Lab 3 Grading

Make the Ball Move (15 points)
The ball should move while playing the game. Work with the move() method of SmoothMover and the Vector to get the ball moving.

Check For Edges (15 points)
Fill in the appropriate method that checks for the edges of the world and allows the ball to bounce off of each of them. Bouncing simply means reversing the direction the ball was traveling in when it hit the wall (only the x or y direction). There is no partial credit for this section – it must work for all three walls or no credit is awarded.

Check For Paddle (15 points)
You will need to create a method named checkForPaddle and call this method to help the ball check for collisions with the paddle. When the ball hits the paddle, it needs to bounce off of it.

Make Paddle Move (15 points)
The paddle should follow the movements of the user with the mouse. When the user moves the mouse left, the paddle should move left.

Check For Bricks (15 points)
When the ball collides with a brick, the brick should be removed from the screen. Also, collisions with the bricks should cause the ball to bounce off of it (meaning reversing both directions).

Stopping the scenario (15 points)
The scenario should stop if the ball goes off the bottom end of the screen or there are no more blocks on the screen.

The above will be tested by Web-CAT. The final 25 points will be awarded by the TAs.

Random Behaviors (25 points)
(4 points) When a brick is hit, a random event occurs 30% of the time.

(5 points) Move all Bricks Down
Make each brick move one "row" further down towards the paddle (the bottom of the screen).

(3 points) Speed Up Ball
The speed of the ball should speed up.

(3 points) Slow Down Ball
The speed of the ball should slow down.

(5 points) Change Color of Bricks to be color X
All of the bricks on the screen change to be the same color. You can pick whichever color you like.

(5 points) Change Color of Bricks to be a random color
All of the bricks on the screen change to be a random color.