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Master's Thesis
Academic Year 2020

Folkfore: A Board Game Designed to Increase
Interest in Traditional Folklore for Emerging
Adults in Indonesia



Keio University
Graduate School of Media Design

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A Master's Thesis
submitted to Keio University Graduate School of Media Design
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Master of Media Design

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Abstract of Master's Thesis of Academic Year 2020

Folklore: A Board Game Designed to Increase Interest in Traditional Folklore for Emerging Adults in Indonesia

Category: Design

Summary

This research examines the use of multiple storytelling in a board game environment and its impact to promote folklore in Indonesia. Globalization gives an opportunity of exposure to other cultures, which does not necessarily mean always making a good impact in the society. The research is a form of preventing cultural erosion, a serious issue among the younger generation of Indonesians. However, in spite of the technology advancements in various industries such as video games, board games have been an attractive social activity for emerging adults. In the last few years, the market for board game industry in Indonesia has significant growth. While there are many other board games that were designed around Indonesian folklore, this design research will differ from those that are already available. Most other board games use a very simple gameplay, that dilutes the engagement level, and/or are focusing on one single famous story.

This research designed a new storytelling-based game that comprises multiple folklore in Indonesia. On top of having many stories, unique gameplay that involves multiple design decisions are needed to work cohesively. With the objective to raise replayability, which also serves the goal of exposing multiple stories for players. Several initial prototype testing that was conducted suggested that giving players various and meaningful choices can encourage interest of the players towards the story being told. As the worldwide pandemic was happening in the middle of research progress, the final design will be in a simulator in digital format.

The verification of the design is done through a pre and post test. The pre survey was conducted as an aim to identify participant's background. While post-questionnaire was done using the ARCS motivational design model to measure participants' motivations towards learning folklore through the artifact.

Keywords:

FOLKLORE, BOARD GAME, STORYTELLING

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Chapter 1

Introduction

1.1. Background

As the world progress through technology, we are more connected than we ever could. With internet, information and other form of media can be distributed around the world tremendously fast. This has ushered in an era of globalization, where we collectively made a new ethnicity globally [1]. The exchange of culture can lead positively towards acculturation and mixing of cultures. Such interaction have positive impacts, bigger opportunities, open-mindedness, or even provide better trade and commerce just to name a few. However as everything else, globalization also comes with its own negative effects. Cultural erosion is one of the big negative impact from globalization. A lot of Indonesian culture are slowly being eroded away, and the society are crawling away from traditional culture. This is especially true in urban areas where technology and internet access are very supported compared to urban remote areas. A new trend of board games in Indonesia emerged and was really very evident around 2015 until the time of this research. It has attracted a lot of young adults to socialize and entertainment place, which opens an opportunity to the issue. In 2020, a worldwide pandemic broke out, and while the final product becomes in digital form, it is still embodying a board game environment in various ways. These includes but not limited to, setting up the game, no coded rule, and players can do whatever they want, but limited to the virtual table space.

1.2. Research Problem

Indonesia is a vast archipelago area in the south-eastern Asia. These islands entirely have tropical climate with rain forests stretch across the country. In the past this fertile lands attracted many comers from different part of the world. Due to the nature of being separated with sea, there is less contact between an island and the next. In this situation, it is not hard to deduct that lack of contact between regions can lead to many cultures. Each with their own unique tradition, language, music, habit, and other way of living essentially. Cultures are generally passed down through generations for tens to hundreds of years. During the colonization period, Ir.Soekarno and Moh.Hatta united all of Indonesia in the declaration of independence in 1945. Today, Indonesia consists of more than a thousand ethnic groups. The slogan of the country is "Unity in diversity", which corresponds to what being multiculturalism is.

As technology progresses and the world become smaller and interconnected through internet, every country is now exposed to one another. Various media has won the attention of many people, including children of early ages and adults alike. Whereas parents in developing country are more focused on working and developing their career, it is not rare to find that many parents did not have much time in passing down stories and traditions to their children. By the time they reach teenage years, many of them have develop more interest towards other cultures that they consume through their personal computers, smartphones, and other gadgets [2]. Not only that, the phenomenon also contribute to the low interest of Indonesian in reading generally. As stated by UNESCO in 2016, Indonesia is on the second lowest at reading interest in the society, but is very active in their gadgets [3] Emerging adults which are in late teens to late 20's are the ones most affected by this phenomenon [4]. The government of Indonesia themselves has warned about younger generations who are slowly becoming less interested in local culture. This leads to the assimilation culture of people, preferring other culture instead of their own country's traditional one [5].

However, with the progress on smartphone and internet, board game industry especially in Indonesia has gotten a lot of attention. Nowadays designers and pub-

lishers can put their design on a crowd-funding source, and reaching way more audiences compared to before [6]. The phenomenon is also mirrored with the situation in Indonesia. In the past 5 years, board game cafes and communities has emerged. Followed by rising interest among students to play board games and socialize in those locations [7]. Various games has also emerged to take the opportunity to introduce players to folklore. However, so far none has embedded multiple stories in the game, or have not designed it to be a more complex tabletop game. Therefore, this research is going to examine whether board game that incorporates multiple stories can motivate young adults to learn traditional folklore stories in Indonesia.

1.3. Contribution

This research contributes to several aspects as follows:

1. Game implementation for a folklore storytelling experience
2. Usage of a specific game mechanics that aims to coherently work towards introducing players to various folklore
3. Feedback from players based on playtesting through surveys and observation
4. A platform for additional stories in future work to be implemented almost immediately.

Chapter 2

Literature Review

The second chapter on related works covers literature review and board games. Literature review consists of cultures and what folklore, especially how their situation is in Indonesia. This is vital to build a basis on elements that is going to serve as a foundation on design process. And secondly, a base understanding of how board game is also required to grasp how it is chosen as a suitable method for the problem that was presented.

2.1. Culture and Folklore

Culture comes in various shapes, but can generally be divided to two, tangible and intangible. Tangible cultures are the artifacts of the society, e.g; Traditional Foods, Artworks, Musical Instruments, Structures, and Fashion. While Intangible culture are things that are passed down, e.g; Language, Belief, Ethics, Stories, Values, Customs and Rituals. These examples of cultural relics are often interconnected. Indonesia has quite successfully make a name out of the traditional fashion, pattern, foods, and instruments to international world. However some elements are still getting neglected, especially some that does not get a lot of exposure from what people interact with on everyday life.

The mix of cultures is called acculturation, and it comes in 4 different types [8]. The first one is Integration, being a multicultural society, and this is a preferable outcome. But society often falls victim to the other types of acculturation. Assimilation, where an individual gives up their cultural identity and fully absorbed to the host culture. Third one is separation, where an individual rejects other cultures. And the last one is marginalization, where a person does not accept a

new culture, but also neglecting their own traditional culture.

Indonesia has a slogan of "Bhinneka Tunggal Ika" which means unity in diversity. As the nature of Indonesian society scattered between thousands of archipelago, it is inevitable for Indonesia to have so many cultures. Exchanging and learning others' culture is an important experience for people, mentally, financially, and sometimes religiously. However the practice has to be done carefully in a way that the culture that being interacted should not make a person to cast away their origin. Should that worse case is true, then it will not be long until a culture become forgotten and the legacy lost in between generations. As such, in this digital modern era, a person should approach international culture in the same fashion. Where it is beneficial to practice open-mindedness by learning other countries' way of living, one should not forget their nationality of their own country's culture.

One example of culture being passed down between generations is folklore. In Indonesia folklore can be categorized to 5 different types of stories [9]. Fairy tales, legends, myths, fable, and sagas. Fairy tales are fiction stories that are perceived to have not really happened, with the purpose of giving moral lesson or educating while entertaining. Legends are stories that are taken to have actually taken place, often becoming a collective history. Myths are stories that usually involves gods and heroes of the past, it also includes various interpretations of the universe, humans, and tribes. Fable are stories that revolves around animals that live like humans. And sagas are stories from classic Malay about the impossible feats of the characters.

2.2. Culture and Folklore in Indonesia

As the time being, various media both nationally in Indonesia and internationally has highlighted many times of the importance of preserving Indonesian traditional cultures. Several has even been acknowledged by UNESCO [10]. Upon a field-work research and several interviews to a local school that was conducted, many

effort towards the preserving of culture has been done by the government. Such as incorporating traditional language, dance, and music as a mandatory school subject from elementary until high school. However, In spite of all the intentions, it seems like folklore has not been getting the attention compared to others [11]. This is a very unfortunate missed opportunity, as folklore is a mirror of a culture and can be a gateway to introduce various other shape of culture [12].

2.3. Learning Culture

A student's learning experience rely quite heavily upon their own motivation and interest towards the subject. As Carvalho, Barone, and Bercht [13] mentioned in their research, lacks of motivation in student in some extreme cases may lead to intense consequences, such as depriving effort to engage in learning process or even worse, school evasion. Therefore the goal is to make the learning a pleasant experience, and to make the educational game motivating for the players to be engaged in the topic. However there is a need to be able verify the motivational aspect of the individual playing the educational game. In order to do so, this research resort to Keller's ARCS motivational design model [14]. The name is derived from the four steps that happens to cultivate motivation from an individual; Attention, Relevance, Confidence, and Satisfaction. Each point will be discussed below.

