

CSCI 201 Project Description

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Arcade Hoops

Overview: We are planning on designing a macOS game which allows the player to shoot basketballs into the hoop based on a shot-power bar. Players will have 30 seconds to make the most points possible, and the players with the highest scores will be placed on the leaderboard which is displayed at the end of the game.

Guest/User Feature: A player can either sign in through their premade account with a saved high score, or play as a guest. If they play as a guest, their high score will not be saved to the leaderboards.

Tools:

Idea 1: We are planning to use Python for the frontend of the game and Java for the backend.

Idea 2: We are planning to use Swift and RealityKit for the frontend of the game and Java for the backend.

Multithreading: We will be using 2 threads to have two players simultaneously play and compete with each other. The players will begin playing at the same time and end at the same time.

Data Storage:

Idea 1: We are planning to convert the data into a JSON object, and then write it into a file. Then whenever we need to get the live data, we can read the file and parse for any relevant information.

Idea 2. Use mySQL to access and store databases of users and highest scores.

User Experience: A user will sign and then either log in to their existing account, create an account, or play as a guest. They will then be redirected to a screen where they can choose between playing the game single player, playing multiplayer, or viewing the leaderboard.