

Fun Learn: An Interactive Mobile Platform for Kids Learning

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Abstract. The project brings out the utmost desire for kids to learn basic mathematics in the form of simple games. They can enjoy on one hand while on the other hand their mathematics skills can greatly be improved by using Fun Learn kids' games. Usually kids go more for playing games that make them feel entertained and are easy to play. This game will not only entertain the kids but will also make them learn unintentionally that makes it less boring than normal learning. The game would comprise of three basic games related to Math's learning. Score for a user will increase for every correct answer. The project adds some interesting design techniques to the levels which makes it even more attractive for kids to increment their urge to play it and quench their thirst through it.

Keywords: fun learn, interactive, user friendly, learning.

1 Introduction

Pakistan is the developing country that requires help and support in the field of education, especially for children learning to fasten up its pace. The current education system is not up to standard and need to improve the education system, so that better education system be implemented. There is a immense gap in rural and urban education system. On the other hand technology becomes everywhere, therefore we can get the benefit to implement the latest technology. This project offers mobile learning platform and hence fill the gap for rural and urban education system. It demonstrates and apply the latest mobile technology in the area of online education system.

Fun Learn, a game having fun and learning at the same time [5]. It is easy and it is entertaining. The game would comprise of three basic games related to Math's learning. These games include counting, finding smallest number and finding largest number. Players would select the game they wants to play. A number of questions would be given to the player in each game. Levels would be incremented upon giving the right answer. Marks would be increased each time there is an increment in level.

Games can be very productive learning activities [4]. If someone wants to find a way to keep their children entertained and facilitate them learn at the same time [3,8], consider FUN LEARN an android based application. In today's computerized society, parents and teachers struggle to make engaging projects that will help kids learn, so

FUN LEARN will be a natural choice for educational games as it will have a very fun learning and friendly interface. The motivation behind this project is to apply design techniques learned so far more effectively and in depth. The project will help us to come in accordance with different tradeoffs in design interface for more universality [1,2].

1.1 Objectives

- Kids will get themselves entertained on hand held gadgets.
- This application will provide opportunities for building conceptual skills and developing positive attitudes towards mathematics, by reducing the fear of error and failure.
- Intelligence of kids will start improving at small age and will help them to step up more confidently at the elementary education level.

2 Proposed Architecture

Following Figure 1 shows the proposed architecture of Fun Learn.

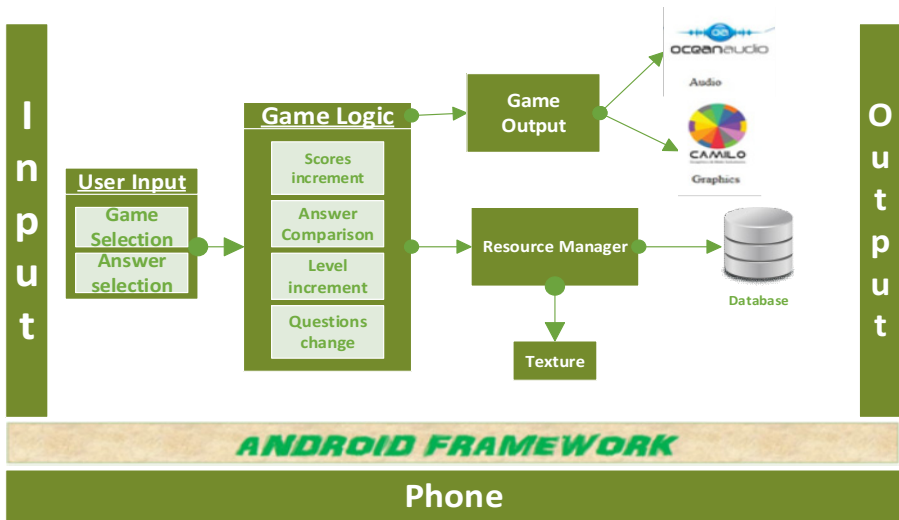


Fig. 1. Proposed Architecture

2.1 Description of Proposed Architecture

- **Input Module** will comprise of the selection of game out of three games including counting, finding smallest number and finding largest number. It will also consist of the answer selected by player to the given questions in selected game out of the three games.

- **Logic Module** is basically the business logic layer and is comprise of the game logic i.e.
 - The **increment in levels** when the player gives the right answer to the given question in the specific level of selected game.
 - **Increment in scores** upon giving the right answer to the given question when the level is incremented.
 - **Comparison** of the answer to the given question selected by the player with the correct answer from the database.
 - **Random change** in questions of each game in Fun Learn
- **Database** will have data of questions of the different games in Fun Learn and their correct answers.
- **Graphics** module will contribute in the visual and audio features of the game.
- **Resource Manager** manages the resources like texture and is connected to the database.

