CENG491

Education Game Designer

(EDUGAME) Story Telling Creation Tool

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1 MOTIVATION

Nowadays games can serve to many different purposes. Educational purposes compose a part of them, which is highly important, even vital. Educational games are the ones which are designed to teach people certain subjects, to expand their perception, to reinforce their self-development, to record their historical improvement, or to lead them to practice a specific skill while playing[1].

The most significant "positive" effect of the games are seen on children, which they may improve a player's manual dexterity and computer literacy. Ever-improving technology also provides players with better graphics that give a more "realistic" virtual playing experience [2]. This special educational games help many mentally handicapped and preschool children learn basic skills, such as how to recognize objects, everyday manners and hygiene and how to use their imagination. Today, on the market, there are a lot of such applications which provides children to improve themselves. However there are still some restrictions on some of these games. For example, one easily can find a story telling application but this application does not have important features such that children can not use their imagination and can not play active role in that game. Moreover, these applications do not provide to follow the children's improvement by their teachers and parents since they do not save what children do on the applications.

In this project, we will implement features that increase children's ability and imagination and a system which supplies to follow their progress.

2 BACKGROUND

This project will be set on the mobile devices and tablets and it will be environment independent that is it can run on android and iphone operating system (ios).

In the game, there will be a lot of different features. These are :

1. Animations : Visual mobilities can draw children's attracts and they will connect children to the game.

2. Playback of recorded or synthesized voice : Microphone will be used to record the voice of children and that recorded voice can be played inside of the game whenever they want. Moreover children can answer some direct questions in some part of the game for learning or remembering some objects.

3. Dynamic game scenario based on choice of the player : Children can create their own scenario and thanks to it without following any defined pattern, they will form different stories in each play. It will be the most important aspects of the game because with this specialty that will be unique in the market.

4. **Recording and replay of kids game performance :** The most significant expectation by teachers and parents is following children's progress. With saving opportunity, the game will meet their expectations.

5. Interaction with platform : In the game, the sensors like gyro sensors, camera, touch panel and speech recognition will be used. Children will play active role by using these features of the device. They will be the main character and at the same time manager and scenarist of the game.

3 PROPOSAL

As we said in the last sentence of background, In this project we aim to create a game which offers to children to be the main character,manager and scenarist of their story. We will work with METU CEIT department in the head of Prof.Dr. Kürşat Çağıltay[3]. They are working with pre-school and mentally disabled kids. They need an application which accelerate their learning ability and saving their periodic progresses. In the final they want to have a chance to see children's improvements. That's why we will develop a game which meets their demands. The game will also be unique in the market with its new features and it will have many positive effects on education of pre-school and mentally disabled kids.

4 REFERENCES

[1] Wikipedia website http://en.wikipedia.org/wiki/Educational_game

[2] eHow website <u>http://www.ehow.com/info_8146629_effects-education-mentally-handicapped-children.html</u>

[3] Akıllı Oyuncak Projesi