of emotion with music. According to the authors, emotions and stimuli associated with music can be memorized. With regard to music, a musical stimulus might evoke (1) a conditioned response, or it might evoke an emotion because it is (2) associated with an autobiographical memory of an event. With regard to autobiographical events, the perception of music associated with that event can evoke the emotional memory representation of that event. (3) Musical information with symbolic sign quality (due to semantic memory) might evoke a concept with emotional valence, which in turn might also lead to an emotional response. The research shows that preserving music memory have positive effect on the listeners who have Alzheimer's disease (AD) .<sup>13</sup>

## Social Media

As discussed before, self-chosen music could evoke more intense emotion and the more intense the emotions are, the better memories will be recalled. Designing *Memosong* into a music social media that user could share and exchange music and stories by themselves can be a effective way to retrieve people's memories.

Social media can invite people to co-create contents with many functions such as discussion forums, blogs, social platforms, and videos, photos, and news-sharing sites that provide networks, relations and interactions-the three ingredients central to co-creation<sup>14</sup>. Social media has changed the consumer's role in storytelling from a passive listener to a more active participant.<sup>15</sup> The former research shown that people are motivated to generate and broadcast online content primarily for intrinsic reasons such as the enjoyment that the act of creating something provides,

promoting themselves to attract attention and initiate conversation, or to influence others<sup>16</sup> In social media settings, people could be encouraged to participate by initiating conversation through seeding<sup>17</sup>, provoking<sup>18</sup> engaging and providing a platform for conversations. Conversations in social media were generated where none would have taken place naturally otherwise.<sup>19</sup> Because people think in terms of the validity of an idea (argumentatively), they express themselves with stories.<sup>20</sup>

There are another recent research about social media and music festivals assumes that emotional attachment will be greater for customers who engage with brands using social media. To test this hypothesis, a survey instrument about social media activity, brand feelings and behaviors pertained specifically to brand of music festival was developed and pretested to measure variables in the model. The authors conducted an online survey and employed a commercial market research team to contact both social media users and non users. Emotions were measured using a ten-item scale to measure the strength of consumers' emotional attachment to brands. The items capturing how consumers feel about the brands were: affectionate, friendly, loved, peaceful, passionate, delightful, captivated, connected, bored, and attached. 425 responses including users in different ages, occupations and attachment to social media were collected. The model set up by the author fit good to the data and the hypothesis was proved by the data.

## Storytelling

*Memosong* use storytelling as a way to tell memories. Stories itself have characters that could help to preserve memories. Stories contains indices such as locations, actions, attitudes, problems, characters etc that cause both empathy in the listener<sup>21</sup> and help the story being recalled.<sup>22</sup> Stories indices create empathy by providing a meaning and the more indices a story has, the more places the story can reside in memory and consequently be better recalled.

Even though storytelling hasn't been used to express contents in music area before, it has been examined to be an effective way to express contents and build up emotional connections in other areas such as branding and marketing. Former research pointed out that as there are two characteristic of music : the information goods nature of the product and an experience good. The fact that songs are information goods makes them shareable, free, and able to be distributed.<sup>23</sup> which make music could refer to what branding and marketing have done in express emotional contents. In branding area, stories and storytelling are put in the central in order to have a better understanding towards psychology of consumers.<sup>24</sup> . Based

on other researches as well, Woodside summarized five propositions to inform this conclusion.<sup>25</sup> First, people naturally think narratively rather than argumentatively or paradigmatically. Second, a substantial amount of information stored in and retrieved from memory is episodic stories that include inciting incidents, experiences, outcomes/evaluations, and summaries/nuances of person-to-person and person-and-brand relationships within specific contexts. Third, retrieving, reliving, or repeat watching stories results in what Aristotle. Watching, retrieving, and telling stories enables the individual to experience one or more archetypal myths. An archetype is an unconscious primary form, an original pattern or prototype in the human mind; archetypes are not learned or acquired they are with us from birth and are as natural and embedded in us as our own DNA quest for happiness. Fifth, individuals seek clarity, to make sense of prior conversations, events, and outcomes from others and themselves by telling stories.

Stories can also deepen other people to have a better understanding towards other people's memories. As former researches show that stories create or enhance connections with the brand by providing a theme to create conversations between customers and brands and among consumers themselves that allow the consumers to fit in their own experiences in the brand story.<sup>26</sup> Stories can help build awareness, comprehension, empathy, recognition, recall, and provide meaning to the brand. Caroline<sup>27</sup> in the paper explains storytelling's power in changing brand's image by using Air Miles' case. During conducting research towards focused group, Air Miles team asked collectors to re-tell stories that were important in their life. By emerging common themes, Air Miles is able to re-branding their program. In the paper, Caroline points out that in a commoditized market, it's the character of (and emotional attachment to) your brand that creates lasting value for your loyalty program. Brand managers know that the brand is no longer just the words and pictures; the brand is really about the total delivery of a promise to consumers. The stories told by consumers help Air Miles to find out key insights: The material reward matters little in and of itself- it's what you do with it, and with whom you share the reward that matters. Air Miles was about to change from a functional to an emotionally engaging experience, back to the brand's root of providing the bridge between the anticipation of achieving worthy goals and the warm feelings that follow success. Caroline mentions that if customers talk about your brand as if it's a mirror image of who they are and what they live for, then the brand is connected with the consumers.

Why would anyone care to share or read such stories? Woodside<sup>28</sup> states three

rationales to explain the reason. First, telling stories is inherently pleasurable to the authors; such storytelling allows authors to be both protagonist and audience and to vent anger or report bliss about events and outcomes over and over again, and to enjoy the nostalgia of reliving earlier experiences . Second, to some extent consciously, but mostly unconsciously, storytelling permits the teller to experience an archetype fulfillment; the plot line in the story told provides evidence that the storyteller-as-protagonist represents a regular guy/gal, lover, jester, creator, ruler, rebel, sage, hero, outlaw, magician, or some other archetypal primal form. Third, telling stories revises and deepens sense making of the meaning of events in the story and what the complete story implies about oneself and others.

## **2.2 Other Related Works**

This section briefly looks at some other works which might not directly connected to the research topics but provide some relevant interests which might also contribute to the statement of this thesis.

### **Music listeners**

Why people listen and care about music? According to former researches, there are four important uses of music. First, music induce and support positive emotional states. The most important function of music listening is mood management and more specific mood enhancement and fending off boredom. Secondly, because of music's mood enhancing qualities, a related type of music use concerns listening as a way to cope with problems. Thirdly, through music people acquire knowledge of the world music consumption serves to facilitate identity construction. Music offers several elements that are useful as tools in the processes of identity formation, that is, listeners are influenced by lyrics and ideas expressed by artists and also more subtly through identification with images of an artist or band. Identification can take the form of recognizing oneself in the lyrics and the artists style or presentation. Fourthly, choices in music listening also enable listeners to situate themselves in the social world. Music has been referred to as having a badge function: through music young people define and present themselves as a specific type of person (identity) and as belonging to a specific group (social identity).<sup>29</sup>

## 2.3 Contribution of this research

From the former researches, author can get following conclusions: Music can involved in forming memories and can also remind people of a past event. The more emotional music is, the better memories will be recalled. In the age of Internet, by inviting people to co-create contents, social networks provide opportunities for people to share and exchange self-chosen music and better emotional attachment between contents and people can be create. Storytelling also has been examined that have the function of transferring contents in a emotional way which cause the contents be better understood.

However, even though there are many researches talking about the relationship between music, emotion and memories, and the memory function of music has been applied as a medical tool, there are still few researches talking about using music as a way to retrieve memories in daily life.

Also in the age of Internet, as online music provided by music platforms became the main resource for listening to the music and social medias can also archive memories, the idea of combining music, social network to archive memories hasn't been tested in former researches.

What's more, storytelling which has been used in branding and marketing area hasn't been used to transfer emotional contents of music. Therefore , *Memosong* will focus on these questions. By designing a music social network where people could share and exchange music and their stories behind the music, *Memosong* hopes to offer an effective way for people to retrieve memories in their daily life through music.

## Notes

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- 2 **Zentner2008.**
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- 6 "Arousal" refers to the excitation level elicited by the music ( ranging from very relaxing tot very exciting

- 7 "Valence" is understood here as the emotional value on a continuum from negative to positive( or unpleasant or pleasant and emotional intensity ratings of the music.
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- 28 Woodside (2010).

## RELATED WORK

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29 TerBogt et al. (2010).



## Chapter 3

# Design

The design of *Memosong* is based on *Design Thinking* method. Unlike traditional design which focus on earning high profit, *Design Thinking* put human being at the center of design. By doing fieldwork and learning from *Fieldwork master* who is the observation target in the fieldwork, *Design Thinking* aims to design products with good user experience. Under this method, the main design steps of *Memosong* are : philosophy, vision, stakeholders, previous study, fieldworks which include develop several models ( sequence model, flow model, physical model, artifact model, cultural model, mental model ), brainstorming, concept scheme, concept sketch, use case, ,make story, concept drawing,and implementation. The meaning of each step will be explained later.

*Memosong* is designed to enable people to retrieve their memories through music and stories. At the very beginning, philosophy and vision is set up in order to have a clear goal for the design. The philosophy of *Memosong* is people's memories are valuable and should be cared about. The vision is that I want a tool that helps people to retrieve their memories through music. The whole design process will follow philosophy and vision.

The second step is analyzing the stakeholders of *Memosong*. The stakeholders are the persons who are related to this design. In the case of *Memosong*, the persons are users, content provider, IP owners. figure 3.1 shows the detail description of stakeholders.

