Densmore Dash:

Description:

The player controls a fox running through grassy hills through brick wall obstacles. The player can tap on the screen to make the fox jump and release to let him fall. As the fox moves through the hills the player must dodge the brick walls coming from the top and bottom of the screen.



GUI:

The app opens up to a menu screen with a few options. The first is to play the game, the button below controls the difficult of the game. Displayed on the top left of the menu screen is the users high score, on the top right there is a button that displays all of the users high scores. The different levels of difficulty change the speed at which you run and the amount of obstacles in the game.



Processing:

The mechanics and physics of the game are similar to real life. Vertically, there is a constant gravitational force in the game, you tap and hold to accelerate up and release to fall down. Horizontally, the user has a velocity which accelerates over time in order to gradually increase difficulty. The objects that the user has to dodge are generated using random number generators whose patterns can be altered according to the the difficulty setting.

Code Structure:

The actual code for the app consists of three key files, the Main Activity, Game View, and Main Thread. The Game View file is the source of everything that is displayed on the screen while in the game. Game View uses a variable called canvas to show all of the layers and objects in the game. The Main Activity builds the game when the app is launched and calls the Main Thread which updates everything in the game simultaneously and continuously while playing.