**1.0 Introduction**

Because of the new technology in our generation, developers construct a new type of system that can be used in a smartphone and that is Android. An android nowadays is familiar for all the users it can be used in different ways especially for entertainment. Most of the users are playing an android game for past time and entertainment most of the time. The players of Android games have no age limit. The users have different types of android games that help them to enhance skills and learning, teenagers play an android game that are logical games or adventure game that can enhance logical thinking for the youth, but most of the users that is affected of an android game are kids ages 4-7 years old.

We all know that kids always like playing around or playing games in different devices like tablet or smart phone. The kids want to play games that are very attractive or have different features. Kids ages 4-7 years old are kids that are starting to learn basic education and android games have advantages and disadvantages. The advantage of android games is the user can be educated in playing an android game but the disadvantage is some game can bring harm to the user especially to the kids because some games contain features or aspects that are not suitable for them like games that contain fight scenes, killing and gambling. We all know that kids can do whatever they see or learn on these games.

Parents are having a hard time to teach basic education to the kids ages 4-7, because kids nowadays are very distracted. Kids always want to play different games especially android games. In our current generation android games are very friendly user because even kids can easily play the games. And android games can help parents to teach kids basic education that are appropriate to the kids. An android game can give knowledge to the user or player so that the kids can learn many things while enjoying playing an android game.

Developers wanted to create an android game that can teach kids to familiarize alphabet, shapes, colors and to count numbers. An adventure game that can help kids to be educated and that can help kids to familiarized different things. Developers wanted to create an android game that can also teach the kids to set goals because the game is an adventure game that have a goal to collect different things. They ensure that kids will learn while enjoying playing the game.

* 1. **Statement of the problem**

There are some disadvantages of playing an android game. The users especially kids can harm by playing android games, because not all games contain knowledge or education. Games might contain scenes that are not capable for the kids or not suitable ages 4-7 years old. Kids can be affected by playing android games because they might have been addicted or affect the behavior of the user. The developers want to create a game that have no side effects to the users and teach the user to learn basic education and can be useful for the parents to teach the kids easier.

* + 1. **General Problem**
* **How to design and develop an educational adventure game for Island of Knowledge?**

*Not all android games are educational especially adventure games. Games might only create for entertainment and only for past time. There are games that have no lessons and knowledge that can help the user to enhance the user’s mind thinking. The users may affect playing android games, especially for the kids, because some of the games are only for enjoyment and not knowledgeable. Kids will only focus on playing and not on learning. Some adventure games like Minecraft which is very popular to kids because Minecraft has an creative modes survival and adventure which the kids really enjoying the open world game. But Minecraft not focus on educational mode which help the kids to learn about alphabets, numbers, shapes, and colors. And Minecraft has brutal features which is the part of survival game that the user needs to kill or avoid the zombies which is not suite for the kids to play.*

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* + 1. **Specific Problems**
* **How to design and develop a gameplay module for Island of Knowledge?**

*Most of the games are containing scene or brutal features that are not suitable for the nursery student. The games that contain brutal scenes may affect the behavior of the kids. One of example is Minecraft that has a survival mode, adventure, and creative mode. The kids can gain some knowledge because of building blocks, but Minecraft has a brutal part which is the kids under 4-7 playing Minecraft will affect the kids attitude because of brutal features.*

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* **How to design and develop a trivia module for Island of Knowledge?**

*A game that is suitable for kids should have facts or trivia that can teach the users to learn more things, especially basic education because that is the main goal of the game. A game should give facts that can be helpful for the users and to identify or know different objects. Example of trivia game is Know your Trivia which is focused on trivia, the gameplay is the user need to choose only one in 4 choices if correct, the user will advance to the next level but if wrong the user need to repeat the level. Know your Trivia is a kid’s game but lacks of teaching mode, the user will not learn on the game because the user will just guest which the correct answer on the four choices is.*

* **How to design and develop a settings module for Island of Knowledge?**

*Playing a game with sound effect and background music can give more thrills to all the users. The user can be energetic for playing a game. Not all the users having fun or enjoying the with a sound or background music. Some of the users are satisfy playing a game without a sound. They can focus on the game if it is silent or quiet. Example of the game Viking adventure a game which has a sound effect and background music to give enjoyment in the game but the user might be bored in playing because of the music and background music is making the user hurry or rush.*

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* **How to design and develop scoring module for Island of Knowledge?**

*Some games not record the previous score of the users and also the unlock levels, if the users fail to finish the current level the game will start from the beginning*. *And the unlock levels is not save so the user will play over and over again. Because of this, the user might be bored and tired because every time he/she plays the game it will back from the start. Example of the game Doodle Santa Jump Game is a game that records the high score but the previous score or past score is not recorded.*

**1.2 Current State of Technology**

In this generation the technology is changing fast all over the world. Most of the children waste their time to play android games for enjoyment and entertainment. Android is upgrading every year to enhance the features of the applications and android games to be more reliable for the users.

Many people have an android phone which is used for searching music, browsing on the internet, playing games, watching movies, and taking some photos. That's why many applications are created to develop the android usefulness. Some of the applications that the developers target is a game which is a form of play or sport that provide the people an entertainment and fulfillment. Although these may influence the user’s attitude, behavior and mannerism.