Based on understanding stakeholders, two field works were conducted in order to understanding people's behaviors on preserving memories in daily music listening experience and their attitudes towards memory. The first fieldwork was done with a content provider-a second hand store *Pass the Baton*<sup>1</sup> and the second fieldwork is an interview with a user: Keiko Ogawa. In the following sections, the ethnography of *Memosong* will be explained.

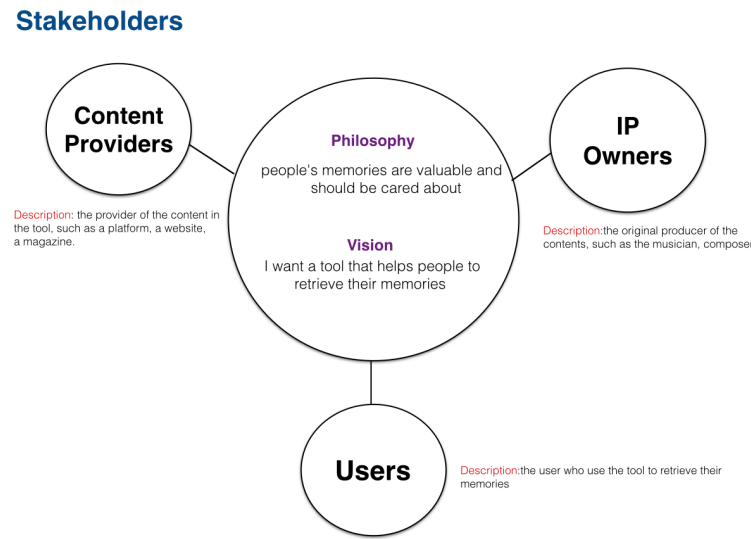


Figure 3.1: *Stakeholders*

## 3.1 Ethnography

### 3.1.1 Fieldwork

#### 3.1.1.1 First Fieldwork

The fieldwork research was conducted on October 25th, 2015 at *Pass the Baton Omotesando*<sup>2</sup> which is located inside Omotesando Hills. *Omotesando* is Tokyo's fashionable shopping district where many fashion brands located in attracting many locals and tourists go shopping everyday.

*Pass the Baton* is a recycle outlet in Japan. They have three gallery-looking shops now, two shops are in Tokyo- located in Marunouchi, Omotesando and another one in Kyoto.(figure 3.2) The concept of this antique stores are not like other antique stores whose main purpose is to recycle. It is a place that helps people pass on their favorite items and address the value contained in antique goods. The shop sells vintage, used and repurposed goods that are refurbished and repackaged with a creative bent(figure 3.3). What's more, every consignment item is accompanied by a tag with the sellers name and photo.(figure 3.4) There is a little anecdote about each piece, which adds to the personal feel of passing on the history of the item. For example, there used to be a dress displayed with an impressive pedigree: I was wooed by three men while wearing this dress,



Figure 3.2: *Pass the Baton* shop in Omotesando

Image source: <http://retaildesignblog.net/wp-content/uploads/2011/08/Pass-The-Baton-by-Wonderwall-Omotesando-05.jpg>

the former owner wrote on the tag. According to the founder of shop Masamichi Toyama, *Pass the Baton* tries to preserve the stories and the unique history behind things while adding new values through the shop's editing.<sup>3</sup>

The focus of this fieldwork is to understanding what are the elements present specifically in the shop with second hand goods buyers.

During the fieldwork, the verbal and non-verbal communication between buyers and shop stuffs, buyers and their friends, buyers and the objects were observed. Some visitors came with a map or tourist guide in their hand. Those visitors firstly stood outside of the shop and looked at the gallery-looking window to enjoy the items and read stories taps. Then they came inside the store and had a look at the items in the shop. Some people who had no idea about the shop at the beginning got attracted by the display windows. Then they looked like getting interested in the shop and chose visiting the shop. For some people who were already familiar with *Pass the Baton*, they went inside the shop and select the items they want.

A young girl who often came to shop for shopping was picked randomly as a fieldwork master for understanding how people deal with "memories". The master is 25 years old and lives near Shinjuku. She is a graduate school student majored in product design and her hobbies are photography, cooking and oil paintings. She learned this shop from a design website and she was touched by the concept



Figure 3.3: Three categories of products in *Pass the Baton* : Recycle, Remake, Relight

Image source: <http://www.pass-the-baton.com/c/pages/about>

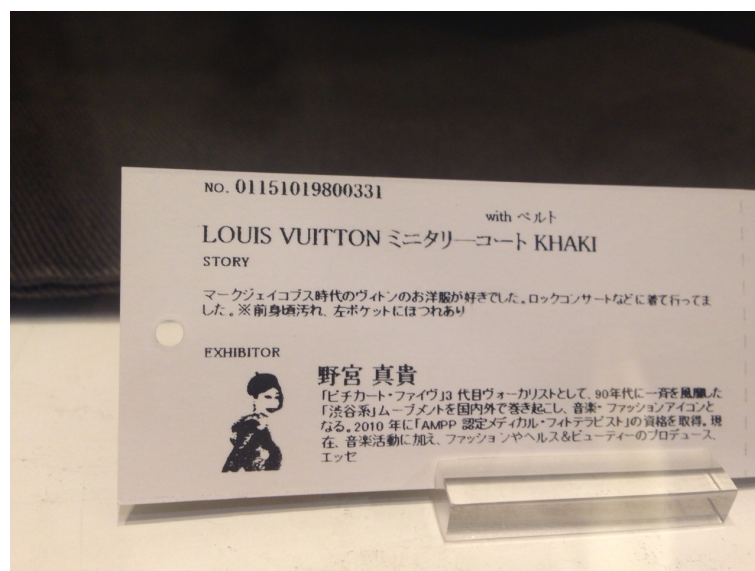


Figure 3.4: The tag with the seller's name and stories



Figure 3.5: The display window of *Pass the Baton* Omotesando

of this shop immediately. She started shopping in this shop since half a year ago. She came here average once a month and usually during the weekend. She prefers shopping alone so she always comes by herself. She purchased one pair of earrings, one piece of necklace and a coat from the shop before. She believes that well-designed stuff could stand the pass of time and that's the reason why she doesn't care about if the goods were used or not. Actually she is thinking to sell one of her old earrings to *Pass the Baton*. As a student, she thinks it make sense for her to save money on purchasing good-designed stuffs in a second-hand shop.

She took the train from her home to *Pass the Baton* and walked along *Mejitori*, randomly looked at shops along the street. However, as the shops in *Omotesando* are generally expensive, she can just do window shopping. That day she was intended to get a new bracelet. Figure 3.5 shows the sequence model of the master once she arrived at the store.

Figure 3.6 is the flow model showing how different people in *Pass the Baton* interact with the staff and items in the shop, both verbally and non-verbally, with each other.

Figure 3.7 shows the physical model of *Pass the Baton* that allows people to enjoy shopping.

The item shown in Figure 3.8 are the items the master brought with her when she went shopping. She carried a light bag, and wears an antique hat and a pair

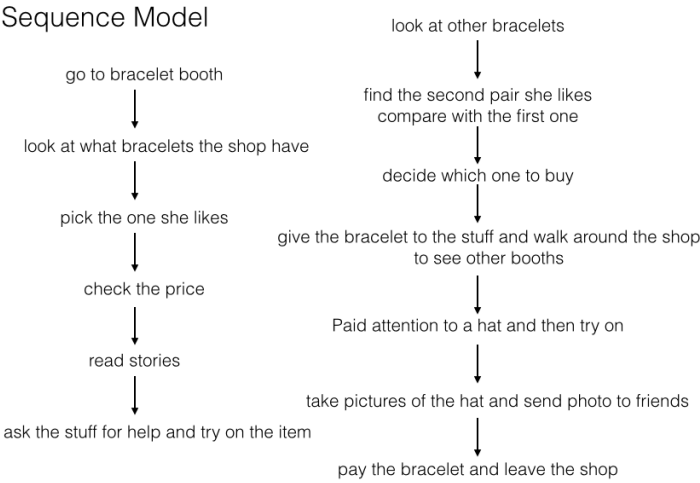


Figure 3.6: Sequence Model

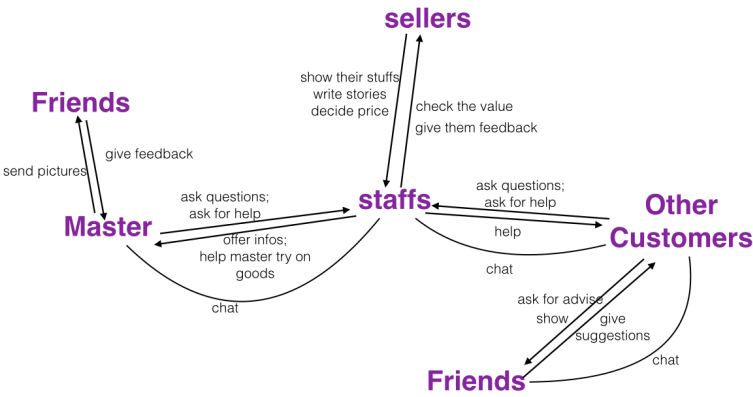


Figure 3.7: Flow model

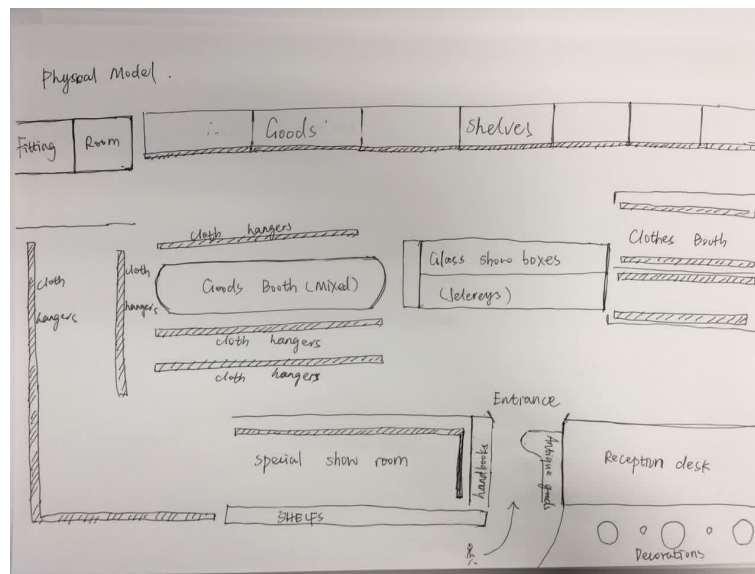


Figure 3.8: Physical Model

of glasses. She also used smart phones to take pictures and send the pictures to her friends.

