174A Project Proposal

Team Name: Golf for It

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Introduction:

Our project proposal is a golf simulation game in third-person perspective of the ball, inspired by games such as Golf It! The goal is to hit the golf ball into the goal in as few strokes as possible. There will be obstacles that the player has to navigate around.

User Interaction:

Button	Function
Left/Right arrow keys	Aiming
Up/Down arrow keys	Changing shot power
Space	Hitting
R	Resetting the ball

Advanced Features:

- Collision Detection will be used for the golf ball to interact with obstacles on the course(s)
- **Physics-based simulation** will be used to model friction to affect/slow down the ball's movement after it is hit

Reference:



Things to Implement:

- Physics:
 - Gravity
 - o Friction
 - o Collision detection
 - o Getting hit
- Gameplay:
 - o Keep track of strokes
 - o Reset ball to start
 - o Hitting the ball
 - Changing power level
 - o Changing aim direction
 - o End level when ball in goal
- Level:
 - Start
 - o Blocks
 - Moving blocks
 - Goal
- UI:
- Strokes

Current Progress:

Currently, we have managed to implement simple physics like position/velocity/acceleration, as well as basic collision detection that stops the ball when it collides with walls. We have also implemented the user controls and have begun level design. Moving forward, we will work on improving collision detection so that the ball can bounce off of walls and obstacles and adding textures to the course and sky. We will also add functionality to reset the course as well as a goal to complete the course.