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Games improve the user ability and logical thinking to do in the game. Educational games are really helping the student to understand situations and ideas. The Island of Knowledge that was created by the developers have some comparison to the “Pigbull to the moon” it is an educational game the game also collect items like a fruits, coins, and letters. You have to dodge the falling birds while going up in the sky, three times you have been hit by the falling bird game over but there’s a ranking and totals scores for the game. The advantages of the Island of Knowledge, is the users need to collect different items like numbers, colors, shapes, and letters. After collecting those items the users can get trivia or description that will pop up on the screen which give facts and information about that item. The users mind will be exercise and practice to familiarize the shapes, colors, numbers, letters and different information about the items. Playing educational games in android can help the user to learn more and to develop skills. At the very young age of the user this game will help the user to gain more knowledge about different things, persons or animals.

**1.3Objectives**

**1.3.1 General Objective**

* **To be able to design and develop an educational adventure game for Island of Knowledge.**

*The developers want to create an android game that can give basic education to all nursery and elementary students. To create an adventure game that can teach the users how to familiarize alphabet, shapes, colors, and count numbers. The users will learn basic education while enjoying playing the game. A game that will help kids to gain knowledge that they can use in their lives.*

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**1.3.2 Specific Objectives**

* **To be able to design and develop a gameplay module for Island of Knowledge?**

*The developers want to create an adventure game that is suitable or appropriate for ages 4-7 years old. The gameplay should relevant for the kids and should also fit for the young ones. The developers will create an adventure game that has no display of brutal scenes or any features in the game that can harm the users. A game that is entertaining and attracting for all the kids.*

* **To be able to design and develop a trivia module for Island of Knowledge.**

*The developers will give facts or trivia to the users about the things that they get or collected in the island that has been objective for every level. A description or definition of every object that can help kids to familiarize those things. The user can learn the basic alphabet, shapes, colors, numbers and different things.*

* **To be able to design and develop a settings module for Island of Knowledge.**

*Playing educational games with sound and music will improve the children’s attention to enjoy and focus in the game. The sound and background music can be turn on / off. The users can control the background music.*

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* **To be able to design and develop Scoring module for The Island of Knowledge.**

*The developers want to create an adventure game that will save the previous score of the users and will save the unlock levels when the users want to stop playing. The user can also play the level that he wants to or the level that he wants to accomplished with a higher score like 3 stars. The highest score in each level must save in the game. The next level will unlock when the player done collecting items on the current level and score 3 stars. In order to get a higher score like 3 stars, the user must finish the level within the fastest time as possible.*

* 1. **Scope and Limitations**

**1.4.1 Scope**

The developers will conduct module and capabilities that will be used to develop this game and to accomplish task

* + **Main Menu**

The game will have a main menu which allows the users to decide and choose at the starting point.

* **Play**

The game will have a play button which allows the users to start the game and proceed to the island selection. The user can now start enjoying the game while learning the basic educations which are the alphabet, colors, numbers and shapes. The user will enjoy the game because of the design and also the background music.

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* **Settings**

The game will have a setting which allows the users to adjust the sound and the background music. The users can choose if the users want to play the game with or without sound.

* **Credits**

Allow the users to know about the list of the developers that designed and programmed to build this game. The users will know who created the game.

* **Exit**

The game will have an exit button which allows the users to click the button and to exit the game application. If the users didn’t want to play the game the users can easily exit the game because of the exit button.

* + **Island Selection**

In this selection the user will choose between four different islands. In every island there’s a different object and design. The game will also have different objective or mission in every island. The game has 4 Island the Alphabet Island, Color Island, Shape Island, and Number Island.

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* **Level Selection**

This is the level of difficulty inside the island selection. In alphabet there are 26 levels, for the number there are 10, shape and color have 8 levels each

* **Score**

The counting of the score is depending on the object that the user collects and the time use in finishing the level. The faster the time, the higher the score. The score can be determining by the items that the users collected within 100 seconds. If the users failed to collect all the items within 100 seconds the score will count how many items the users collected. The game have 5 lives.

* **Trivia**

After getting object or items there will be a message that will pop up. This message will show the trivia or description that will describe the collected object. The game will have a sound in every trivia so that the users can understand easily.

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* **Save**

The game will automatically save the finished levels with their corresponding score. The score that will be save in the game is the latest score that the user have in finishing the current level. The game can save the current level that the users play before.

* + **In game**
* **Pause and Resume**

The game will have a pause and resume button which allow the users to pause and continue the game. If the users want to stop the, the users can use the pause button and also resume if the users already to continue the game.

* **Obstacles**

The game has fires and spikes, if the character steps on it the life will decrease. The game also have power-ups, the first one is the time power-up, if the player gets this power-up the player can get additional 10 seconds to the time to collect the items. The other one is life power-up, if the player got this the life will reset in to 5 lives again.

* **Time Limit**

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When the game has started there is a timer which is a limitation for collecting items. The user has given 100 seconds to collect the items in every level. If the users failed to collect all item within 100 seconds the game will only give points depending on how many items the users collected.

* **Restart Level**

The game will have a restart button which allows the users to automatically restart the current level. If the users want to play again the level from the beginning because the user missed some items, restart button will make the level start from the beginning

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* **Back Button**

The game will have a back button which allows the users to back the game into the level selection. The game can also back from the start adventure or selecting the island.

**1.4.2 Limitations**

* **Character Selection**

The game has only one character that the user can use. The character is the main player that plays a big role through the whole story of our game.

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* + **Multiplayer**

The game did not have multiplayer. The game can only play by a single user.

* + **Save of Multiple Data**

The game only saves the previous score on each level. As long as the player gets 3 stars, the next level will be unlocked.

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