The culture model is shown in Figure 3.9. Culture models described the relationship between different people and parties' role in the shopping experience of *Pass the Baton*. By purchasing the goods in the shop, the masters and other customers actually keep continuing the stories of the item and became part of the memories belong to the item. Therefore it is interesting to find that there is an emotional connections built up between original users-the exhibitors and the customers.

Through the observations in the fieldwork, the mental model of the fieldwork master could be summarized as: When she sees the item, she checks the design; when she sees the item, she reads the stories; when she sees the item, she feels the texture; when she sees the item, she try the item on herself; when she sees other things she like, she compares; when she sees the items, she takes pictures and share with friends. When she reads the advertisement of the shop, she checks the shops on Internet. When she reads the advertisement, she searches online ; when she reads the advertisement, she asks her friends.

### Artifact Models



Figure 3.9: Artifact Model

### Cultural Model

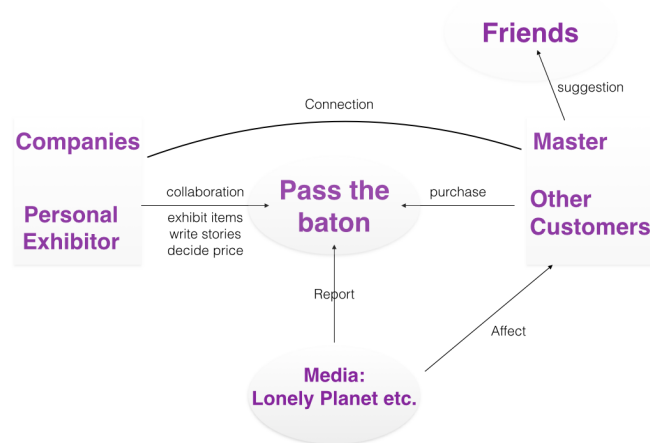


Figure 3.10: Culture Model



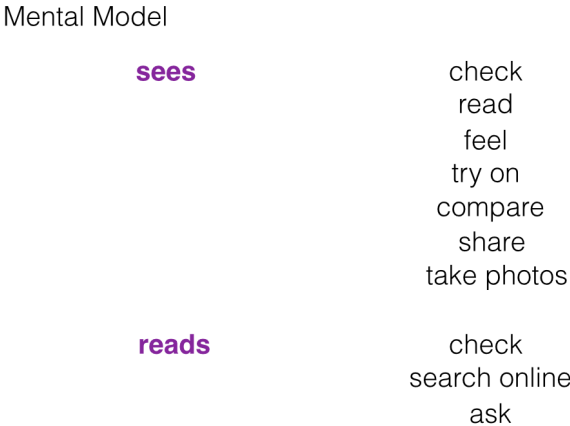



Figure 3.11: Mental Model

### 3.1.1.2 Second Fieldwork

The second fieldwork is focusing on understanding why and how people preserve their memories in their life. The fieldwork was an interview conducted with Keiko Ogawa (25, Female) in her home. (Figure 3.12) Keiko is a student studying speaker system design. The master has many experiences in music and design. Her father is a business man and her mother is a housewife. From 2 years old to 4 years old, her family lived in NYC. Her dad always played a CD from an orchestra to Keiko but at that time, Keiko was so small that she didn't remember listening to the song. Later on when she was 20 years old, one day she heard the same CD, she felt for some reason, she was familiar with song. She started learning piano since 4 years old and started learning flute since 10. Music brings her many happiness. When she feels stressful or depressed, she will play piano or flute. She uses to play the song she is good at and when she is playing, she will just throw all her thoughts in playing instruments. In her daily time, she also likes to listen to music. She organizes songs in different categories. Keiko specially talked about her experience in London and mentioned about how she kept her memories related to certain music. She went to *Hyde Park* with her friend and luckily met her favorite band *Earth, Wind and Fire* was giving a show in the park. She could clearly remember the weather, the temperature, what clothes she was wearing on that day. She created a special listening list in her music software for London and put all *Earth, wind and Fire's* songs into the list. Everytime she listened to those



**Personal Profile**

Her father is doing business and her mom is a chief. She started learning piano from 4 and flute from 6. She likes listening to American pop music. She also likes going to coffee shops, museums, tasty restaurants and artist market when she was free.

**Working profile**

She was majored in economics when she was in undergraduate, but she felt she was more into entertainment and design then she joined KMD. She has over 10 years experience in orchestra working as a flutist and conductor. When she was in KMD, she joined GID program as she want to get overseas experience and know the people all over the world. Those colourful experience gave her special viewpoints to her lifestyle and she wish to remember those beautiful moments and transfer knowledge she got on the way to the people around her.

**Goal**

- Continue getting new experience and meeting new people
- Never forget the good moments in her life. Be appreciate
- Transfer memories and the experience to others.

**Name:** Keiko Ogawa

**Age:** 25   **Sex:** Female

**Current city:** Tokyo

**Hometown:** Tokyo

**Occupation:** Student

Figure 3.12: The Profile of Second Fieldwork Master: Keiko Ogawa

songs, the memories in London can be recalled. Figure 3.13 shows the sequence model about how she record her memories.

Figure 3.14 shows the flow model about how she interacts with the band, her friend who visit the park together with her and the friends on social network.

Figure 3.15 shows the physical model of Keiko's home where the interview was conducted

Figure 3.16 shows the artifact model which are the things Keiko brought when she listened to the music

Figure 3.17 shows the culture model which explains the different roles of persons involved in the experience.

Through former analysis of the observation and conversation done during the fieldwork, some unconscious patterns of Keiko's action were spotted. When she listens to the music, she write down the name. when she want to review what she listened, she checks her smart phone. When she listens to the old song, she will start thinking about her old days. When she listens to the music, she wants to take a picture, When she finds the music is good, she shares on social network. When she listens to music, she wants to enjoy the music. When she sees the pictures related to London, she will search for the songs she heard in London. When she sees the nice music performance, she likes to take a picture, When she sees the nice music performance, she records a video. When she sees a nice music performance, she wants to draw the picture of the scene. When she sees the music performance, she memos or takes some notes about experience.