2.3.1 Attention

This is an aspect that would capture the interest of a person. Before being engaged, an individual will have to be attracted towards the subject matter. The methods includes giving an active participation such as role-play in game, variability in game to take into account different approach of various people, using humor, and giving questions or problems for the learners to solve.

2.3.2 Relevance

After grabbing the attention of the learners, the next step is to see how relevant it is to the learners. Some strategies includes introducing the present worth of a

material, future usefulness of the subject, and choice to allow learners use different methods to pursue their work.

2.3.3 Confidence

This part is talking about helping learners understand their likeliness of success. If they feel they cannot meet the objectives, their motivation will decrease. The key to this part is to provide objectives and prerequisites, allowing them to grow, and give a sense of degree of control to the learners.

2.3.4 Satisfaction

After being through the previous process, a learning experience should be rewarding or satisfying in some way. Whether it is a sense of achievement, praise, or mere entertainment. Providing feedback and reinforcement for the players. This is one of the advantage of having a game, where a clear award for winning is apparent.

2.4. Board Game

Board game has been with us for thousand of years, the history of board game itself stretches far since 3500 B.C, the oldest recorded board game in Iran. Board game derives from tabletop games, which often includes a piece, cards, and an area zone using board. Nowadays a board game does not always have to include a physical board to be played. Although board games have smaller audience than video games, board games may have yet to see its golden era thanks to internet that can reach bigger audience from another part of the world [6]. This opportunity enables game developers to crowdfund their projects, and inevitably gaining a massive improvement in qualities of each aspects of board games such as mechanic, components and artworks. Through platforms like Kickstarters and various SNS media (e.g; facebook, instagram), the marketing department also gains a boost, enhancing advertisements and word of mouth between peers.

2.4.1 Storytelling in Boardgame

Humans love stories, it can reflect our emotion to the excitement of a close sport game, and to games in general. There are two ways of interpreting stories in a board game. One is a story of the experience that a user had during the gameplay. For example, a family playing Monopoly, which does not have stories written on the game may invoke a story on its own. The feeling of closing to winning, and hoping a roll of dice may roll the exact number can have different output in our emotions. It will create a story, a memory to be retold to others. Then there are other games that directly have stories in the game itself. This may vary from a roleplay on a written text, or have the players creating their own written stories through various choices. This research needs both of experience since it is closely tied to folklore stories. The first one is important to make players interested to replay the game again, while the latter is taking the role of conveying information and knowledge of folklore.

2.4.2 Board game in Indonesia

Since 2015, the board game industry in Indonesia has seen a big increase, and is expected to keep rising [7]. Many factors played as stated before, such as the added complexity that makes board games more interesting, and a very big audience for marketing through online. Other than that, the government in Indonesia is also supporting creative economy, with a specific agency dedicated for this called BEKRAF (Badan Ekonomi Kreatif Indonesia). Therefore directly supporting the board game market. As of 2020, There has been 43 different brands of Board Game Cafe, and around 40 board game communities spread across Indonesia, with majority in Java Island, where most of Indonesia population is.

2.5. Related Works

Multiple traditional folklore-based board game has been created in Indonesia in an attempt to contribute to awareness of cultural value. This section will discuss the strength of several available games in the market and discuss how this research will differ from them.

1. "Timun Mas Green Giants" is one of the most popular title of this genre that has gone international. It is designed by *Educa Studio*, a company started on 2012 aiming to make educational games both for mobile and tabletop. Timun mas Green Giants have made known internationally in various board game events, and even has its own mobile game version for a broader audience. However the game is only about one specific popular story.



(Source: *Educa Games* [15])

Figure 2.1: Timun Mas and Green Giant Board Game

2. Another game that deals with other aspect of cultures and serving it as a board game, *Bhinneka* by Minikmaya Games [16] is taken as example. The game introduces various cultures such as clothes, music instruments, and structures of many tribes in Indonesia. It is aimed towards a younger audience, hence the *quartet* game play is chosen. While a set of 4 cards in decks to introduce folklore might be feasible, it does not fall into advanced board game category which can make a game inviting to players to revisit. Regardless, some element of the game such as utilizing real place of Indonesia is taken to consideration in designing Folkfore.

In summary, the distinction in the design of Folkfore lies in its wide variety of folklore stories that it offers, and a more intricate gameplay with replayability in mind. While the visual design of the game also should utilize other cultural elements.



(Source: *boardgame.id* [16])

Figure 2.2: Bhinneka Game

Chapter 3

Design

3.1. Introduction

The design of the board game was inspired by a lot of other well known board games. To design a rather compelling board game, I tried playing several board game with my friends, and dissecting the game design elements that can help me achieve my goal. Experiencing the stories and discoveries through chance and luck left me with a good impression.

This puts myself to the perpetual state of being more invested and interested in other aspects of game, leading me to discover many various facts about the game, and so on. In conjunction with stories, interesting mechanic invites me to revisit and replay again with my friends, resulting in an pleasant experience in time that I spent on playing it. These were the idea that I aspire to be implemented to the topic of folklore in Indonesia. That would convey the message of the importance of culture and rediscover forgotten stories from Indonesia.

3.2. Insiprations

Before discussing the design of *Folkfore*, there are several games that I chose as a reference in terms of mechanic that suits to be implemented in the final design. These games need to be introduced to better understand the consideration in making the design to be used as a base to apply the concept.

1. Betrayal at House on the Hill: This is a board game that was released in 2004. It is a 3-6 players game with a range of playtime around 60 minutes.

The game was nominated in 2005 Japan Board game Prize Best Advanced Game Nominee [17]. The game got various additional contents from fans and enthusiasts, and got an official expansion on 2016. Ever since its release, it has gotten quite the popularity due to its many randomness and different outcome requiring a unique strategy for each play session. In the first phase of the game, players are allowed to wander and opens up a new map tile, randomly generated by taking one tile from the stack of square room pieces. This represent the area which can trigger unique events that may affect the player's who is on their turn, or everyone in the game. The winning condition on each play vary, depending on the *Haunt* event that gets triggered. If the haunt is triggered, a role of traitor will be chosen among the players depending on when and who triggered the haunt. There are 50 possible different haunts, each with its own unique story, and requires different winning strategy both for the traitor and the rest of the players.



(Source: *Boardgamegeek* [17])

Figure 3.1: Game pieces of Betrayal at House on the Hill



(Source: *Boardgamegeek* [17])

Figure 3.2: Gameplay of Betrayal at House on the Hill

2. Above and Below: This is a famous family board game for 2-4 players with 90 minutes or more of playtime with a good amount of storytelling in it. It was released on 2015, Designed and drawn by Ryan Laukat [18]. It has been nominated in various board game events, with the latest being SXSW Tabletop Game of the Year Nominee at 2016. Players are thrown to a deserted island and tasked to juggle between managing the villagers and resources. The goal is to get winning points, which can be gained through building infrastructure cards or collecting resources. At the core of the game is to collect resources by going for an exploration, where players appoint minimum 2 villagers and go underground. This is the key mechanic of the game, where the players in turn have to consider which villager to take, and will encounter stories. The encounter stories are read by other players to the player in their turn, and giving them choices to make. After making a choice, the exploring players roll dice to determine whether they are successful or not. All the mechanics are interconnected to make players juggle between strategy and luck needed to win the game.



(Source: *Boardgamegeek* [18])

Figure 3.3: Component of Above and Below board game



(Source: *Boardgamegeek* [18])

Figure 3.4: Gameplay of Above and Below board game

3. Wingspan: This game is one of example of using an advanced board game as a tool for education. It was released 2019 and revolves the theme of bird seeing hobby. The game is complete with scientific name, categories, and each bird species has abilities that are mirroring how the bird act in real life. The core gameplay is resource management and engine building. The abilities of each bird can work together creating a symbiosis that enables a player to gain advantages. Players gain resource in a shared pool in the form of bird food. Naturally, every bird has their own specific type of food. The shared pool mechanic makes a dynamic between gaining what is needed

by a player and trying to prevent others player to get what they need. The goal is to gain as many winning points, but there are several ways to do it. A player's strategy also depends on the cards that they draw, and the bonus cards on the field. After several rounds, a calculation is made to determine the winner.



(Source: *Boardgamegeek* [19])

Figure 3.5: The set up for Wingspan



(Source: *Boardgamegeek* [19])

Figure 3.6: The gameplay of Wingspan

3.3. Game Design Document

This section will provide a game design details that is being used to create Folkfore. It is important to first understand that a game design document is intended for game developers, not for the players. Game design document is dynamic and functions as tool to store important decision and define why and how the game works, while also providing space for further improvement and fixing problems that might not too apparent during the designing process.

As such, this section will describe all the elements needed to create Folkfore in its final form, in a way so that other developers may recreate, and reiterate the game. On top of that, for this master thesis the previous prototypes will also be mentioned and described as why it was changed, as a preliminary user tests has shown its weaknesses.

