Gayathri Srinivasan

Taweh Browne

David Londono

Marcus King

Group 4 App Report: EEL

**Abstract:**

What our group wanted to do was enhance the theme of the original game Snake and also the layout so it can have a more appealing effect to the user. The final decision was to basically create a theme underwater and make the main character of the game an eel. This is why we called our game EEL. The coding of our app is based on an original code we found on github for the game Snake. We modified a lot of the coding in order to create the vision that we saw for our app. Such modifications were the change of buttons and also the setting part of the game. Much was done but we didn’t get the chance to implement everything we had in mind

**Methods:**

Due to our idea of getting the original app Snake and modifying it, we found a code on github that was made for Snake. The basic idea of our app was to make a new version of snake that creates a different view of how the users see the game. This different view was to be seen in an appealing way to the user. We noticed that the button layout of the game snake wasn’t at its best so we decided to modify that part of the app in order to make it easier for the user to navigate through the app. We changed names of buttons and took some out. We basically made it simpler for the user. One button we took out was the option of playing the game with two arrows. We decided to do this because we thought it would be too complicated for the users and just wanted to have the 4 button layout. The original 4 button layout had the buttons that make the turn left and right separated largely so we decided to make lessen the gap so it wouldn’t be too hard for the users to control the Eel. Since the original game snake just shows a snake moving around in order to catch its prey, we decided to change it to an eel and to also make a theme in order to make an interesting environment for the user. Our theme is basically underwater where the eel lives. The logo and background for the game was made by our graphics designer Taweh. In the processing part, we wanted to implement an accelerometer so the game could also be played by the movement of the tablet. We were able to get the accelerometer working separately but we didn’t have the time to actually implement it in java.

**Background:**

With our game EEL, we wanted to implement a different feel than the similar version Snake. In our game we decided to make it look and feel better. The background of the game looks as if the eel is swimming underwater while it is trying to collect the blocks. The arrows are closer together so that the users do not have to spread their fingers far in order to maneuver the eel. In our design a user will be able to play the game in the landscape mode and not just in the cliché way of portrait. This function makes it better for the users because if they have a bigger screen, the app becomes the full size. In the settings, the users would be able to change their background of the screen from dark to light. This function is beneficial if the sun is out gleaming on your screen, the users can still see the game because they can set the screen to light and vice versa. We also implemented four different difficulties. On each of the difficulties, users will notice a difference in the way the app feels. Easy mode is for those who feel as if they are beginners, medium mode is for those who are better than the beginners, hard mode is for the users who want to become challenged in their game play, and finally extreme mode is one that will make users angry. These different difficulties test how well the user maneuvers the Eel throughout the screen in order to get the square and to stay alive.

**Results**

The final version of our app came out satisfying for what we intended to create. The graphics came out well done and we barely had any problems with the coding. All of the java and graphics came together perfectly but unfortunately some things we had in mind of doing weren’t reached in time. We wanted to also put a background in the settings page so that the layout of that one page wouldn’t look so plain. Also, the sensor we wanted to have implemented in the game wasn’t reached due to lack of time. One more thing we wanted to add was a multiplayer mode that would allow 2-4 players to play and compete testing which player gets the most blocks. Overall, our results came out pretty satisfying and the additions that we wanted implemented can highly boost the number of users that play the game.

**Conclusion:**

To conclude, our app came to be what we envisioned and there is also a lot of work that can be done to make it much better. Our group worked very well together and we got done much of what we had planned. We hope that many users like our idea of the game and we would also want to get feedback to extend our ideas in order to make the game more likeable. Creating the game was fun and stressful at the same time but it was a great experience for all of us because it tested our knowledge and imagination to create something great. It would be awesome if someday the app we created gets recognition of its innovation.

**Reference:**

Link to the code of Snake:

https://github.com/neyre/Snake