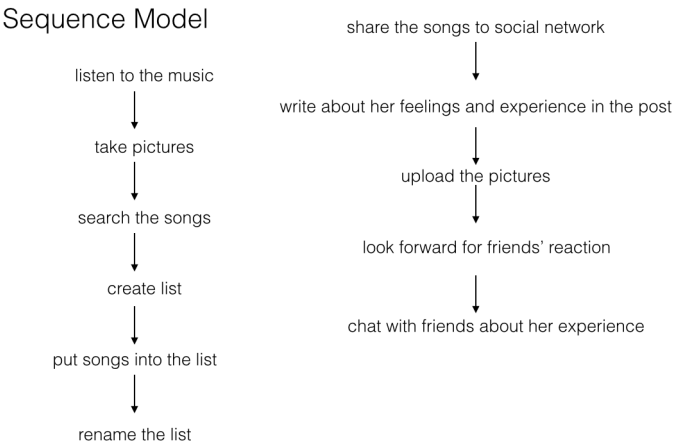


Figure 3.13: Sequence Model

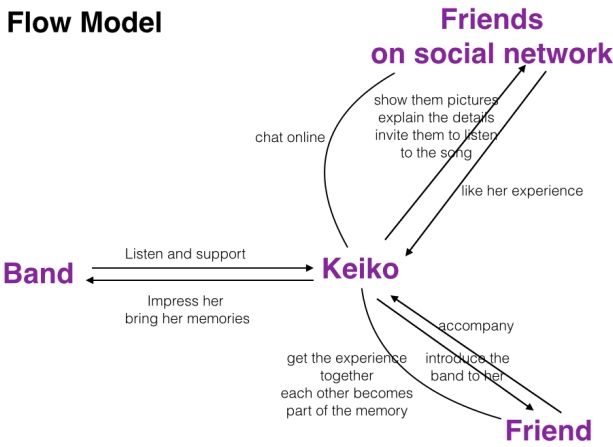


Figure 3.14: Flow Model

## Physical Model

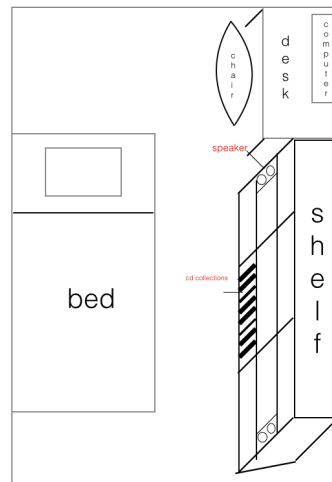


Figure 3.15: Physical Model

## Artifact Model



Figure 3.16: Artifact Model

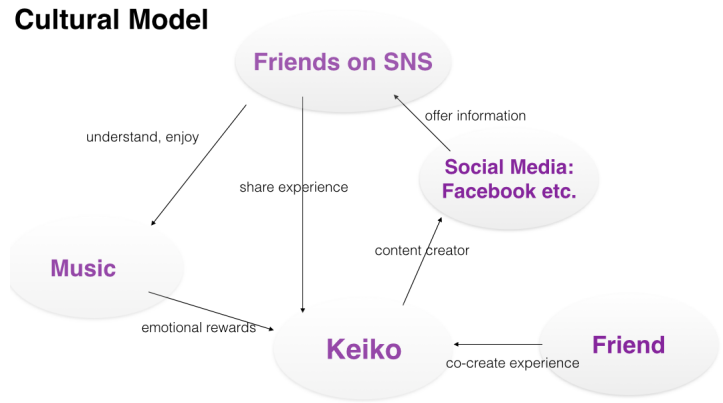


Figure 3.17: Culture Model

Mental Model

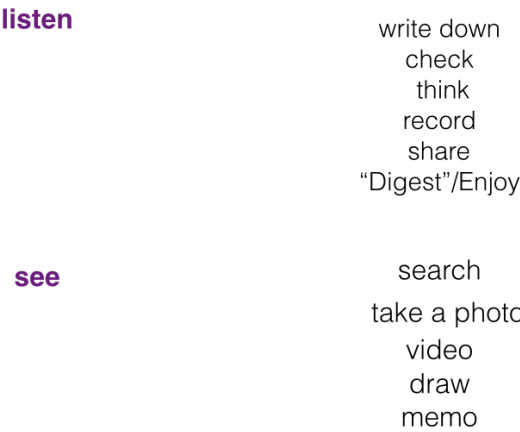


Figure 3.18: Keiko's Mental Model

### Target Persona



**Name :**Eri Wang  
**Age :** 24 years old  
**Sex:** Female  
**Current City:** Taipei  
**Hometown:** Taipei  
**Occupation:** Clarinet Player

#### Personal Profile

She was born in Taipei. She likes listening to classical music, playing clarinet and watching musicals, purchasing well-designed stuff.

#### Working profile

She started learning clarinet when she was 4 years old and since she entered elementary school she started playing clarinet in school's orchestra. Later on, she became a professional musician and gave performance all over the country. When she graduated from college, she was planning to go to Japan but unfortunately 3.11 earthquake happened so she did a part-time job in a "Duo er coffee shop" near her house and she worked as a music teacher in local middle school. Then she got a chance to play in NYC orchestra and she stayed in United States for 2 years.

#### Goal

Collect all the valuable experience and hope those experience never disappear. want to meet people who has the good personality ( honest, kind)  
Want to share her touching memories with other people

Figure 3.19: Target Persona

### 3.1.2 Target Persona

Based on the field researches, target persona who may have the needs to retrieve memories related to the music was created. Eri Wang (24, Female) was born in Taipei Taiwan. Since she was in elementary school, she started learning clarinet. Due to her hard working, she was luckily to enter the best musical high school and then enter Taiwan Normal University to study clarinet. After graduated from the university, she worked as a middle school teacher for 2 years and at the same time, she gave performance all over Taiwan. Then she was selected by an American Orchestra and was able to go to NYC to play clarinet. Music is an important part of Eri's life and almost all her experiences are related to the music. She wants a tool to help her collect all her valuable experience.

Creating target persona serves as the basis of brainstorming and making concept. After the concept is created, target persona could be used again to test if the idea can cater the needs and provide appropriate value proposition.

### 3.1.3 Brainstorming

After conducting a fieldwork and creating a target persona, a brainstorming session was conducted. Based on the ideas generated, an initial concept was created. In order to have greater diversities for generating ideas, three individuals were in-



Figure 3.20: Brainstorming with graphics

vited to do idea generation session together, including the author of this thesis. The mental model and target persona were shared among the group before the brainstorming session so that each of the participants understood the context for brainstorming.

60 ideas was generated at the end. (Figure 3.20) They provide interesting insights for the author. For example, retrieving memories is about somewhere you can look back, something as a media which won't not be changed by time and it is better to be controlled by the users.

### 3.1.4 Making Concept

Based on ideas generated in the brainstorming session, a concept scheme is set up.

As shown in Figure 3.21, concept scheme includes the input and output of this design. The input is the resource of this design. In the case of this design, the input are Smart phone, Internet, Video Data, User Information, Music Platforms, Experience, Social network and Listeners. On the left side listed the output which is the goal of this design. In this design, the output is retrieving people's memories through music. In the middle, the blank area should be the concept of this design. By using the input as elements, the concept should get the output.

Based on concept scheme, the relationships between the input resources are

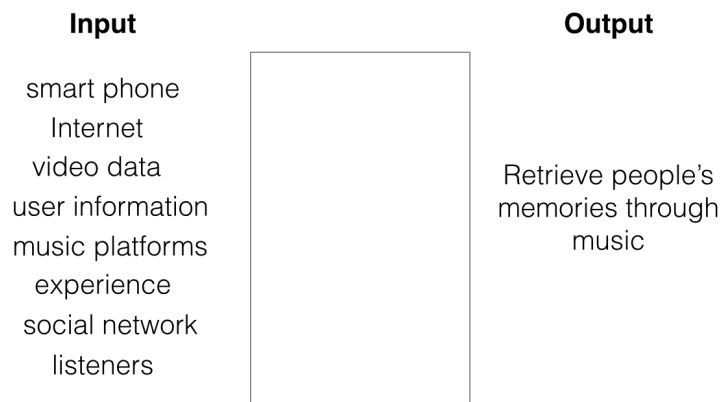
**Concept Scheme**

Figure 3.21: Concept Scheme

explained in concept sketch. (Figure 3.22)

Then the user case explained the stakeholders' roles in the design.(Figure 3.23)

After understanding how the functions will be used by user in the context, a story is made. This process called making a story. The user is listening one song and remember he listened this song in his sisters wedding ceremony before. He wants to write down his memory because he thinks the memory is valuable for him. He goes to the music platform firstly and then finds the song. He copied the URL and then goes to the music story sharing website. He pastes the URL address and writes stories and the shares on the website. He has one board of memories where he could always look back. His girlfriend wants to know his past and she just goes to his memory board. She is the follower of her boyfriend. By using the website, she feels she knows him better.(Figure 3.24)

The details of the design are shown in the process called key path. In other words, the details such as interface are designed on this step. The website is decided to look like a gallery as gallery is usually the place where valuable items are displayed. There should be a personal page where user could store all his memories at one place and there should be a place where all the thoughts user shared should be see together. As the website is just designed, there hasn't been collaboration between music platforms and this website. (Figure 3.25)



Concept Sketch

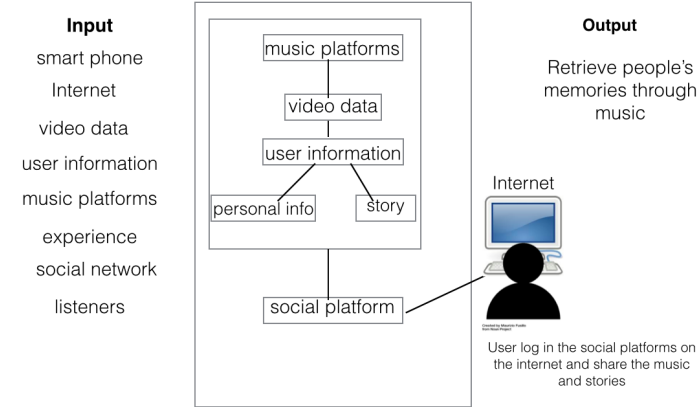


Figure 3.22: Concept Sketch

Use Case

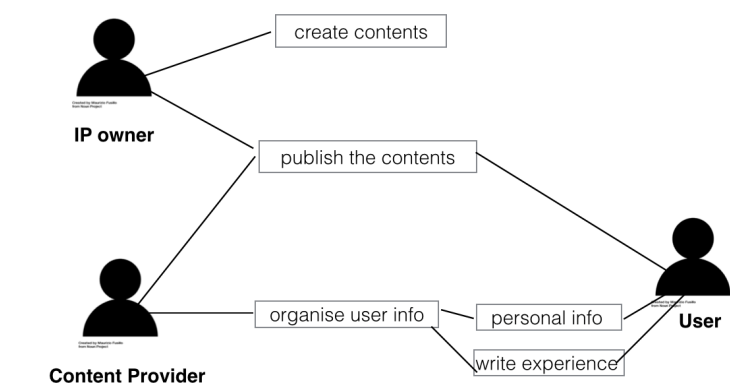


Figure 3.23: User Case

## Make story

The user is listening one song and remember he listened this song in his sister's wedding ceremony before. He wants to write down his memory because he thinks the memory is valuable for him. He goes to the music platform firstly and then finds the song. He copied the URL and then goes to the music story sharing website. He pastes the URL address and writes stories and the shares on the website. He has one board of memories where he could always look back. His girlfriend wants to know his past and she just goes to his memory board. She is the follower of her boyfriend. By using the website, she feels she knows him better.