3.3.1 Concept

Folkfore first goal is to make its players be interested towards folklores. We will now discuss on how folkfore is designed in order to tie it with the concept goal. First, is to increase players' interest towards folklore. To achieve it, we designed that each players would choose 1 of 4 characters, each with its own main storyline. Then, to expose with further various stories, players need to encounter short stories, so that they can complete the main storyline. All the story sharing is also done verbally, to mimic how folklore was shared between generations originally. Second, To make the gameplay memorable and immersive, We separated the main story line into 4 parts. And on each short story encounters, we put players in the story by using the second-person point of view of writing. We also incorporate variou elements of Indonesian culture in the visual design of the board game. Each tile of provinces are decorate with its own unique batik pattern. As batik is a repetition of pattern, therefore I extracted each pattern down to its singular element, and set it as a symbol for each province.

Thirdly, Folkfore has to have a high replayability, in order to do that, we always try to put variables in where it could be. Such as, the short stories are randomized. On the day of the writing of this thesis there are 39 short stories. These stories were mostly taken from a website that provides hundreds of folklore

throughout Indonesia [20]. We also added a dice roll to randomize the outcome bonus of successful short story encounter. And lastly, to also give players a sense of ownership, on each start of the game set up, players will collectively place the hexagon-shaped province tile to create the overall playing field for everyone to be played on.

3.3.2 Rules of Gameplay

This section will explain the rule of game of Folklore. As such, this will be more focused on game design aspect. Although the game is in Indonesia, this section aimed for building up the understanding of core gameplay design. For a better clarification the Rulebook used in the playtest is also included in the Appendices section of this research. However the rulebook is also in Bahasa Indonesia, as this research main targets are Indonesian.

Setting Up and Overview

Every character and map tiles of the game has one of the four colours. This represents the 4 resources that is being used in the game. Yellow for rice, brown for wood, blue for fish, and grey for metal. The first step is choosing a character and put them at the outer places in the center board, and every player gets their own corresponding player board and story cards. Then, everyone gets 4 Food chips as source of energy for pawn to travel from tile to tile.

At the start of the game, Players distribute the map tiles evenly in the center board, separating two areas of left and right, where the center is Jakarta and Yogyakarta. After that, players then put 1 of each corresponding resources on each hexagon map tile, in respect to their border colors. Then open 5 bonus cards and put them where everyone can see. The players' goal is to gain Victory Points either through completing main stories, and aiming for one of the bonus cards criteria. This may include hoarding a certain type of resource. The game ends once a player successfully turn all their main story facing up. Doing so, they can choose 1 of the 5 Bonus Cards that should benefit them. And all the points are counted, with the highest being the winner.

The destination of each players are different, but it is written on the backside of their main story cards. To open the cards and gain its bonuses, players have to arrive on the province tile that is written, and have the amount of resource

required, which is also written on each card. Players gain resource by moving to various tile as mentioned before, if they ran out of food chips to spend, they need to rest, which replenish all of their food chips, and not move during that turn.

Moving Between Tiles

Players begin taking turns in clockwise. During their turn, a player can travel to another tile, but have to pay the cost with spending food chips. The price for food chips determined by the colour. If a player crosses the same colour of theirs, the cost is 0. If it is another colour, then it is 1. This means, travelling from a different colours of theirs, to another colours that is also different from theirs, will result in price of 2 food chips.

Encountering Short Stories

Upon arriving on a province tile, the first player who step into that tile gain the resource that was put there during the set up of the game. While on the tile, players can declare if they want to explore the province tile. Doing so, the players on their right will take 1 encounter card, and read aloud the short-story written on it, includes the option that he/she can take, but not the rewards written inside parentheses. If the player who's on turn, chooses the answer with rewards, it is the correct answer, they have to roll a dice, if it results in 4 or more, then they gain the reward as written, and the encounter card is given to them to read or inspect by themselves. The correct answer here is the true story line of a folklore in Indonesia. If the player choose the wrong answer, then he/she gets nothing, and the encounter card will be put on the bottom of encounter card deck.

Special Provinces

Jakarta and Yogyakarta are the two special provinces that have two border colors. The cost to enter them still apply like any other tile, depending on which side any given player is coming from. Upon entering the tile, on top of taking two resources, they have the opportunity to trade. Trading resource price is 1 for 1, as long as there is available resource chip on the Jakarta and Yogyakarta Trader Cards respectively. This does not cost any energy. If two players also share the same any given tile, they can also initiate a trade during one of their turn. This

mechanic is put to use in order to add more communications between players outside story-telling, and aid to let players keep feeling involved eventhough it may not be their turn just yet.

3.3.3 Aesthetics

There are multiple elements of the game that delivers the Indonesian culture on the game pieces. For example, the resources chosen for the game are specifically chosen. Rice is a staple food of Indonesian, Wood represents the many jungles, and Fish for the seas which is between islands of Indonesia, and lastly metal to resemble the richness of mining material that the country have. Beside using the 4 colours for game mechanic purpose, the art direction in this game take many inspirations from nature and traditional crafts of Indonesia. Batik is one of the well-known culture of Indonesia that has spread internationally and acknowledged by UNESCO heritage. Therefore it is important to highlight that every hexagon tile that represents Indonesia's province has the singular pattern of batik of that particular region. During the development of the game, a piece of batik was taken from a whole pattern found in the clothes of traditional Indonesia. Thirdly, in many cards design, a pattern of oriental pattern shows up and being used consistently across the decks of cards. The pattern is also taken from one of the batik style pattern found in Yogyakarta, the heart of Batik in Indonesia.



Figure 3.7: Design of Map Tiles

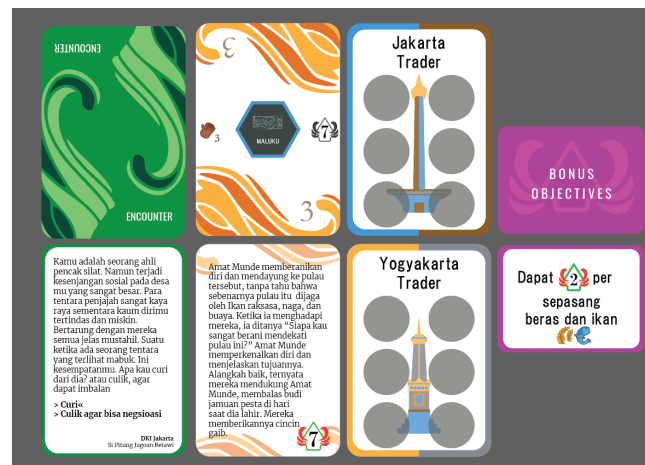


Figure 3.8: Design of Cards

3.3.4 Technical Aspects

The game is featured as a Custom Game in Tabletop Simulator that can be accessed through Steam platform for Windows PC, Mac OS, and Linux. Because of that, there is a minimum limitation of the PC system specification that is required to run Tabletop Simulator, that differs slightly based on the OS.

Windows

- OS: Windows 7 SP1+
- Processor: SSE2 instruction set support.
- Memory: 4 GB RAM
- Graphics: Graphics card with DX10 (shader model 4.0) capabilities.
- DirectX: Version 10
- Network: Broadband Internet connection
- Storage: 3 GB available space

Mac OS

- OS: macOS 10.12+
- Processor: SSE2 instruction set support.
- Memory: 4 GB RAM
- Graphics: Graphics card with shader model 4.0 capabilities.
- Network: Broadband Internet connection
- Storage: 3 GB available space

Steam OS or Linux

- OS: Ubuntu 16.04+
- Processor: SSE2 instruction set support.
- Memory: 4 GB RAM
- Graphics: Graphics card with shader model 4.0 capabilities.
- Network: Broadband Internet connection
- Storage: 3 GB available space

On top of the computing specification, the game uses a server for the computers to communicate, so a strong internet connection is needed. A stable LTE signal has been proven to provide a smooth gameplay. Folklore relies heavily on voice-chat as it mimics real interaction of playing a board game. It is strongly advised to have an input microphone and speaker output to avoid feedback sound looping. Secondly, the interface and control of Tabletop Simulator has been designed to function well with a mouse peripheral device, and is also advised.

3.3.5 Prototypes

Here we will look at the development process through the different prototypes that was produced and tested to reach the final product.

Prototype 1



Paper prototype

Figure 3.9: First Prototype - photo 1



Paper prototype

Figure 3.10: First Prototype - photo 2

In this early version, we come up with the initial idea of having a hexagonal tile map, and its mechanic of discovering stories of every player's chosen character. We also considered the size of the board game and cards, so that it would be portable, and yet still comfortably playable. Secondly, we also already divided 4 categories of different color, each is an advantage to one of the 4 characters. Then we test play it to see what makes it fun and should be improved, while also identifying which part does not give any purpose. We came up with a design decision to include a shorter stories, taken from a portion of a real stories around

Indonesia, that will be needed for players to go on. There are many fours in this game. 4 characters, 4 main story cards, 4 different resources, 4 colours, therefore we come up with the name "Folklore" as a twist on folklore and four.

Prototype 2



Lasercut Prototype

Figure 3.11: Second Prototype - photo 1



Lasercut Prototype

Figure 3.12: Second Prototype - photo 2

On the second prototype, the research was continued in Indonesia. During this phase the pieces was made from lasercut on wood boards. The goal is to make a concrete feeling of playing an actual tabletop game before finally going to produce the polished version. We also included other people for initial tests. In this second prototype, we came up with the idea of trading resources between players, in attempt to make the gameplay short, and therefore leaving players to keep be engaged. This decision also opens up the opportunity of interaction between player, more careful consideration of who to work together with, in order to reach both players' goal. At this stage, the game is quite polished, and only need some smaller tweaks. The main game loop has been built as foundation.

