

## 174A Project Proposal

Team Name: **Golf for It**

Name	Email	GitHub Username	UID
Victoria Delk	vickydelk@g.ucla.edu	vickydelk	105402341
Isabelle Marchand	imarchand@g.ucla.edu	imarchand11	505486150
Clement Nguyen	nguyenclement@g.ucla.edu	NutrientC	005613768
Charles Zhang	charleszhang@ucla.edu	czhangy	305413659

Team Rep: Charles Zhang

### 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 hole 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**
  - **Friction**
  - **Collision detection**
  - Getting hit
- Gameplay:
  - Keep track of strokes
  - **Reset ball to start**
  - **Hitting the ball**
  - Changing power level
  - **Changing aim direction**
  - **End level when ball in hole**
- Putting on screen
- Level:
  - **Start**
  - Blocks
  - Moving blocks
  - **Hole**
- UI:
  - Strokes
  - End level