Status Report - WEEK 2

Name: Justin Huang, Chris Liu, Anvesh Krishna Pattaje
Period: 5

Last week accomplishments:
- **[Anvesh]** Learned more about how physics principles are implemented in dyn4j, and researched code on their website. Learned from chatgpt about what CollisionDetection, CollisionResolution, BroadPhase, NarrowPhase, Manifold, and many other things are.
- **[Anvesh]** Implemented the move() method for the Obstacle class.
- **[Chris]** Implemented boundaries for the game in the RoThro class. Set their coefficients of restitution so that the ball bounces back instead of sticking to the surface of obstacles. Figured out how the graphics system works (width, height, camera scale, etc.) Removed extraneous rendering details from the ball and the obstacles.
- **[Justin]** Finished implementing the control function of the Ball class, consists of changing the angle the ball is thrown at and shooting the ball
- **[Justin]** Created InputManager and a KeyListener so keyboard key bindings can now be created for all applications involved in the project.

Next week's goals:
- **[Anvesh]** Implement methods in the Obstacle and Level classes. Plan a layout for the game and specify the bounds of the world.
- **[Anvesh]** Learn more about how collisions will be implemented in our game, and common backgrounds and shapes for obstacles in order to help plan the "look" of our game.
- **[Chris]** Continue improving the GUI. Make sure the colors are consistent. Investigate how to implement the ball launcher functionality. Figure out how to detect that the ball has reached a certain "goal" so that we can properly end the game.
- **[Justin]** Create the set controls class, maybe add an avatar and a way to move left and right along with jumping with the avatar. Also check in with the rest of the team to see if previously added functionality actually works.

Challenges/Concerns:
- **[Anvesh]** What methods do I need to create and implement? What would be all the edge cases in our game that will need to be rigorously tested?
- **[Anvesh]** Are we going to have the controls for the game appear on the screen or are we going to have the user control their robot using keys on the keyboard?
- **[Chris]** The ball launcher GUI might be challenging to implement. We might have to revert to just having a ball instead of a full-blown robot on screen.
- **[Justin]** Find a way to increase the complexity of the project, make it more fun and add more complex data structures