Final Prototype



Tabletop Simulator Prototype

Figure 3.13: Final Prototype - photo 1



Tabletop Simulator Prototype

Figure 3.14: Final Prototype - photo 2

The final prototype of the game is imported and added as a custom game in Tabletop Simulator, in Steam Platform for PC. The platform is very viable in recreating a physical environment. Players can move their camera around, essentially having the same point of view towards the game. This eliminates the need to see their map tile goals in an upside down for players who are supposedly sitting on the other side of table. Other than that, the platform also enables players to virtually interact with the object since it has its own physics engine. For example, players can flip, flick, shuffle, roll, or even as far as flipping the table.

The process of importing the whole game into the platform gave quite a challenge, but became a very useful tool for faster improvement and trials. First all the images needed to be uploaded to a cloud server, either Steam native cloud, or other website that enables hosting images such as imgur. Then, Tabletop Simulator is launched, creating a new virtual room, and set as custom game. On that virtual room, game objects can be placed, and the images that were previously uploaded can be shown by inputting the shared internet address. This action is repeated for all the components of the game, until everything is set and ready to be played.

Players were lent a Steam Account, from which they launch Tabletop Simulator and connect through their own PC using internet connection. Soon after that, a line of verbal communication needed to be established in order for players to be

able to tell stories to each other. The platform of voice chat was discussed among players on which platform is more convenient for all of the participants. Some sessions utilize LINE social platform voice call, other sessions use Steam native group voice chat. One advantage in using a simulator is that it can multiply the object indefinitely, and is a faster way to produce rather than physically making it. The disadvantage is the barrier of navigating through the digital platform, and no direct physical communication happened.

Since the nature of recreating the game objects are easier and cheaper in digital platform compared with its physical version, the iteration can happen very fast, and can instantaneously be used. The first object that this version has added, is the additional dice for resources. Instead of flip-a-coin mechanic, the dice is now the determiner of which resource a player gets rewarded. Secondly, the images can be easily interchangeable, whereas physical copy need its component to be laid out, printed, and cut. This solution provides a more rapid prototyping process.

Chapter 4

Evaluation

The Evaluation of Folkfore consist of having players to play the game, and observing the interactions that happened. Pre-survey was given before the gameplay, to see difference in background of each players. After the gameplay, it is then followed by a post-questionnaire to know their motivation level through Keller's ARCS Model approach. Within the post-questionnaire are also questions regarding validation of designs that were put to validate the goals of the concept. The following are aimed to be validated by playtesting with the players: the detailed steps and the important points that was noted:

- Testing Folkfore as a game design.
- Playtesting Folkfore as a tool to learn folklore in an enjoyable way.
- Whether Folkfore has successfully motivate players to get to know traditional folklore.
- Obtaining players background information and feedback.

4.1. Validation Process

The following are steps that was conducted for the gameplay test sesion:

1. Installing Steam platform and Tabletop Simulator
2. Connected through group voice call
3. Filling out the pre-survey

4. Reading the rulebook, to see whether players can understand the instruction enough.
5. Gameplay; during the gameplay, communications were observed to get findings. Conversations happened in the session are also paid attention to.
6. Filling out the post-questionnaire

Utilizing the Keller's ARCS Model [14], a series of 36 questions were presented in the post-questionnaire. 12 questions related to Attention, 9 on Relevance, 9 on Confidence, and 6 on Satisfaction. These questions consist of statements for participants to answer by selecting their level of agreeance on that statement. The scale that was used is 1 from 7, 1 being extremely disagree, 7 extremely agree, and score of 4 being the absolute middle or neutral. Some statements that are marked with asterisk is a negative statement. The measurement that was written is taken by subtracting 8 to the average score. For example, a score of 3 in a negative statement will result in 5. This is done in order to be able taking an average out of the score.

4.2. Scope and Limitations

Although the experience of real tabletop game may increase the overall experience, this research is not about emphasizing the impact of a direct social communication towards a board game experience or interest toward folklore stories. In light of the novel corona virus COVID-19 pandemic, there has been lockdowns and self-quarantine policy that was mandated by the governments worldwide. Due to this situation the test was moved into Tabletop Simulator on Steam, using PC.

It is by no means that the ARCS model can be an indefinite proof of anyone who played the game to be very engaged in folklore. Rather, it is an indication that players were motivated to learn during the game, willing to play again and know more stories in the process. This research also does not claim to be better than other methodology of introducing stories to people, nor claiming the chosen assessment method is compared to other methods.

In regards of the game itself, Folkfore is not an absolute best design, rather it is an ever-growing and ever-expanding game. From the gameplay tests and conversations that happened, Folkfore can be iterated and developed further. However the version that was used was deemed viable, since it has gone through multiple prototypes previously. In fact, Folkfore was designed to be very expandable, which was discussed on previous chapter.

4.3. Result Analysis

Three separate sessions were conducted with 3 different players on each session, which will be referred as Player 1 until Player 9 in this research. All players were 25-29 years of age, and is considered well late in the age bracket of emerging adults. We will address each player's background and their result in ARCS motivational design model. Other than ARCS Model, some questions to tie the design choice and concept was asked, which will also be discussed based on each player's answers. Users' individual result will be then paired and speculated with their background to be analyzed. Then, followed by discussion section to reach a more in-depth look of the over-all findings. Details on the questions on pre-survey and post-questionnaire can be accessed in the appendix section of this research.

4.3.1 Players' background and ARCS result

Player 1's background and score are as follows:

- Attention Score : 5.42
- Relevance Score : 5.00
- Confidence Score : 5.44
- Satisfaction Score : 6.33
- Average ARCS Score : 5.55

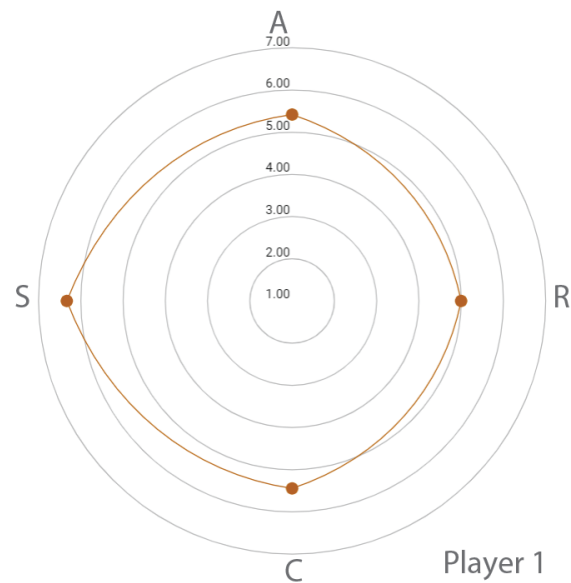


Figure 4.1: Radar Chart of Player 1

Player 1 falls to the category of an average emerging adult in Indonesia. Born in a city, getting exposed to other culture intrigues her. She often play games in her spare time, but just to help passing the time. Thus she is categorized as casual gamer. However, she is also quite interested in Indonesia. She also know some famous stories, but not that much that she remembers. The result on her ARCS score reflects well with her background. Folklore has acquired her attention, but the relevant is a bit smaller because she does not know many stories within folklore. However she feels quite confident that she can finish the game, and the satisfaction level of her completing the game is very high. She commented that the wording on short story cards puts her into the story, making the gameplay more immersive. She feels that folklore really resonated well with Indonesian folklore, such as the usage of the visual elements and discovering stories. Having multiple stories also enables her to learn a lot. She would like to play again, considering that the game has a high randomized set up, so she feels that in the next game she will have the advantage. Further than that, a better understanding of the boardgame was established after one play session, so she would like to play again with now a better knowledge of the game.

Player 2's background and score are as follows:

- Attention Score : 5.83
- Relevance Score : 6.33
- Confidence Score : 5.00
- Satisfaction Score : 6.33
- Average ARCS Score : 5.88

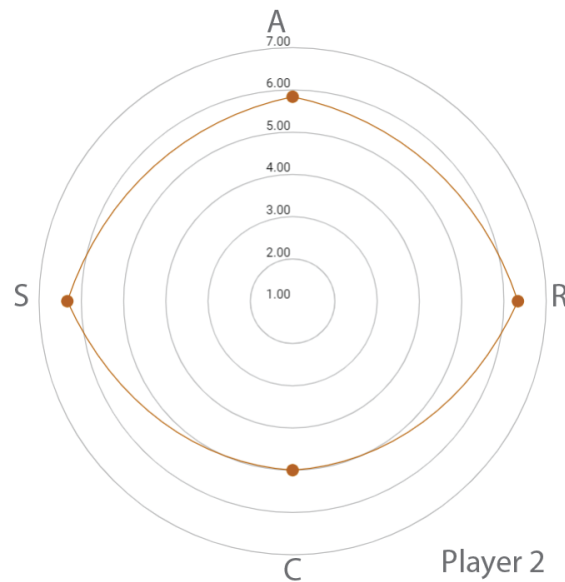


Figure 4.2: Radar Chart of Player 2

Player 2 has only visited 6 cities in Indonesia, but is very good at cooking Indonesian foods. Although, he only used to read stories once a month, he remembers them well, which was shown when he played folkfore. He is also a casual gamer like player 1, only playing games casually on his phone every now and then. But he plays board game quite often with his friends and wife. Folkfore has gotten his attention. He is a person that really appreciate Indonesia diversity in cultures,

giving a high performance when playing folkfore. As such, his relevance is very high. However, he rarely plays game on PC, therefore his confidence is good, but not really high when playing folkfore. Nevertheless it is very satisfying for him to finish the game. He praised quite high on folkfore as a novel way to reintroduce traditional folklores, using multiple folklores really ties folkfore with Indonesian folklores. He thinks that it is interesting to interact with other players. Even-though he find the learning curve was quite steep in the begining, he also thinks that he will do better in the next game and therefore are eager to play again.

