

USER REQUIREMENTS

1. The user shall be entertained by a side-scrolling game that tracks distance run, bananas collected, and total score.
2. The user shall tap the screen to jump and avoid obstacles.
3. The user shall enter a unique username before playing.
4. The user shall be able to view their top score on the home screen.
5. The user shall be able to view the global top 100 scores, top 100 bananas collected, and top 100 distances run..

FUNCTIONAL REQUIREMENTS

- 1.1. The game shall consist of a gorilla moving with the screen at a constant rate.
- 1.2. Bananas shall appear at random places within the game.
- 2.1. Obstacles shall appear at random places within the game.
- 2.2. The character shall be controllable in the vertical direction.
- 3.1. The username shall be the unique key that identifies each user.
- 4.1. The game shall store each user's top score on that user's local machine.
- 5.1. The software shall include a database stored on a web server that consists of a top 100 scores table, a top 100 bananas collected table, and a top 100 distances run table.

NON-FUNCTIONAL REQUIREMENTS

- 1.1.1. The gorilla character shall be loaded into Unity as a sprite.
- 1.1.2. The total score shall be calculated upon completion of each run.
- 1.1.3. The total score shall be a linear combination of distance run and bananas collected.
- 1.2.1. The number of bananas collected shall be tracked throughout each run.
- 2.1.1. The game shall end when the character collides with an obstacle.
- 2.2.1. An upward force shall be imparted upon the character when the screen is tapped.
- 3.1.1. There shall be a user input box on the homescreen that takes in the username.
- 3.1.2. Every username shall be stored in a database on the web server.
- 4.1.1. The user's top score shall be displayed on the game home screen.
- 5.1.1. The game shall compare the user's score from each run to each of the top 100 tables on the server.
- 5.1.2. The database shall be updated accordingly upon any user completing a run that puts them in the top 100 of any of the three categories.
- 5.1.3. The three tables shall be related by username.