Figure 3.24: Make story

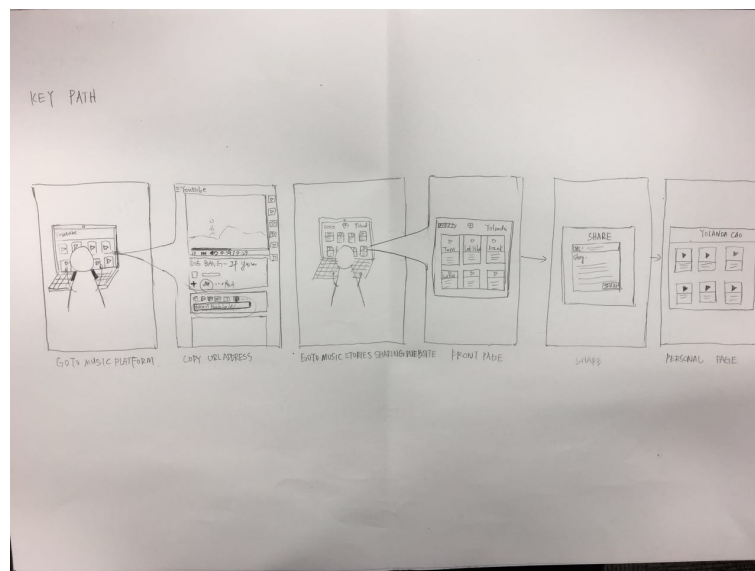


Figure 3.25: Key Path

### 3.2 Concept of *Memosong*

After going through all those former steps, the concept was made (Figure 3.26). By conducting the concept, the goal of this design- retrieving people's memories through music can be achieved. This will be proved by showing how shareholders interact with each other.

The shareholders of *Memosong* as explained before, are IP owners, content provider *Youtube* and users.

IP owners: upload music to music platform *Youtube*

Content Provider *Youtube*: offers music resources to users.

Users: There are two kinds of users. Users who post memories on the platform ( shown on the left side of the picture) and users who read memories ( right side). People who want to share their memory behind the music will go to *Youtube*. For example, one person has a song which is related to his unforgettable memory- a wonderful talk with his friends. It was a Sunday afternoon in New York, he and his friends went to a coffee shop. They had a lot of fun and took many photos. He remember there was a song played in the store which leaves deep impression on him. He wants to keep this precious memory. Therefore, he found the song on *Youtube* and copyed the URL address. Then he went to *Memosong*, posted the song with a describtion of his memory. Everytime, when he logs in the system to hear the songs, the music will bring him back the old days, everything happened on that beautiful afternoon. On the right side, another user who wants to check her friends memory, log in *Memosong*. She found out that her friends posted a new music with his story. She read the story while listened to the song. She could almost imagine what happened to her friend in her mind. She was so touched by his experience that wants to explore more about the website *Memosong*.

Therefore, even though the users didn't talk about their memories face to face, by sharing the music and stories, people who post the music can always have a place to look back and enjoy the same emotion retrieved by the music. Other people who are interested in these memories can have a place to understand the value of those memories. The memories are cared by both people who own it and the listeners. Music works as tool to connect people's emotion.

### 3.4 Interface Design of *Memosong*

The basic concept was decided in the former steps. In this part, the name will be decided and the website will be visualized.

## Concept

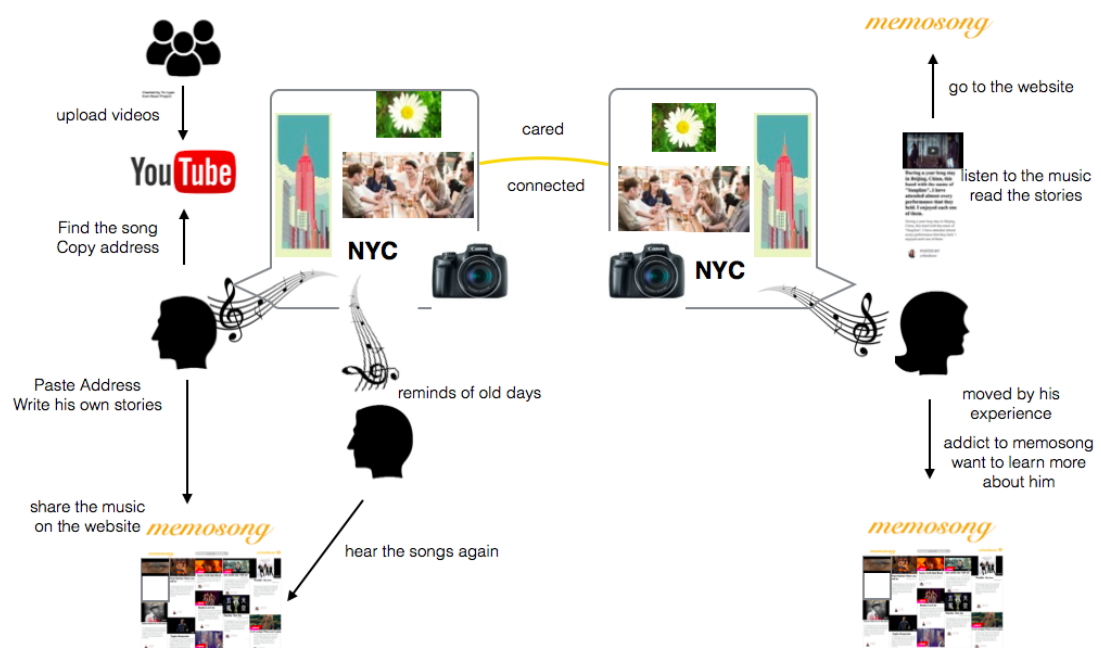


Figure 3.26: Concept



Figure 3.27: Logo of *Memosong*

*Memosong* is decided to be the name of this website. "Memo" represents the function-a area to write down people's memories. "Song" represents it is a music website. *Memosong* means writing down your music memories here.

The logo design is shown in Figure 3.27

According to the key path, the interface is designed by using software *Illustrator*. The front page of *Memosong* is a gallery looking page. These elements displayed here. Figure 3.28 shows the image of the front page.

- The logo on the left top corner
- User Name on the right top corner to show who logs in the system
- A sharing button is beside the user name. Click on the sharing button, a window will pop up.
- Below the page head is the video area. All the videos ( the user and people they are following ) shared will show up here. Each video will go with the description of the stories behind the song.

Figure 3.29 shows the sharing window. By clicking on the sharing button, the window pops up on the page. Inside the window, there are two small charts to fill in. One is for URL address and another one is for writing the stories. After filling the charts, click on the sharing button. Then the video and the description will show up in the front page.

Figure 3.30 shows the Personal Page of *Memosong*. The page head shows the profile picture of the user and the user's introduction. There are three categories of contents on the page.

- Songs. All the songs user have ever shared will show up here. Each song goes with its title and the story behind it.
- Followers. People who follow user.
- Following. People user is following.

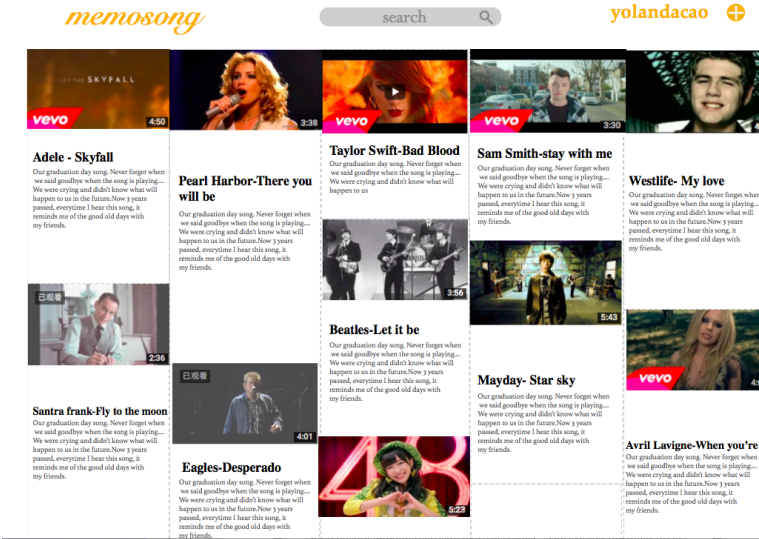


Figure 3.28: Front page of *Memosong*

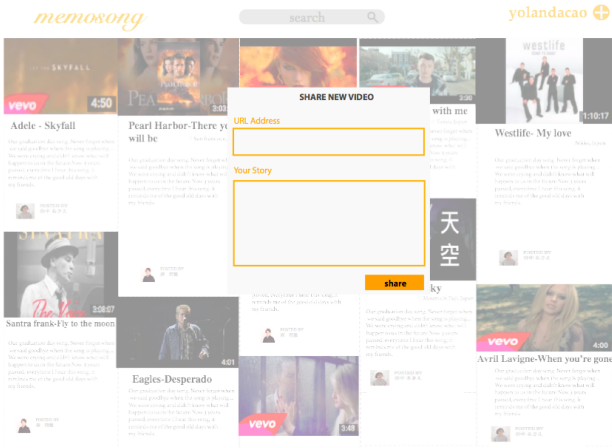


Figure 3.29: Sharing window of *Memosong*

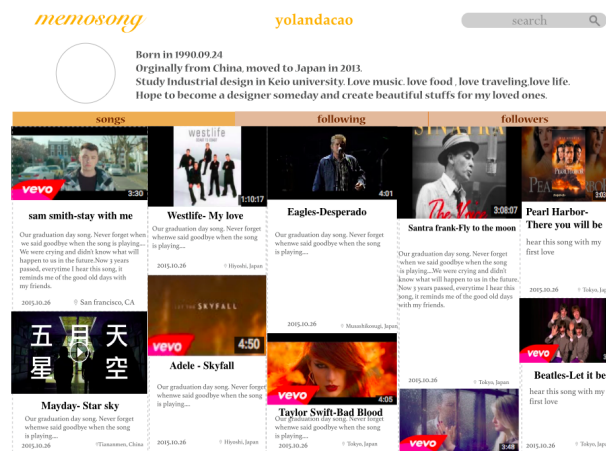
Figure 3.30: Personal Page of *Memosong*

Figure 3.31 shows the following page. The people who user are following can be check here.

Figure 3.32 shows up the people who are following the user.

By visualizing the website, the design can move on to implementation.

