



Lab 3 – Block Buster

Topic: Shake and Tilt Sensor-Controlled Brick Game

Deadline and Submission: Check Sakai

A demo of this assignment can be seen here: <https://youtu.be/SFmNrpSqCjA>

#	Task	Check
1	Create a rectangular play area (custom view) that holds 10 bricks, 1 ball, and 1 bat.	
2	Animate the ball by moving the (x, y) position by (dx, dy) amount. Pick an initial position (x, y) somewhere in the lower middle of the play area and pick a speed (dx, dy) such that the balls move smoothly.	
3	Every time a ball hits one of the edges or a brick or the bat, it should change its direction of movement. The brick will disappear when hit.	
4	Initially, everything will be stationary. When the phone is shaken hard, the game starts -- the ball starts to move and the bat can be moved left or right by tilting the phone. Hint: both shake and tilt can be detected from accelerometer values.	
5	Underneath the rectangular box, show the elapsed time. Reset the counter when a new game starts (i.e., hard shake). Pause the timer when the ball exits the board (when the bat misses the ball and the ball exits the play area).	
6	Determine the winning and losing scenarios and show the status.	