Player 3's background and score are as follows:

- Attention Score : 5.00
- Relevance Score : 4.11
- Confidence Score : 4.56
- Satisfaction Score : 5.50
- Average ARCS Score : 4.79

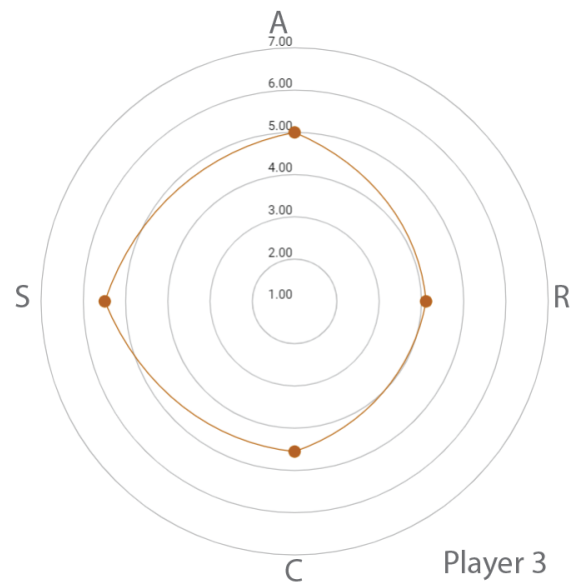


Figure 4.3: Radar Chart of Player 3

Player 3 was born near the capital city, and spent her life around the greater area of Jakarta, with a couple vacation out town. She likes Indonesian foods, can still do some traditional dance as well. She likes to read once a week when she was young, and therefore knows quite a lot of famous folklores. She is also a casual gamer. However she rarely plays board game, especially a complex advanced board game. Folklore has captured her attention, however she felt the relevance quite okay. But at the end of the game, she felt satisfying to be able to play the game. She answered that she enjoys the game mainly because she has the power to carefully think and choose which option of the story that she finds in the short stories cards. She feels that the part where she encounters those stories, as well as using visual cues of batik elements makes the game relatable to Indonesian folklores. She commented that she want to play again, because she wants to know more of Indonesian folklores.

Player 4's background and score are as follows:

- Attention Score : 4.25
- Relevance Score : 4.33
- Confidence Score : 5.00
- Satisfaction Score : 5.33
- Average ARCS Score : 4.73

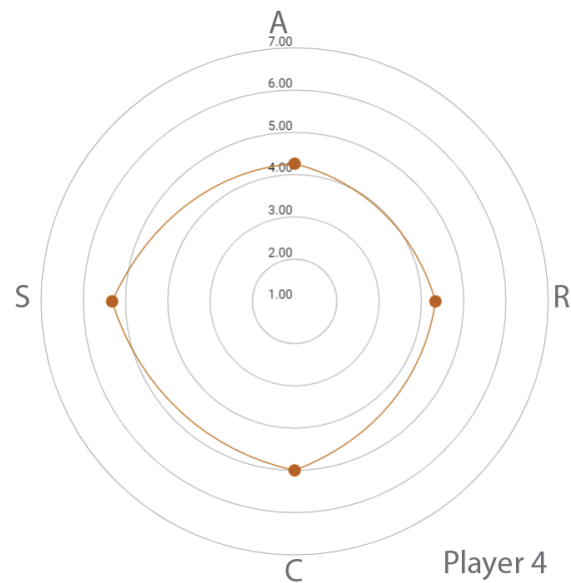


Figure 4.4: Radar Chart of Player 4

Player 4 was born in Jakarta and has never visited other places. Even so, he used to wear batik, eat traditional foods, learned to play traditional musical instrument, about once a week. He knows quite a lot of famous folklores as well, and has a high intuition in choosing the choices in encounter story cards. He is what is considered as hardcore gamer. He plays on PC everyday for hours, and playing a more complex and demanding games. However he rarely plays board game, and he feels folkfore quite okay and find it just good enough. He played quite well in the play session, by guessing what a typical Indonesian storyline would be. He enjoys the game because of its quite high complexity such as having to decide routes to take. The encounter stories cards are what really compels him. To quote, he said that he wishes that folkfore would have more variety in stories. He would like to play again because of his competitive nature, and has thought up of a new strategy to win the next game.

Player 5's background and score are as follows:

- Attention Score : 4.25

- Relevance Score : 3.89
- Confidence Score : 3.22
- Satisfaction Score : 4.00
- Average ARCS Score : 3.84

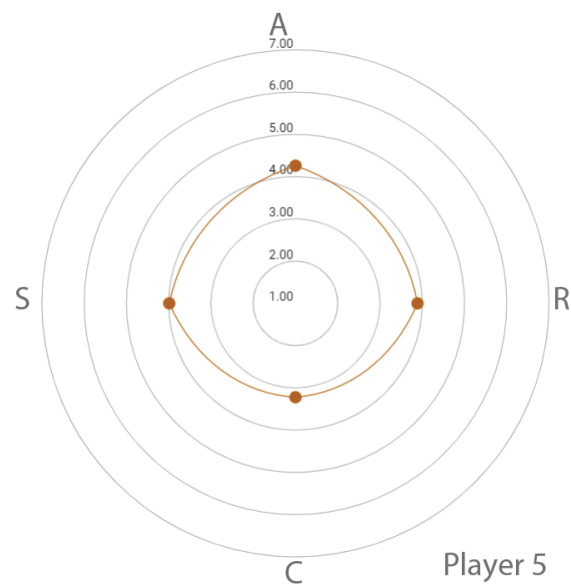


Figure 4.5: Radar Chart of Player 5

Player 5 was also born in capital city, Jakarta. He has only been to 1 other place other than his hometown. He only wears batik a couple times a year and has very little knowledge towards traditional music. However he enjoys traditional foods every week. Compared to every other player, he only knows extremely little of very famous folklores in Indonesia. He is a hardcore gamer, just like player 4 is. Folklore did an okay job in getting his attention, however, he feels that it is not relevant to him, therefore he falls in confidence. Finishing the game also feels just okay for him. He commented that indeed folklore is very folklore related. However, he does not feel that it is worth his time to learn folklores. He commented that even if he wanted to play again, it is solely because he want to win the game

objectively, regardless of the folklore content in it. Upon further interview with him and his close friends, it was determined that he is an anti-Indonesian culture. He really loves foreign culture, and only that specific country's culture. He fails to feel intrigued by what other players might find other countries myth interesting. Therefore player 5 in this research will be considered as an outlier.

Player 6's background and score are as follows:

- Attention Score : 5.50
- Relevance Score : 5.89
- Confidence Score : 5.11
- Satisfaction Score : 6.50
- Average ARCS Score : 5.75

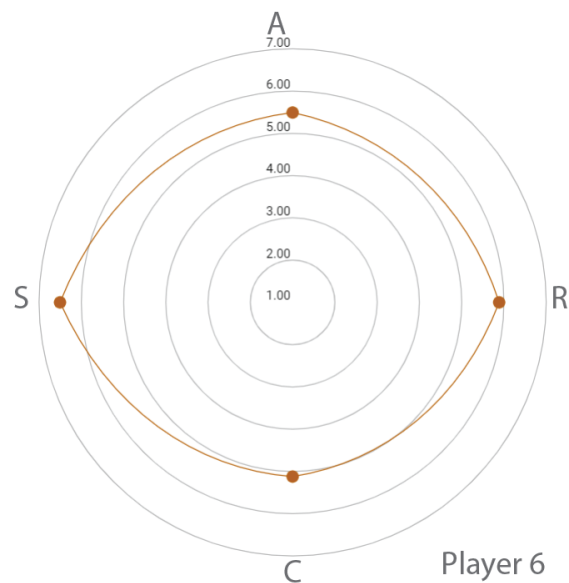


Figure 4.6: Radar Chart of Player 6

Player 6 was born in Malang, a city in province further east from Jakarta, but still in Java. She wears traditional clothes only a couple times a year, but really

loves Indonesian foods. She learned to perform traditional dance, and participates in traditional festival once a year. She knows quite a lot of folklore. She is a hardcore gamer, plays mainly on PlayStation 4. Folklore resulted in a high interest for her towards folklores. She commented that she do like foreign cultures, such as myth of Greek, Japan, etc. But she also want to know more about stories in Indonesia, it is just that they are quite hard to find. She feels that the wordings in the encounter stories puts her in the story, and find it more enjoyable. She wishes to play again to have a chance to know more new folklore.