### 3.5 Implementation

As *Memosong* is a website, the implementation of *Memosong* is divided into two parts -The front end and the back end. The front end is coded according to the interface designed in the former step. The back end is the database. The front end are written in HTML5, CSS, Javascript and the data base is written in Node.js (see Appendix A to check the source code). Data transmitted between front end and back end is in Json format. The way data transmitted will be explained here. When user opens website, These information will get from the database: Figure 3.33

- user information including user id, user name, user birthday, user address, user information, user image

- songs including song id, video url, title, story content, watch, information about people who share the music including image, name, id, time, address.

- people who is following the user including their id, URL address

- followers' information including id and their URL address.

When user want to share the contents, they fill in URL address and story,

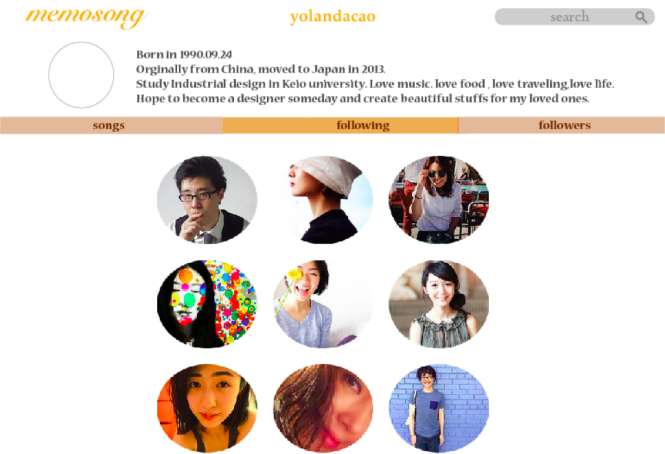


Figure 3.31: Following Page

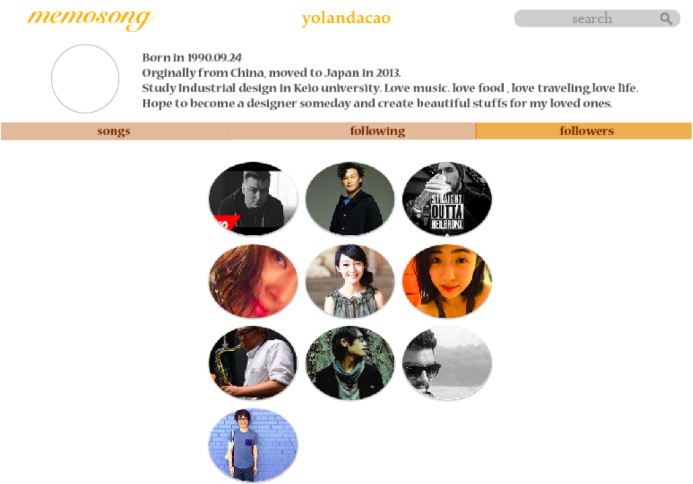


Figure 3.32: Follower Page



```

var data = {
  "userid": "user001", //用户在数据库中的唯一id
  "username": "yolandacao", //用户的名字
  "userborn": "Born in 1998.09.24", //用户的出生日期
  "useradres": "from China, moved to Japan", //用户地址
  "userinfo": "用户简介", //用户简介
  "userimgurl": "http://www.***", //用户头像的url
  "songsall": [ //包含所有上传者视频的数组（也包括用户自己上传的），数组中包含n项
    {
      "songid": "每个视频的id", //每个视频对应的唯一id
      "imgurl": "http://www.***", //每个视频缩略图的url，图片地址
      "title": "故事标题", //每个故事的标题
      "storycontent": "故事内容", //故事内容
      "watch": 0, //是否观看过
      "vediourl": "http://www.***", //打开该视频的链接
      "byuserid": "http://www.***", //上传者头像的图片地址
      "byusername": "上传者用户名", //上传者用户名
      "byuserid": "上传者用户的id", //上传者用户在数据库中的唯一id（通过检索这个找出用户自己上传的视频）
      "bytime": "上传时间", //上传时间（my songs中显示）
      "byaddress": "上传地址" //上传地址
    },
    ...
  ],
  "following": [ //用户关注了哪些人
    {
      "followid": "用户ID", //关注者的用户id
      "followingurl": "http://www.***", //关注者头像图片url
    },
    ...
  ],
  "followers": [ //有哪些粉丝
    {
      "followid": "用户ID", //粉丝的用户id
      "followingurl": "http://www.***", //粉丝的头像图片url
    },
    ...
  ]
}

```

Figure 3.33: Data transmit between front end and back end

and then click on share button. The front end will send these information to the database in json format.

- video URL address
- story contents
- user id

If user want to share successfully, the database will send back data. The data are songs' id, video URL address, story contents, watch, information about the people who share the video including image, name, id, time, address.

When user click on the video, it shows that the video is watched. The front end will send the request to the database. The database will send back the video's id and user's id.

As there are many videos shared on the website, if all the videos show up at the same time, the data will be too big. Therefore, each time the web page goes down, there will be ten new videos shown on the page. The front end will ask the information about the songs to the back end until all the videos' information is send.

After designing the front page and setting up the database, the website is working and can be used in user test.

## Notes

- 1 <http://www.pass-the-baton.com/>
- 2 Omotesando is a zelkova tree-lined avenue located in Shibuya and Minato, Tokyo, stretching from the entrance to the Meiji Shrine, to Aoyama-dori
- 3 [http://ajw.asahi.com/article/cool\\_japan/style/AJ201405130010](http://ajw.asahi.com/article/cool_japan/style/AJ201405130010)

# Chapter 4

## Evaluation

For testing of the concept with respect to the research objects, three experimental tests were held in total. These tests were held in different time and have different test purpose. All the tests were conducted with the target group- College students among 20s.

First test: invite people to share music and storeis and ask for feedbacks about the functions and interface design.

Second test: invite the same group of people with first test to review the memories they shared before. Test how the website could retrieve their memories.

Third test: invite another group of people to listen to the music and read the stories on *Memosong*. focus on getting their reactions to those shared memories.

### 4.1 Test 1

The first experiment was done on December 10th in Yokohama, Japan. 60 people are invited to share their memories on *Memosong* and answered the designed questionnaire.

Figure 4.1 and Figure 4.2 shows the scene that user are using *Memosong* to share their music memories. After sharing songs on the website, they fill in the questionnaire designed by author.

Four questions are asked and the interviewees are requested to give marks to each question. 5 is the highest point and 1 is the lowest point.

The results of the questions are shown below:

**First question:** *Do you feel it is necessary to have this website for writing memories behind the music?* The responses are shown in Table 4.1. The 2 interviewees who answered “not necessary” said that compared to memories, guys prefer sharing cool music.

**Second question:** *Do you have fun on sharing your memories on the website?* The results are shown in Table 4.2. Interviewees are having fun on sharing their



Figure 4.1: User is searching for music

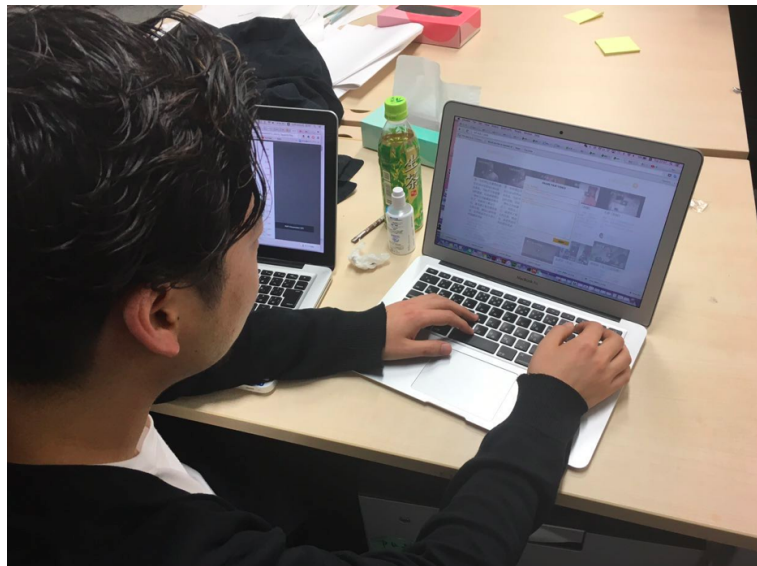


Figure 4.2: User is writing his memory

Table 4.1: First Test: Results of First Question

| Rating | No. People |
|--------|------------|
| 5      | 5          |
| 4      | 34         |
| 3      | 10         |
| 2      | 9          |
| 1      | 2          |

memories and some of them showed an happy attitude to tell stories. People gave lower scores wondered about the privacy of their shared contents. As they only want to tell their personal stories to closed ones.

Table 4.2: First Test: Results of Second Question

| Rating | No. People |
|--------|------------|
| 5      | 11         |
| 4      | 28         |
| 3      | 14         |
| 2      | 5          |
| 1      | 2          |

**Third question:** *How much do you like the interface about this website?* The results are shown in Table 4.3. People are showing that the interface design is clear and simple. They could easily find the place to share ( the “plus button”). Some interviewees said that they felt happy for having a personal page to store their memories therefore they could always look back in the future and can have a track of their music tastes.

Table 4.3: First Test: Results of Third Question

| Rating | No. People |
|--------|------------|
| 5      | 17         |
| 4      | 25         |
| 3      | 10         |
| 2      | 3          |
| 1      | 5          |

**Fourth question:** *How much do you like functions about this website?* The

results are shown in Table 4.4. People are showing that the function of the website is enough for them to share and track music and memories they have shared. However, people who gave lower scores complained about coping URL address from youtube and *Memosong* is kind of treaky and they hope there will be a simple way for sharing music to the webiste.

