

# PRESERVING TRADITIONAL CULTURE OF KONDA-KONDI THROUGH MOBILE GAME APPLICATIONS

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**Abstract:** Traditional games are now disremembered so it is time to bring back the memories of our childhood and make it alive throughout the next generation. The focus of this research is to develop a sense of awareness and cultivate them in our people sentiments. Konda-kondi will be turned into an interesting app to attract the children rather than having them playing some worthless games. By using the mobile application, the developer wants to introduce the supreme of traditional game of konda-kondi. Adobe Animate is use to build a mobile interactive game that user can interact with and enjoy the forgotten game of konda-kondi.

**Keywords:** *Konda-kondi, traditional, children, games, culture*

## 1. INTRODUCTION

Nowadays, the technologies are becoming more and more advance as the time goes on and many new technologies have been implemented into every fields including the Education Institution. This mobile application is one of the ways to promote the traditional games to people especially younger generation. Konda-kondi is one of the traditional game in Malaysia that has uniqueness and a symbolic expression in Malaysian culture. Based on the book; Permainan, lagu dan puisi kanak-kanak by (Nani Menon, 2005), parents often ask "why do kids in early age are so infatuated with playing around and when asked to read, they use their wits to reject it?". Parents who lack in understanding their kids throughout their growing process. As they are less capable to understand it is kids' nature to play and have fun. They ought to think it is a time wasting activity and pointless. At this phase, they love to explore and gain experience in the midst of their fantasies and by playing, all their questions will be answered. The Ministry of Culture, Arts and Heritage has established Jabatan Warisan Negara to cultivate, conserve, preserve and protect national heritage for younger generations through their portal. Digitizing Malaysian cultural games can be seen as one of the efforts in preserving our national heritage. Creating the

Malaysian heritage cultural games can be identified as one of the positive efforts preserving our national icon heritage. In order to ensure this effort is being continuously accepted, we focus on developing a prototype of digital cultural game application namely, 'Konda-kondi' to stimulate the traditional essence of Malaysian arts styles.[1]

### 1.1. History of konda-kondi

Konda-kondi is one of the traditional games. This game is an invention in Malaysian community back in the era as a form of entertainment. Konda-kondi is a game hitting with a long wooden stick. The more skillful you are, the higher the chance at winning the game. Konda-kondi is played in an open space. In stage one, the shorter stick was placed across the hole and flicked using the longer stick. The long stick was then placed over the hole. The opposition would then throw the short stick back with the aim of hitting the long stick. If they succeeded, they would eliminate the hitter. In the Stage Two the players had to flick the shorter stick as far as possible, the further it went, the more points they gained. In the final stage, the players would flick the short stick into the air and hit it as far as possible (a technique known as 'Ayam Patuk' or Chicken Pecking. If the opposition were able to catch the stick, the player would be eliminated from the game.

### 1.2. Preservation of Cultural Heritage In Malaysia

Societies have taken many approach to preserve Malaysia's culture and heritage from generations to generations. Through this cultural heritage, Malaysia promotes national identity due to exposure and develops an increase in tourism. Massive growth of arts from the locals gives a greater service to cultural development. Arts and heritage in Malaysia are now more accessible to the masses. Locals used to invent games like Polis Sentri, Baling Tin, Baling Selipar or Tuju Selipar and Galah Panjang. There are folk games such as Congkak, Konda-kondi, and Batu Seremban. [2]

## 2. RELATED WORK

This chapter discussed about literature review related to this project. The data collections are being used as reference for the researcher to gain information about the research that have been conduct. A summary is recap of the important point from prior research and says how the developer research is linked into this mobile application. Besides that, it also integrates and summaries what is known about other opinion about this study and to demonstrate starting point for new ideas.

### A. Components of mobile game-based learning

Mobile game-based learning involves activities that can range from completing very simple tasks to the development of intricate problem-solving skills. These are the characteristics that need to be looked at in order to develop a mobile game:

- Students’ age, characteristics, gender, competitiveness, and previous gaming experience.
- Age.
- Special needs.
- Gender and racial diversity.
- Number of players. How many students can play at one time? Will too many be left sitting on their hands?
- The role of the teacher.