Player 7's background and score are as follows:

- Attention Score : 5.17
- Relevance Score : 5.33
- Confidence Score : 4.67
- Satisfaction Score : 6.00
- Average ARCS Score : 5.29

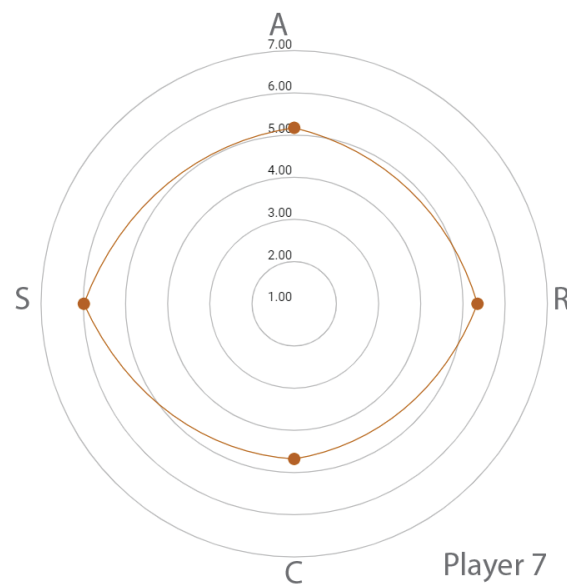


Figure 4.7: Radar Chart of Player 7

Player 7 was born in Jakarta, but has travelled around in Indonesia as well. He rarely wears batik, but he enjoys Indonesian food. He knows almost all famous stories that was asked in the survey. He is a hardcore gamer, who plays on PlayStation 4 and Nintendo Switch. He sometimes play board games whenever his friends come over to his house. Folklore did quite well to raise his interest, as shown on his ARCS score. For him, lacking the knowledge in folklore puts him at disadvantage, but he still enjoy it and was satisfied. He is one of the players that were very apparent in getting into character while reading for other players. He will try to have a more intense voice, mimicking and old story-teller. He find it amusing that the stories in folklore sometimes does not always make perfect sense especially in modern days. He wants to play again to know more weird stories that he would find.

Player 8's background and score are as follows:

- Plays casual game on her phone.
- Attention Score : 5.67
- Relevance Score : 4.89
- Confidence Score : 5.33
- Satisfaction Score : 6.33
- Average ARCS Score : 5.56

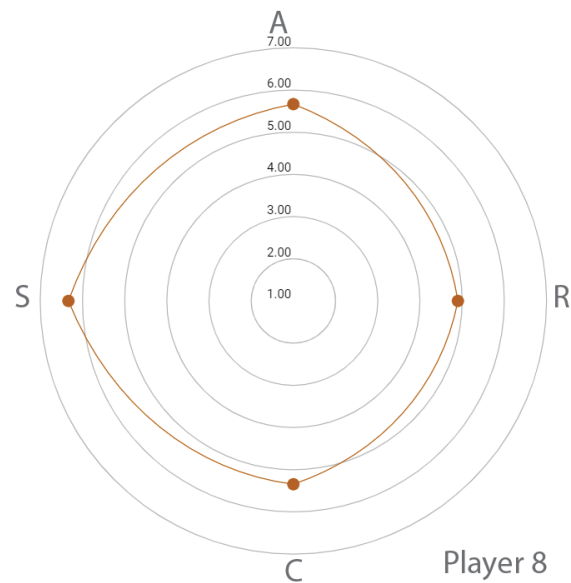


Figure 4.8: Radar Chart of Player 8

Player 8 was born in Bandung, but is the most frequent traveller around Indonesia. She gets quite a high exposure of culture since young. She wears traditional clothes every week and learned to dance when she was young. When asked folklore that she knows, she listed even more than was shown as choices in the survey. She is a casual gamer, plays game on phones and just recently get into Nintendo Switch. She plays board game occasionally whenever friends came over to her house. She also agrees that the wording in the cards put her in the story. She feels that almost all of the elements in folklore ties with Indonesian folklore. She would love to play again to know more sometimes bizzare stories all around Indonesia. She is quite invested in the game and suggested things to improve the game such as the additional custom made dice to be used in folklore.

Player 9's background and score are as follows:

- Attention Score : 5.67
- Relevance Score : 4.78
- Confidence Score : 5.33

- Satisfaction Score : 6.33
- Average ARCS Score : 5.53

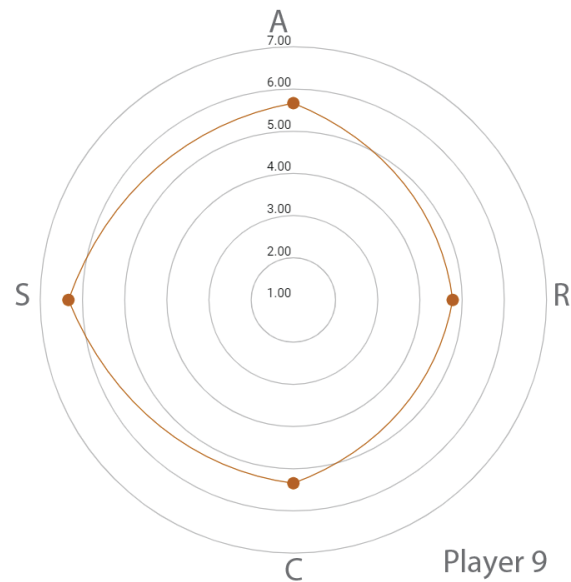


Figure 4.9: Radar Chart of Player 9

Player 9 was born in Tangerang, a city in greater area of Jakarta. She has visited a couple other cities in Java as well. She rarely wears batik, and eats Indonesian foods just about once a month. However she can still perform a traditional dance until today. She knows quite well of the famous folklore. She is also a casual gamer, and plays occasionally on Nintendo Switch. Overall, she commented several times that folkore is interesting to play. She noticed some rules that can be improved to make the play experience better to eliminate waiting time for other players. Other than that, she feels that folkfore succeeded in presenting itself as Indonesian folklore themed board game. She would like to play again after having a better understanding of the game, and also wanting to know more stories of Indonesia folklores.

4.3.2 Discussion

Looking at players' different backgrounds, and results on their respective ARCS score, it is determined that the backgrounds of players that were tested were quite varying. Some players are more serious gamer playing PC and/or console on daily basis, and some are casual gamer who plays on smartphone which usually is not as intense as other platform. However, it is noticed that these different background did not effect the result significantly. The overall average on all ARCS questions are about 5.2, in scale of 1-7, which is on the positive side. Therefore Folklore managed to motivate its players to learn various folklore in Indonesia.

In the gameplay test there is also 1 player that can be considered as an outlier. Player 5 scored the lowest in motivation towards traditional folklore, 3.84 overall. After confirming with player 5 that it is indeed the correct answer and fully aware of both polar of the scale, we asked his closer friend for further understanding. Upon the discussion, it is revealed that player 5 has very high interest towards Japanese culture, and has shown to be neglecting Indonesian culture. This is an example of Assimilation type of Acculturation that was discussed on chapter 2 [8]. Further analysis also revealed that during his childhood he has very little exposure towards traditional stories, only knowing 2 famous folklore titles, whereas other players knows 8 titles in minimum. Even though he answered that he read a couple stories every week during his childhood, it is very likely that he does not read traditional Indonesia folklore. The individual components of ARCS score can also be analyzed. The game has succeeded in capturing his attention by a small margin. However, since he has very little prior knowledge towards folklore, the game felt irrelevant. Furthermore, knowing stories is the key to win the game, therefore he has little confidence in winning.

From the questionnaire given, all players agree that the mechanic of moving around the maps with costs makes it enjoyable. However the choices that is presented on short encounter story should be improved so that players need to think and choose more carefully.

We can also see that players feels that encountering various folklore in the short encounter cards gives the aspect of association with folklore in Indonesia. Us-

ing various stories and using visual elements taken from Indonesian culture also helps to make the game feel the traditional look in it. Players feel the wanting to know more about stories in Indonesia, and want to play again. The better understanding of the game from the first playthrough also has the same impact of replayability.

To further discuss on the topic of replayability of the game, due to the nature of all the randomized pieces in the game, folkfore provides different play session before any given player would experience an identical playthrough. There are too many variables that come into contributing this, however We can inspect some elements to create a much more simplified version to have a rough idea. Should we only take a possibility of any given player, choices to do and assume there are on average 4 different options, and there are 4 players, we can come to a 4 to the power of 4, numbers of possibilities on each round, which is 256. And on average, the game ends when 20 rounds has passed. 256 multiplied by 20 and we come to an over 5,000 different possibilities. This number is very rounded down and still excluding the variety of short story encounters, 6 sided-dice chance for different resource outcome, and different 34 map arrangement. With all these taken account, we can conclude that folkfore has a very high replayability.

4.3.3 Comments and Observations

Players agree when someone mentioned that the majority of stories presented in the game was new to them. They added that there are various folklore in Indonesia that they did not know. Through this game they realize how vast and sometimes bizzare Indonesian folklore is. Even after the game session ends, some even wanted to keep on reading other untold stories left in the encounter cards. On top of that, they said that they wish it would contain more stories, indicating that they are interested in knowing more of it.