Table 4.4: First Test: Results of Fourth Question

| Rating | No. People |
|--------|------------|
| 5      | 24         |
| 4      | 19         |
| 3      | 16         |
| 2      | 1          |
| 1      | 0          |

Here are some other comments they gave the researcher.

- Consider medium for sharing memories. A lot of my memories have to do with the era, or an event that happened, video or pictures would be a nice addition to written stories.
- Attach pictures with it with songs, then associate memories sound, song or audio or pictures together Maybe it'll work better as a gift? To make a collection of memorable songs that brought two people closer together.
- Live experience is share the moment. Audience and artist. So the whole of live experience is memorable.
- Its interface can contain lots of template of our visual expression!!
- I would rather want to know the story of the composer of the song

In conclusion, in the first experimental test, most of the interviewees shows a positive attitude to *Memosong* and would like to attach music with their stories on the website. They enjoyed the process of finding, writing and posting. However, there are also limits found in this session, such as the content privacy issue, difficulty on copying URL address and different gender requests towards music contents on the webiste.

## 4.2 Test 2

The second experimental test was a review session conducted on January 19th in Yokohama, Japan. Same group of people with the first tests, 60 interviewees

were invited to review the contents they have shared on *Memosong* and they were asked to answer three questions.

**First question:** *Do you want to review the contents shared before?* The results are shown in Table 4.5. Most of the interviewees felt happy to review the song shared one month ago. People who gave low points said one month is kind of short to do a review and they would like to share the contents frequently while review the contents about 1 time 2 months.

Table 4.5: Second Test: Results of First Question

| Rating | No. People |
|--------|------------|
| 5      | 25         |
| 4      | 19         |
| 3      | 12         |
| 2      | 3          |
| 1      | 1          |

**Second question:** *By just listening to the music shared by you one month ago, how much does your memory be retrieved?* The results are shown in Table 4.6.

Table 4.6: Second Test: Results of Second Question

| Rating | No. People |
|--------|------------|
| 5      | 13         |
| 4      | 29         |
| 3      | 15         |
| 2      | 3          |
| 1      | 0          |

**Third question:** *Please play the music and at the same time read memories wrote by you, how much your memories be retrieved?* The results are shown in Table 4.7.

Comparing the answers of the second question and the third question, People who can remember the memories related to the music raise 28%. By adding up the story written by interviewees, the memories related to the music can be better retrieved, which proves that the design is efficient for retrieving people's memories behind the music.

Table 4.7: Second Test: Results of Third Question

| Rating | No. People |
|--------|------------|
| 5      | 43         |
| 4      | 16         |
| 3      | 1          |
| 2      | 0          |
| 1      | 0          |

## 4.2 Test 3

The third experiment was an interview session conducted on January 7th in Yokohama, Japan. Two students (here will be called "Listener") were invited to read the stories shared by their friends on *Memosong* and accept the interview from the researcher.

The first listener is a girl (23) who is a student majored in Media Design. In her daily life, she likes to write novels with her friends together.

As shown in Figure 4.9, she was invited to watch a video shared by her another friend. She was very interested in what he will share at the beginning. She read his stories firstly and then listened to the music.

The listener laughed several times while the song was playing. After that, author interviewed her. She told author, she will be interested in the contents if they were shared by the people she knows. After she read her friend's memory, she wants to post her memory as well. She told the author her experience about one song "Vincent" which reminds her of her dog. She felt the lyrics can also be used to describe a dog as a dog is pure and kind as star sky. She felt very happy to know her friends thought and she felt she had a better understanding towards her friend.

She also gave author some suggestions. She thought the website is good because it is a special website just for sharing memories. On *Facebook*, there are so many functions which she thinks it is too confusing sometimes. She hopes she can choose the person she follow and be followed.

The second listener is a girl (22 years old) majored in Architecture. Author showed her a video shared by one of her friends. However, the girl didn't show much reaction to the contents. She told author that the story written by her friend is not emotional and the song is not the type of song she likes. She could just feel she understand her friend's music tastes better. She suggested that if



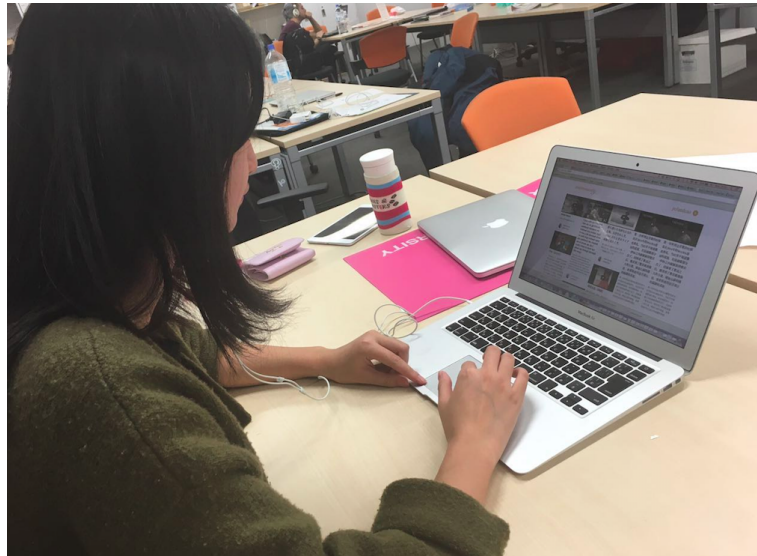


Figure 4.3: The First "Listener"

there were key words listed below the stories would be better as she could catch the meaning in short time.

The different reactions got from the interviews gave author new insights on completing the website. In order to get users' to have a better reaction to the contents, there are several elements should be there.

- If users are familiar with the people who share the memory or not
- If the contents are emotional or not
- If the contents are related to users' own experience or not.

### 4.3 Conclusion

Through the three experimental tests did in this evaluation session, the efficiency of *Memosong* was proved and many useful points are found from users which will be applied for future development.

Functions for protecting users' privacy need to be set up; Certain tags should be provided for users to use in order to make writing stories more convenient; There should be search function for users to search for songs they like; Users should be able to talk with each other therefore the message function should also be developed; Songs with similar taste or similar story lines should be able to be seen by user.

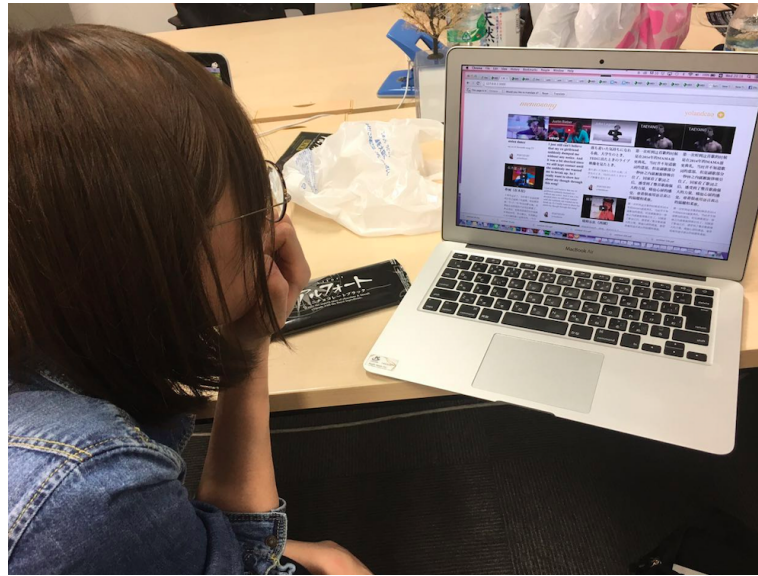


Figure 4.4: The Second "Listener"

Even though the website is just set up and there are many places need to be modified and improved, users enjoyed using the website and they had fun of sharing and reading stories behind the music in the experiments tests. They also said that the songs remind of their old days. Therefore, *Memosong* can provide value for its users- retrieve memories and bring changes to the music social networks.

# Chapter 5

## Conclusion

### 5.1 Contribution

*Memosong* retrieves individual's memories through music and stories. This can not only be proved in theory but also be proved in the user tests. As discussed in related works, *Memosong* is not just a music website but functions more like a social network. It provides a place for individuals to preserve and review their memories in the way of storytelling. It also opens a window for users to check others' memories. Stories of users serve as an engaging media to connect memories and music.

*Memosong* also fill in a blank area of music platforms. Before the development of *Memosong*, there is no special music network that help people to express their memories. Existed music platforms provide unlimited music resources and smart recommendation systems to music lovers while the emotion behind the music had no where to put. Even though *Facebook* has added a new function which allows users to share stories on the platforms, according to the questionnaire conducted in the evaluation session, *Facebook* is not the comfortable place for memory. Therefore, *Memosong* also create a new kind of music platform.

By adding up stories to the music, *Memosong* brings emotion connections between people and music. In the age of music being fast consumed, a song is more hard to be concerned by listeners. It will promote music content creator to create valuable contents in the future.

### 5.2 Limitations

As memories are abstract, how much memories can be retrieved by *Memosong* is hard to measure. The way author now is using to test whether *Memosong* is effective or not is by interviewing if users enjoy using and sharing their memories on the website. In the future, when the website have a large number of users, the

effectiveness can be tested by the activeness of users- the numbers of music and memories user shared on the website and the communications happened among users.

Also, as *Memosong* is still under construction, there is no collaboration between the music resource *Youtube*. Users have to go to *Youtube* to copy the URL address and then move to *Memosong* to past the song address and write stories. This process cause effort and it may decrease the motivation of sharing.

The concept of *Memosong* is easy to be copied by other developers. If the big music platforms would like to develop similar platforms, *Memosong* will be hard to survive. Therefore, it is necessary for *Memosong* to develop special technology on preserving people's memories which is hard to be copied by others.