The role of a teacher is very crucial so as to determine the characteristics that will be influencing the gameplay. Rules and goals are also important components. [3]

### B. Benefits of mobile game-based learning

Mobile games have potential to engage with students and cultivate education while promoting entertainment. Non-violent games are more prone to teach planning and problem solving related to curriculum. Entertainment that is based on education appeals to the public in which it develops vocabulary skills and mental skills. It’s a great platform to conduct skills application and practical experience. Mobile game-based learning has the potential to engage and motivate students and offer custom learning experiences while promoting long term memory and providing practical experience. In order for teachers to effectively use game-based learning in the classroom, they must first find non-violent games that facilitate planning and problem-solving and relate to the curriculum. Role-playing, simulation, and adventure games are recommends because they often appeal to the development of more than just one skill. The function of game-based learning in the development of vocabulary skills and the enhancement of mental quickness. Video or digital games provide a great tool for conducting educational research. Digital games have “great diversity,” while attracting students of various demographic backgrounds. They also help students set and work towards achievement of goals, provide helpful feedback, and maintain records for measurement purposes. Furthermore, the interactive nature of video games stimulates learning and encourages participants to challenge new topics or knowledge. Video games can help students

develop computer skills that they may need in a society that continues to develop technologically. [3]

### C. Research on the culture preservation in current games

#### (Chinese Myths in Mobile Games)



**Figure 1:** Sun WuKong aka Monkey King in Tencent’s hit MOBA Honor of Kings

Myths, historical events and folklore is an insight to the Chinese culture. The entertainment industry often revolves around these stories as the plot for their stories. If the setting is modernised still, there are references to these backgrounds for the movie industry. Many researchers have been studying this phenomenon and it is rather transparent to see Chinese mobile games are also inculcating the heritage of Chinese history. Two themes that are popularly being chosen as background choices for Chinese mobile games: the classic novel Journey to the West and the Three Kingdoms era in Chinese history. In terms of legendary folklore levels, these are in the same league with King Arthur or Robin Hood in the west.

### D. Tap A Wau



**Figure 2:** Tap A Wau Gameplay

Wau or Kite in Malay is a uniquely designed Malaysian kite that has flown since times past. It is called 'Wau' because the shape of its wing is similar to an Arabic letter (pronounced "wow"). It is a marvelous tradition inherent to the culture of the people, especially in the Eastern States of the Malayan Peninsula.

### E. Gasing-X



**Figure 3:** Gasing-X Gameplay

GASING-X is a 3D spinning top game promoting traditional Malaysian game, GasingPangkah. In GASING-X player will attempt to spin their spinning top (Gasing) around a circle arena and try to knock the opponents out of the arena. Tilt the phone/tablet to crash and collide into AIfs Gasings. Player can customize their Gasings with many different parts. Every part has own stats that will affect their performances.

### 3. GAME METHODOLOGY

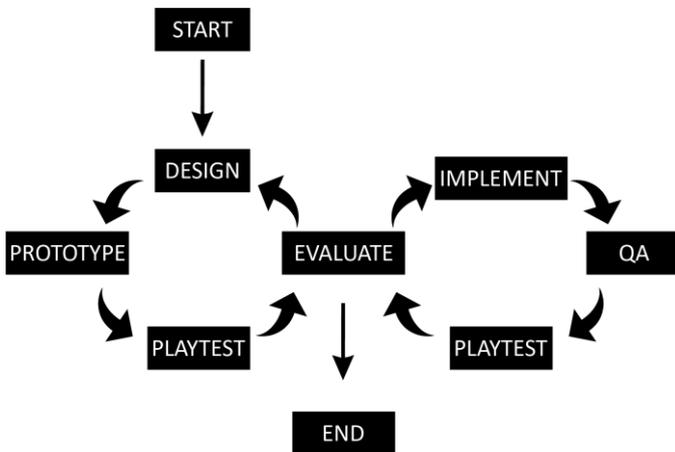


Figure 4: Flowchart

This chapter discussed the research methodology used in this project. Methodology is the guideline to develop Kondakondi: Preserving Traditional Culture Games Through Mobile Applications which use Android. To develop mobile application, it's important to gather the needs and requirement of the application itself. Therefore, it's important to start with a study on the need of the application, usage of a suitable technology and other application. To get all information for the case study, literature review will be needed as references to make sure the application is built in the right direction.

- **Phase 1: Analysis**

The developer analyzes and identified the problem statements through questionnaires and interview. Their research goal is to embrace the culture into younger generation who had forgotten our culture and traditional games and music. They will organize the data into program strengths, weaknesses and suggestions to improve the program. The developer will be preserving the culture through mobile applications.

- **Phase 2: Design**

This is where the design phase occurs. Which the developer will documentation the results of questionnaires and interview, then visualize the data into graphical and the flow of the mobile applications.

- **Phase 3: Development**

After the developer finalizes the content of the mobile application, this is phase where the programming will be developing to navigate the mobile applications. Based on the data that had been collected, the programming part will integrate on the feedback that had been analyzed.

- **Phase 4: Implementation**

Development of materials and procedures for installing, maintaining, and periodically repairing the instructional program. This is also the phase where the developer will ensure the application is functional.

