CS 116X/106 **Lab 03** **Winter 2015**

Physics and Animation (sans physics library)

Instructions:

All parts of lab questions that have **R** at the beginning are mandatory, and their submission by each student is required. The parts of each question that begin with **O** are open-ended enhancements for further investigation into course material. These should be completed only after the mandatory parts of the lab are completed, and are not explicitly required for submission. If you choose to complete further optional add-ons, you are welcome to explore your own options, and not just the suggestions provided. Submit a zip document to the dropbox folder L3 on LEARN. The document should contain separate folders for the following file:

- **L3_MiniPutt**

Lecturette: Description of lab question, recap on friction

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1. MiniPutt

a. **R** Using the provided started code, and without using the Fisica library, write a sketch that implements the game mini-putt. The detailed starter code has every aspect of the game except motion. It is your job to implement motion, including friction. When doing this, you will need to keep track of the variable `velPower`, which changes during motion due to friction and influences the x and y velocities. This requires <= 20 lines of code, but may be a difficult concept to grasp.

b. **O** Implement a celebration reaction of your choice that plays whenever the player gets the ball in the hole, during STATE_CELEBRATE.