SENSOR BASE MOBILE APPLICATION PROJECT

PUPPIES VS MONSTERS

UI/UX DOCUMENTATION

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1. TESTING

After some self-testing and user testing, these are the problems we have encountered and also the solutions for them.

* Problem: It was hard for players to know whether they have answered correctly or what they have answered since there is no sign to indicate that.

Solution: Draw an arrow, which is the answer, to indicate which direction the players have chosen. The arrows will also move in its own direction until the players choose another one.

* Problem: According to some users, it would be cool if the 3D models stay still on the plane where it has appeared, no matter which direction the camera is looking at.

Solution: There is no solution for this yet. However, we have done as much as we can to make the 3D models look right on the plane and they are rendered fairly related to the camera.

* Problem: The app is not closed properly

Solution: There is no solution for this yet since we have not found a proper document for this.

1. UI/UX

* There are two main screens which are Menu screen and Game screen.
* The Game screen is where the gameplay happens. Monsters will appear in the middle of the screen when the camera detect specific images. Of course, the monsters’ position, however, will also be rendered relative to the camera direction and the images’ position.

On the top right corner is a green health bar to indicate whether player is alive.

Challenges are rendered at the bottom of the screen and above a timing bar, which is represented by a dog and a cat running from one end to the other. When the orange/yellow dog is running from left to right, that is the amount of time the player has to remember the sequences. On the other hand, when the black/grey cat is running from right to left, this is the amount of time the player has to answer the sequences. When the player answers the sequences (using MetaWear as a remote control or swiping the screen), arrows will appear to represent the answers.

Monsters will perform animations like Walk, Get Hit, Attack, Die according to the gameplay. When player gets hit, an explosion animation will be performed.

When the games end, the text will appear to indicate whether the player has won or lost. An Ok button is also shown to return to the menu screen.

* In the menu screen, there are four access points.
* On the top left of the screen is a gear icon providing a path the setting screen. In this setting screen, the player can choose whether he wants to use remote control, toggle light sensor, which will change the screen brightness according to the surrounding light, and enter the MAC address of the MetaWear if remote control is enabled.
* In the middle of the menu screen, the Play button will lead to the Game screen.
* Under the Play button is the How To Play button which leads the a screen showing instructions to play the game.
* Under the How To Play button is the Quit button to exit the application.
* Blue, white and black are the main colours of the game. A background with those colours along with some puppies is put in the menu screen to represent the game idea.
* Some custom fonts are used where Sketch 3D is used for the application name, KBLuckyClover is used for buttons in the menu screen and in-game texts and AmaticSC is used for normal texts in screens belong to Menu.