- **Phase 5: Evaluation**

The application will be tested by preschool students. Then the results of learning and the courseware will be diagnosed and the courseware. The courseware revisions are based on diagnosis. Lastly, full-scale implementations are evaluated and providing opportunities for feedback from the users.

### 4. RESULT & DISCUSSION

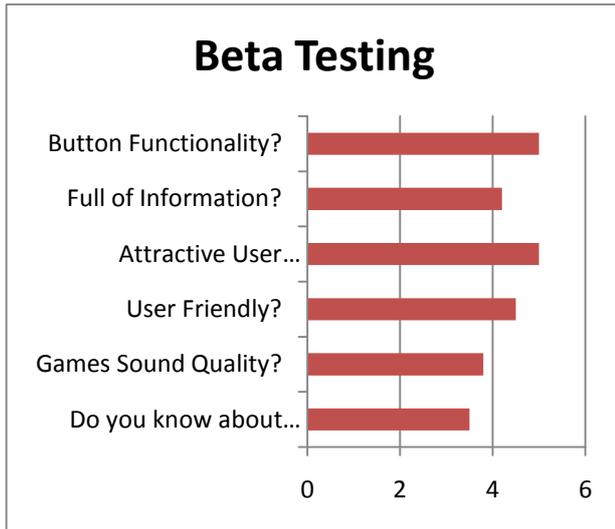
There are many types of the method can be used to test a prototype. When all the design and development has been completed, developer tested the application by using a questionnaire and user also given the chance to use the mobile application that created by the developer. There are two types of testing phase which is Alpha testing and Beta testing.

#### F. Alpha Testing

Alpha testing is a type of acceptance testing; performed to identify all possible issues/bugs before releasing the product to everyday users or public. Alpha testing performed by user who are usually among the developer organization. Critical issues or fixes can be addressed by developers immediately in Alpha testing. Alpha testing is to ensure the quality of the product before moving to Beta testing.

#### G. Beta Testing

Beta Testing of a product is performed by "real users" of the software application in a "real environment" and can be considered as a form of external User Acceptance Testing. Beta version of the software is released to a limited number of end-users of the product to obtain feedback on the product quality. Beta testing reduces product failure risks and provides increased quality of the product through customer validation.



Total Average Testing = (Total average rating/ Questionnaire elements)

$$\text{Total Average Testing} = (3.5 + 3.8 + 4.5 + 5 + 4.2 + 5) / 6$$
$$\text{Total Average Testing} = 4.33$$

This chapter help to provide a platform on how to properly test the mobile game before it can be fully implement and deploy in the real-world situation which is critical for the developer in order to make sure that the application work perfectly, perform the main function efficiently and provide good performance in every condition and environment when it was implemented into the real-world situation. Based on the result from Alpha and Beta testing, the developer state that this project was a success and the objective of the project is achieved successfully. All the information gathered are reliable and useful to the user who had no idea on what konda-kondi is.

## 5. CONCLUSIONS

Starting from the beginning, the developers always need to come out with fresh ideas during brainstorming session in order to achieve the best result for Mobile Game “Street Legend: Konda-kondi”. For conclusion, based on the testing results, researcher has successfully achieved their objectives. It is proven that “Street Legend: Konda-kondi” is suitable to use among kids to gain their knowledge and information. Other than that, the parents and the public know how to use this application very well. For them, it is easy to use. Regarding the survey had have been done, the result show that all the users are satisfied with this application and make suggestion to improve it to become more better such as change platform to Unity. Researcher are hardworking to develop the application, this is the first Konda-kondi Mobile Game in Malaysia that use RPG style, the resource are limited to find. Last but not least, Street Legend has successfully managed to achieve its main objective. The mobile game has runs smoothly without any problem.

## 6. RECOMMENDATION AND FUTURE ENHANCEMENT

After doing this project, the things that seem to make this project more efficient is to increase the number of features by adding inventory system, shop, more stages, and bonus reward and weapon grade. The inventory system can be used to store item such as weapon, potion and armor. Other than that, at shop or market the developer can use it as a medium to sell item. This help to increase the quantity of potion or power-up item to make the game more interesting. Besides, add weapon grade system it will give more intense to the user to play this game. These help the user to enjoy this game and experiencing the best konda-kondi game in this era.

## References

- [1] Yahaya Ismail. (2008). The Cultural Heritage of Malaysia. 79-82. E-Man Dhani. (2016). Spanar dan Spatula. 87-93.
- [2] Hasibuan, Z. A. (2011). Preservation of Cultural Heritage and Natural History through Game
- [3] PRENSKY, M. 2001. Digital Game-Based Learning. McGraw-Hill, New York. ISBN 0-07-136344-0