During the play session there are several interesting moments that were observed. Firstly the choice that was presented in short stories, has made all players to want to listen closely to their friends who were supposed to be the story-teller. This has happened several times as other players were talking and were asked

to be quiet, indicating that the listener feel the importance and wants to listen to the story. Secondly in part of the story-teller during the short stories, some players began to talk in an exaggerating manner, making the story-telling to have more character. Some players also commented that some cards has interesting choices that may be unexpected, and hopes that more cards have better meaningful choices like that. Lastly, it turned out that the gameplay in digital setting can be beneficial. In way that all players can virtually sit in the same space, therefore eliminating the awkward of having some elements upside down for some players who sit in the side across the table. Which is impossible to be done in a real physical world.

Chapter 5

Conclusion

5.1. Concept Validation

This research is aimed to design a board game that can provide motivation and interest towards one of neglected part of culture, that is folklore, for emerging adults in Indonesia, and assessed through Keller's [14] theory on ARCS motivational design model approach. For this objective, more iterations should be implemented to refine and improve the final medium.

Exploring this academic field provides an opportunity for implementation that may used for expanding this field, or in some cases be used in other field as well. The design of Folkfore brings together learning experience by using multiple stories, and the aspect of engaging playful way by embedding a more complex playstyle of a board game. In this regard, the choice to put many stories has resonated well with the players. Furthermore, the replayability of this game is also high, supporting the objective to introduce players to as many stories as possible.

We can derive a conclusion that people with higher exposure towards traditional culture in their past shows a better motivational and experience on playing folkfore. These traditional culture experience can be learning musical instruments, wearing batik clothes, and knowing folklores. Although it would seem that consuming a traditional cuisine is not related to this.

Folkfore cannot change the opinion those who have assimilated their culture into other country's. And Folkfore is not intended to be as a stand alone or a replacement towards other methodology of introducing traditional folklore. Rather,

it is designed as a complimentary activity alongside other methodologies. However the game enables players to mimic the experience of how a traditional stories used to be passed via verbal communication.

Looking at the interactions between players, and reaction of players towards the game, ARCS model enables to show the interest towards the subject in numbers. In that retrospect, the game did quite well, having an average of 5.2, including the outlier.

5.2. Future Work

Future work on this research may consist of a physical playthrough and compare the result of using a life tabletop against virtual simulator. As there might be a difficulties in navigating inside the simulator itself that may act as barrier towards accessibility of players that would reduce the whole experience and diluted the design choices that was made.

At this point during research, Folklore consisted of 39 short stories and 4 long stories, each divided into 4 cards. However, folklore can be expanded should there be a source with more knowledge towards various folklore in Indonesia.

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Appendices

A. Post Questionnaire, ARCS Questions

ARCS Model: Attention

ARCS Type	Statements	Score
Attention	There was something interesting at the beginning of the game that got my attention	5.11
	The interface design of the game is eye-catching	5.67
	The quality of the writing in the game helped to hold my attention on it	5.33
	The content of the game is so abstract that it was hard to keep my attention to it*	4.89
	The design of the game looks dry and unappealing*	5.67
	The way the information is arranged in the game helped to keep my attention	5.11
	The game has things that stimulated my curiosity	5.33
	The amount of repetition in the game caused me to get bored sometimes*	4.33
	I learned some things that were surprising or unexpected with the game	5.44
	The variety of reading passages, activities, illustrations, etc., helped to keep my attention on the game	5.22
	The style of writing in the game is boring*	4.78
There are so many words on each card that it is irritating*	5.44	
	Total Average Score	5.19

Table A.1: List of Statement on "Attention" and its scores

ARCS Model: Relevance

ARCS Type	Statements	Score
Relevance	It is clear to me how the content of the game is related to things I already know	5.4
	There were some elements that showed me how the game could be important to some issues in Indonesia	5.11
	Completing the game successfully was important to me	5.33
	The content of the game is relevant to my interests	4.89
	There are explanations or examples of how people use the knowledge in the game	4.56
	The content and style of writing in the game convey the impression that its content is worth knowing	4.67
	The game was not relevant to my needs because I already knew most of it.	5.33
	I could relate the content of the game to things I have seen, done, or thought about in my own life	4.56
	The content in the game will be useful to me	4.67
	Total Average Score	4.95

Table A.2: List of Statement on "Relevance" and its scores

ARCS Model: Confidence

ARCS Type	Statements	Score
Confidence	When I first looked at the game, I had the impression that it would be easy for me	4.11
	The game was more difficult to understand than I would like for it to be*	4.33
	After reading the introductory information, I felt confident that I knew what I was supposed to learn from the game	5.11
	The game had so much information that it was hard to pick out and remember the important points*	3.78
	As I played the game, I was confident that I could learn the content	5.22
	The activities in the game were too difficult*	5.33
	After playing the game for a while, I was confident that I would be able to remember some of the content	5.33
	I could not really understand quite a bit of the material in the game*	5.44
	The good organization of the content in the game helped me be confident that I would learn this material	5.00
	Total Average Score	4.85

Table A.3: List of Statement on "Confidence" and its scores

ARCS Model: Satisfaction

ARCS Type	Statements	Score
Satisfaction	Completing the tasks in the game gave me a satisfying feeling of accomplishment	6.11
	I enjoyed the game and I would like to play again	6.33
	I really enjoyed learning with the game	5.89
	The feedback after the tasks, or other elements in the game, helped me feel rewarded for my effort	5.11
	It felt good to successfully complete the game	6.11
	It was a pleasure to play such a well-designed game	5.56
	Total Average Score	5.85

