

EC 327: Final Android Project

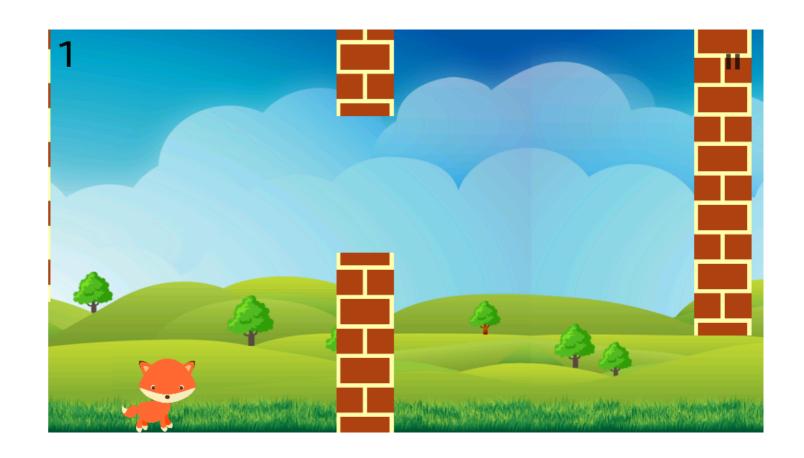
Main Menu

- displays button for level difficulty, personal statistics, sound, and starting the game, as well as the user's high score
- the background moves at a constant speed
- the mode is chosen by clicking the difficulty button which cycles through easy, medium, and hard



Difficulties

- controlled by button on main menu
- code loads differing obstacle generation parameters and game speed settings which are applied in the GameView.java and update() and draw() functions



- easy: slow speed with only individual pillars as obstacles
- medium: same as easy difficulty, but doubled speed
- hard: same as medium difficulty, but obstacles placed on both top and bottom of screen (displayed above)

Personal Statistics



- all score values are stored on the phone and will load each time the app is opened
- displays top score for each level, number of games played, and the user's averaged high score, as well as a button to return to the main menu



Moving & Jumping

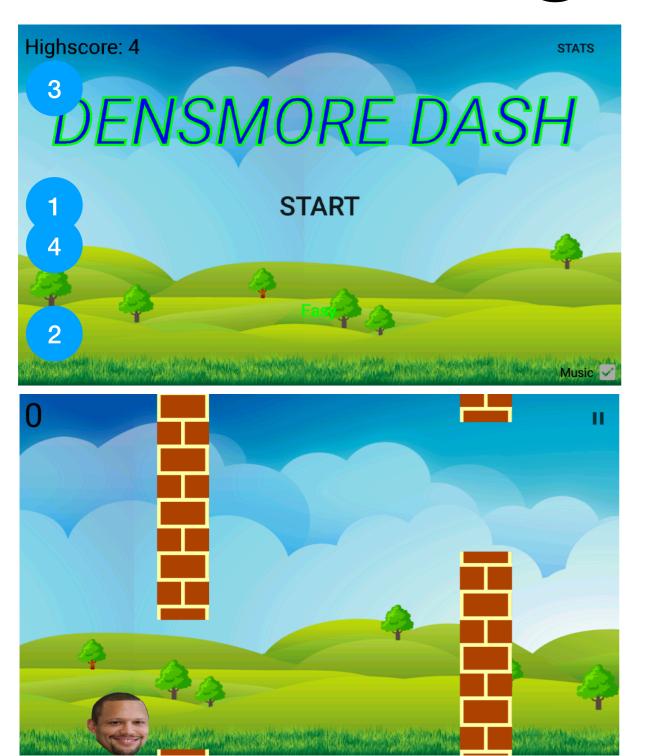
- DoodleGuy class has position, velocity and force member variables used to draw and subsequently update the character's position
- while the screen is tapped, the vertical velocity of the character constantly increases and while the screen is *not* being touched, the vertical velocity of the character decreases until meeting the bottom of the screen or the user taps again
- this velocity is used to determine and update the new position in every frame
- depending on the level of difficulty, the obstacles move at an initial speed that increases as the game continues

Obstacles

- the position of the obstacle is randomly selected from a list of positions generated according to the size of the device's display
- when on hard difficulty, each pillar is used as an input to a custom constructor in order to generate a paired pillar opposite the initial pillar
- the score increments for every obstacle passed safely



Unlocking Densmore



- when three invisible buttons on the main menu are tapped in a specific order (shown to the left), a new feature is enabled
- the game's character then changes to Densmore's head (hence the title Densmore Dash)
- the character is reset back to its original fox icon once the game is lost