## 5.3 Future Development

### 5.2.1 Prototype Development

*Memosong* is still on its early development even though it is a working prototype now. Therefore there are still many functions expected to be developed in the future.

Based on the feedback received in the evaluation session, these functions should be improved.

Firstly, *Memosong* is now a website which located on author's computer. It is not open to public yet. A register system is needed to be developed therefore users could register and start sharing memories on the website. Furthermore, by having users to freely log in the website and edit, more real feedbacks can be collected from the users and a larger number of test users is possible.

Secondly, functions for protecting users' privacy should be developed. As memories are private and writing a memories is similar with writing diary, users should be able to set private level of the contents they shared. By having privacy protection function, users can feel more free to share.

Thirdly, story sharing chart should offer more choices in writing the stories. Tags are expected to be able to use during user write the stories and visual expressions is also a interesting tool for users to express their emotions. Also, pictures, locations, temperatures these information should also be shown with the stories as they are usually important elements in forming the memories.

Finally, search function is expected to be developed. Being able to search for interesting stories and music will be necessary of users to communicate with each

other and make memories being cared by more people.

### 5.2.1 Extensions

In the future, *Memosong* is expected to collaborate with music content providers. *Memosong* wish to provide listeners' daily insights to music producer and encourage them to produce more valueable contents that creates wonderful experience for the users. It will also be a big encouragement for music content providers to see how their music affect people's daily life.

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# Appendix

## A Example Code

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>MEMOSONG</title>
  <link rel="stylesheet" href="./memosong.css">
  <script src="../../dep/jquery/dist/jquery.min.js"></script>
</head>
<body>
  <div class="container">
    <div class="head">
      
      <input class="search head-ele" id="search_box" placeholder="search"
        onfocus='this.placeholder=""' onblur='if(this.placeholder==""){
          this.placeholder="search"}' type="text">
      <span class="username head-ele" id="username_id">yolandcao</span>
      <span class="share-btn head-ele" id="share_btn">+</span>
    </div>
    <div class="person" id="person_id">
      
      <div class="person-info">
        <span class="info-born">Born in 1990.09.24</span>
        <span class="info-address">Originally from China,moved to Japan
          in 2013.</span>
        <span class="info-introduction">Study Industrial design in Keio
          university. Love music, love food, love traveling, love life.
          Hope to become a designer someday and create beautiful
          stuffs for my loved ones.</span>
      </div>
    </div>
    <div class="navigation" id="navigation_id">
      <span class="nav-item nav-songs nav-active" id="nav_songs">songs</
        span><span class="nav-item nav-following" id="nav_following">
        following</span><span class="nav-item nav-followers" id="
        nav_followers">followers</span>
    </div>
    <div class="content-songs" id="contents_songs">
      <div class="column">
        <div class="video-item">
```

```

<a href="">
  
  <span class="title">Adele - Skyfall</span>
  <span class="story">Our graduation day song. Never forget
    when we said goodbye when the song is playing. We
    were crying and didn t know what will happen to us
    in the future. Now 3 years pasted, everytime I hear
    this song, it reminds me of the good old days with my
    friends.</span>
  <div class="byinfo">
    
    <span class="posted"><span class="posted-by">POSTED
      BY</span>
    <span class="byuser-name">Deng Chao</span></span>
  </div>
</a>
</div><div class="video-item">
  <a href="">
    
    <span class="title">Adele - Skyfall</span>
    <span class="story">Our graduation day song. Never forget
      when we said goodbye when the song is playing. We
      were crying and didn t know what will happen to us
      in the future. Now 3 years pasted, everytime I hear
      this song, it reminds me of the good old days with my
      friends.</span>
    <div class="byinfo">
      
      <span class="posted"><span class="posted-by">POSTED
        BY</span>
      <span class="byuser-name">Deng Chao</span></span>
    </div>
  </a>
</div>
</div>
<div class="column">
  <div class="video-item">
    <a href="">
      
      <span class="title">Adele - Skyfall</span>
      <span class="story">Our graduation day song. Never forget
        when we said goodbye when the song is playing. </
        span>
      <div class="byinfo">
        
        <span class="posted"><span class="posted-by">POSTED
          BY</span>
        <span class="byuser-name">Deng Chao</span></span>
      </div>
    </a>
  </div>
</div>

```

```

        </a>
    </div>
    <div class="video-item">
        <a href="">
            
            <span class="title">Adele - Skyfall</span>
            <span class="story">Our graduation day song. Never forget
                when we said goodbye when the song is playing. Our
                graduation day song. Never forget when we said
                goodbye when the song is playing. We were crying and
                didn t know what will happen to us in the future.
                Now 3 years pasted, everytime I hear this song, it
                reminds me of the good old days with my friends</span>
            <div class="byinfo">
                
                <span class="posted"><span class="posted-by">POSTED
                    BY</span>
                <span class="byuser-name">Deng Chao</span></span>
            </div>
        </a>
    </div>
</div>
<div class="column">
    <div class="video-item">
        <a href="">
            
            <span class="title">Adele - Skyfall</span>
            <span class="story">Our graduation day song. Never forget
                when we said goodbye when the song is playing. We
                were crying and didn t know what will happen to us
                in the future. Now 3 years pasted, everytime I hear
                this song, it reminds me of the good old days with my
                friends.</span>
            <div class="byinfo">
                
                <span class="posted"><span class="posted-by">POSTED
                    BY</span>
                <span class="byuser-name">Deng Chao</span></span>
            </div>
        </a>
    </div>
    <div class="video-item">
        <a href="">
            
            <span class="title">Adele - Skyfall</span>
            <span class="story">Our graduation day song. Never forget
                when we said goodbye when the song is playing. We
                were crying and didn t know what will happen to us
                in the future. Now 3 years pasted, everytime I hear

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        this song, it reminds me of the good old days with my
        friends.</span>
<div class="byinfo">
    
    <span class="posted"><span class="posted-by">POSTED
        BY</span>
    <span class="byuser-name">Deng Chao</span></span>
</div>
</a>
</div>
</div>
<div class="column">
    <div class="video-item">
        <a href="">
            
            <span class="title">Adele - Skyfall</span>
            <span class="story">Our graduation day song. Never forget
                when we said goodbye when the song is playing. We
                were crying and didn t know what will happen to us
                in the future. Now 3 years pasted, everytime I hear
                this song, it reminds me of the good old days with my
                friends.</span>
            <div class="byinfo">
                
                <span class="posted"><span class="posted-by">POSTED
                    BY</span>
                <span class="byuser-name">Deng Chao</span></span>
            </div>
        </a>
    </div>
    <div class="video-item">
        <a href="">
            
            <span class="title">Adele - Skyfall</span>
            <span class="story">Our graduation day song. Never forget
                when we said goodbye when the song is playing. We
                were crying and didn t know what will happen to us
                in the future. Now 3 years pasted, everytime I hear
                this song, it reminds me of the good old days with my
                friends.Our graduation day song. Never forget when
                we said goodbye when the song is playing. We were
                crying and didn t know what will happen to us in
                the future. Now 3 years pasted, everytime I hear this
                song, it reminds me of the good old days with my
                friends.</span>
            <div class="byinfo">
                
                <span class="posted"><span class="posted-by">POSTED
                    BY</span>
                <span class="byuser-name">Deng Chao</span></span>
            </div>
        </a>
    </div>

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        </div>
    </a>
</div>
</div>
<div class="column">
    <div class="video-item">
        <a href="">
            
            <span class="title">Adele - Skyfall</span>
            <span class="story">Our graduation day song. Never forget
                when we said goodbye when the song is playing. We
                were crying and didn t know what will happen to us
                in the future. Now 3 years pasted, everytime I hear
                this song, it reminds me of the good old days with my
                friends.We were crying and didn t know what will
                happen to us in the future. Now 3 years pasted,
                everytime I hear this song, it reminds me of the good
                old days with my friends.</span>
            <div class="byinfo">
                
                <span class="posted"><span class="posted-by">POSTED
                    BY</span>
                <span class="byuser-name">Deng Chao</span></span>
            </div>
        </a>
    </div>
    <div class="video-item">
        <a href="">
            
            <span class="title">Adele - Skyfall</span>
            <span class="story">Our graduation day song. Never forget
                when we said goodbye when the song is playing. We
                were crying and didn t know what will happen to us
                in the future. Now 3 years pasted, everytime I hear
                this song, it reminds me of the good old days with my
                friends.</span>
            <div class="byinfo">
                
                <span class="posted"><span class="posted-by">POSTED
                    BY</span>
                <span class="byuser-name">Deng Chao</span></span>
            </div>
        </a>
    </div>
</div>
</div>
<div class="content-follow" id="content_follow">
    <div>
        <a href=""></a>
    >

```

```

        <a href="">
        <a href="">
        <a href="" class="hide"></a>
        <a href="">
        <a href="">
        <a href="">
        <a href="" class="hide"></a>
        <a href="">
        <a href="" class="hide"></a>
        <a href="">
        <a href="" class="hide"></a>
        <a href="">
        <a href="" class="hide"></a>
        <a href="">
        <a href="">
    </div>
</div>
<!-- -->
<div class="box" id="box_id">
    <!-- share -->
    <div class="box-content">
        <span class="box-title box-ele">SHARE NEW VIDEO</span>
        <span class="share-url box-ele">URL Addres</span>
        <textarea id="" class="box-ele input-url"></textarea>
        <span class="your-story box-ele">Your story</span>
        <textarea name="storys" id="" class="input-story box-ele"></
        textarea>
        <div class="box-foot"><span class="share-video" id="share_video">
        share</span></div>
    </div>
</div>

</div>
<script src="memosong.js"></script>
</body>
</html>
%\end{verbatim}

```