Table A.4: List of Statement on "Satisfaction" and its scores

B. Rulebook of Folkfore



Figure B.1: Page 1 of rulebook

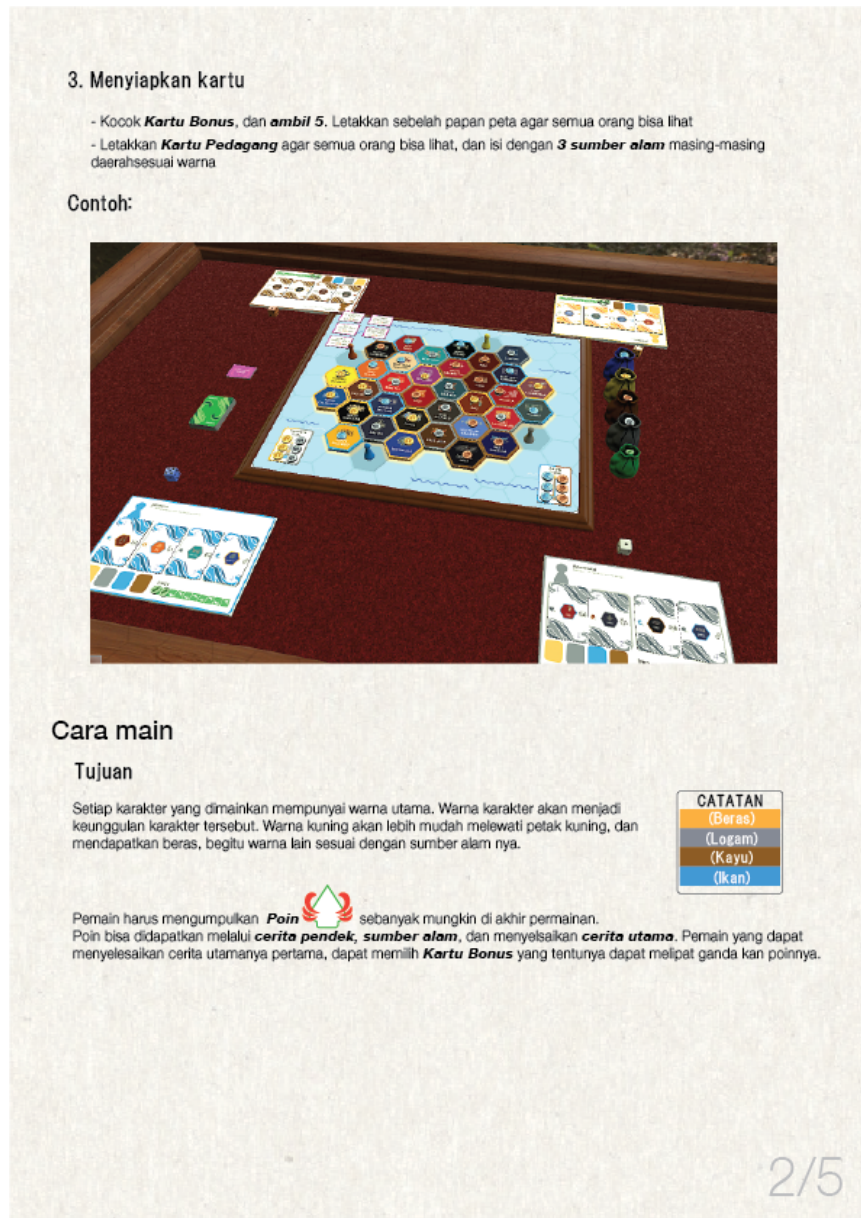


Figure B.2: Page 2 of rulebook

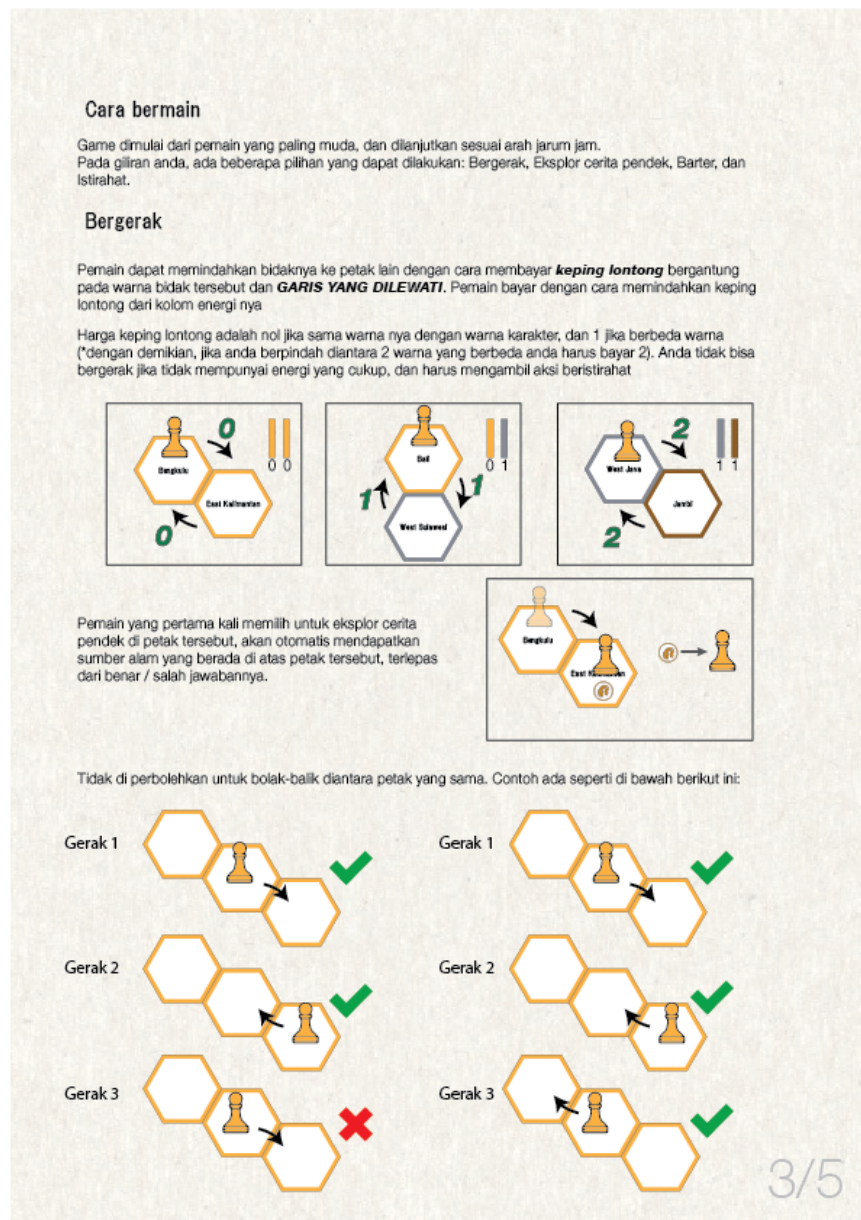


Figure B.3: Page 3 of rulebook

Eksplor Cerita Pendek

Ketika anda sampai di petak provinsi, anda dapat mengatakan bahwa anda ingin eksplor area tersebut. **Pemain di sebelah kananmu** akan mengambil kartu dari **Kartu Cerita Pendek**. Pemain tersebut akan membacakan cerita yang tertulis **kecuali tanda « dan Judul sumber cerita**.

Kamu adalah seorang nelayan, sedang menikmati menangkap ikan, ketika kamu melihat pancaran sinar yang memantulkan matahari di siang hari. Setelah mendekatinya, ternyata itu sebuah keong berwarna emas gemilang. Mungkin seseorang menjatuhkannya, tapi entah kenapa kamu merasa harus menolongnya. Apa kamu bawa pulang atau biarkan saja di sungai?

Kartu adalah seorang nelayan, sedang menikmati menangkap ikan, ketika kamu melihat pancaran sinar yang memantulkan matahari di siang hari. Setelah mendekatinya, ternyata itu adalah keong berwarna emas gemilang. Mungkin seseorang menjatuhkannya, tapi entah kenapa kamu merasa harus menolongnya. Apa kamu bawa pulang atau biarkan saja di sungai?

> Bawa pulang «
> Biarkan saja


Judul dan Sumber Cerita

Dengarkan dengan seksama dan **pilih opsi**, Jika anda memilih pilihan yang bertanda « **maka anda berhasil**.

*Pilihan yang benar adalah yang sesuai dengan cerita rakyat yang tertulis di bawah kanan kartu

Jika Berhasil :

- Putar dadu, anda mendapatkan sumber alam yang tertulis pada muka dadu
Hadiah dapat berupa 1 buah Ikan / Beras / Kayu / Logam
Untuk mendapatkan lontong, anda harus memutar dadu dan mendapatkan gambar 1/2 lontong 2x berturut-turut.
jika pada putaran kedua mendapatkan bahan lain, maka ambil bahan itu 1 buah.
- Simpan kartu tersebut pada daerah permainan anda
- Ambil keping sumber daya alam jika masih ada di petak tersebut
- Anda boleh bergerak dan meng eksplor tempat lain pada giliran ini.




Jika Gagal :

- Letakkan kembali kartu Cerita Pendek tersebut ke paling bawah dek.
- Ambil keping sumber daya alam jika masih ada di petak tersebut.
- Anda boleh bergerak tetapi tidak dapat meng eksplor lagi pada giliran ini.

Barter

Anda dapat barter **dengan pemain lain** jika berada pada petak provinsi yang sama. Harga barter dengan pemain lain tidak di tentukan.

Anda juga dapat barter dengan **pedagang di Jakarta dan Yogyakarta** jika anda berada disitu. Harga barter dengan pedagang adalah 1 : 1, dan yang ditukarkan bebas.



Istirahat

Jika anda kehabisan energi, anda harus beristirahat dan tidak bisa bergerak pada giliran ini. Pindahkan lagi dan isi ulang kolom energi anda dengan **semua** keping lontong yang anda punya.

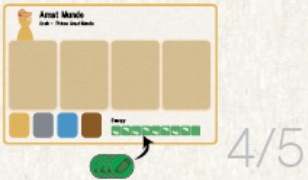


Figure B.4: Page 4 of rulebook

Menyelesaikan Cerita Utama

Syarat (Requirement): 1, 2, 3, 4

Tujuan (Goal): 1, 2, 3, 4

Menyelesaikan cerita utama **harus berurutan dari 1 ke 4**.
 Ketika anda memenuhi syarat dan tiba pada petak provinsi anda memecahkan kartu cerita utama tersebut.
Bayarkan sumber alam yang dibutuhkan ke dalam tas, lalu balikkan kartu dan **Bacakan cerita itu**.

*Kartu utama yang ke-1, 3, dan 4 memberikan **Poin**.
 Kartu ke-2 memberikan **kesempatan putar ulang dadu 1x** setiap kali anda memutar dadu

Kartu Bonus

Kartu bonus berguna untuk meningkatkan poin pemain berdasarkan syarat yang tertulis. Setiap sesi bermain hanya 5 dari 13 kartu bonus yang dapat dipilih oleh pemain.

Pemain yang pertama kali menyelesaikan cerita utamanya, memilih Kartu Bonus terlebih dahulu. Lalu dilanjutkan dengan pemain yang mempunyai kartu cerita pendek terbanyak, jika seri maka jumlah lontong, jika masih seri maka suit dengan gajah/orang/semut

Dapat 10 poin per 3 buah logam	Dapat 10 poin per 3 buah beras	Dapat 10 poin per 3 buah ikan	Dapat 10 poin per 3 buah kayu	Dapat 10 poin per 100 dari semua jenis sumber alam	Dapat 10 poin per 2 lontong tambahan	Dapat 10 poin per 100 logam dan beras
Dapat 10 poin per 100 logam beras dan ikan	Dapat 10 poin per 100 logam beras dan kayu	Dapat 10 poin per 100 logam ikan dan kayu	Dapat 10 poin per 100 logam logam dan kayu	Dapat 10 poin per 100 kartu cerita pendek	Dapat 10 poin per 100 logam dan ikan	

Akhir permainan

Permainan berakhir jika ada pemain yang menyelesaikan cerita utamanya.
 Lalu semua pemain lain memilih kartu bonus setelah pemain yang menyelesaikan cerita utama nya.

Perhitungan poin sebagai berikut:

- Total poin yang didapat dari cerita utama yang terbuka,
- 1 Poin untuk masing-masing sumber alam yang tersisa
- 1 Poin untuk setiap keping lontong
- 3 Poin untuk setiap kartu cerita pendek
- Ditambah poin yang didapatkan dari kartu bonus

penengah adalah pemain yang mendapatkan poin terbanyak.

5/5

Figure B.5: Page 5 of rulebook