3 Prototypes

Children opens the application and a menu appears:



Fig. 2. Fun learn

- A cross icon at the top will close the game.
- This menu shows three types of games

- 1- Counting numbers
 - 2- Find largest number
 - 3- Find smallest number
- Select one of the options shown in figure 1

3.1 Counting Numbers

On selecting this option, questions about counting will be asked which will be solved by children.

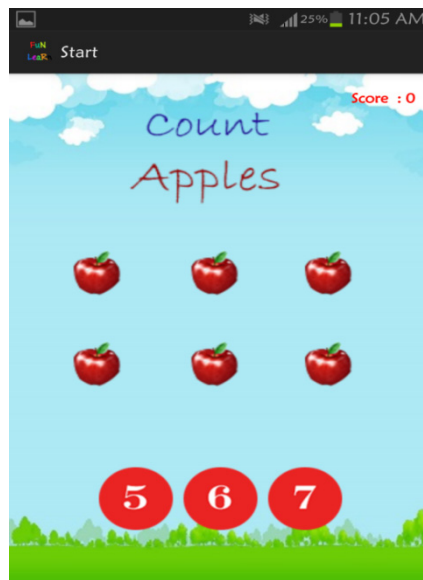


Fig. 3. Count apple

- Figure 3 shows 6 apples and 3 options.
- Children have to count number of apples and choose the correct option
- Giving the right answer will lead to next level and the increment in scores.
- Similarly in this figure 4 Children is asked to count the number of oranges
- Three options are given
- Giving the right answer will lead to the next level and increment in scores



Fig. 4. Count orange

3.2 Find a Smallest Number

On selecting this option, certain questions about finding the smallest number will be given to the Children.

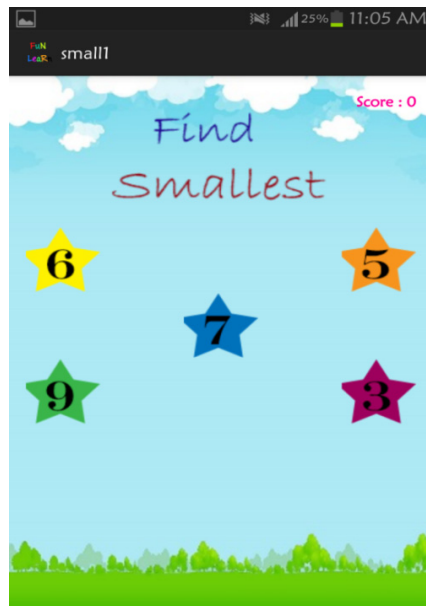


Fig. 5. Find smallest number

- Children is asked to select the number which is smallest
- Giving the right answer will lead to the next level and scores will be incremented.

3.3 Find the Largest Number

On selecting this option, Children will be given multiple questions about finding the largest number.

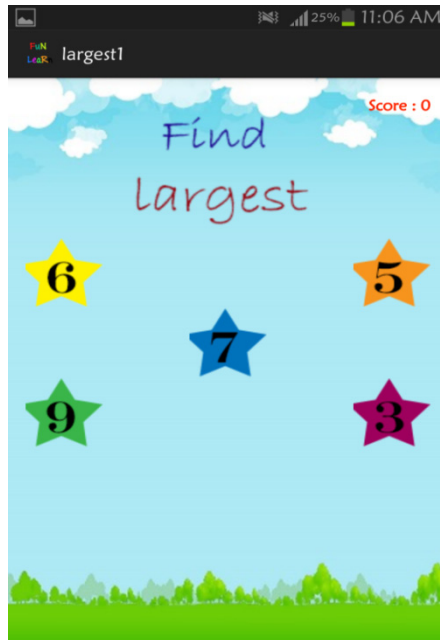


Fig. 6. Find largest number

- Giving the right answer will lead the Children to the next level and scores will be incremented.

4 Conclusion

We have successfully implemented a mobile learning environment which is user friendly and easy to learn. Fun Learn is comprised of three types of games. Player selects one of the games according to his mood. It helps the little ones to enhance their conceptual as well as mathematics learning skills. Fun learn is easy and yet interesting and enjoyable to play with. The basic goal for making this game is to improve mathematics skills of children and to get themselves entertained at the same time.

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