High Striker

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The goal of our project is to implement a simple interactive carnival game, often referred to as "High-Striker" or "Test-Your-Strength". The object of the game is to cause a weight to travel up a pole and strike a bell, by striking a target at the bottom of the pole with a hammer. The test of strength is measured through the acceleration of the hammer, which we will measure by affixing an accelerometer to a hammer. Based upon the measurements of the accelerometer, we can calculate the relative distance that the weight should travel. The end position of the weight is sent to a physics module, which calculates the velocity and acceleration of the weight as it travels up the pole. The motion of the weight is finally sent to the graphics module, which draws the carnival game to the screen. If the hammer is swung fast enough, the weight will be sent flying to the top of the pole, hitting a bell, and making a bell sound via a sound module.