

Project Plan - RoThro

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Period: 5

Date: 5/2/2025

Project Overview:

This project creates a game in which the player is represented by a robot which throws/"spits" a ball in different degrees of strength and directions inside a rectangular screen which contains obstacles. The objective for the player is to make the robot "spit" the ball with the correct angle and strength such that it will pass all obstacles (if there are any, and based on the level of the game they are playing) and go through a hole on the other side of the defined screen.

Team Responsibilities:

All:

- Learn more about the dyn4j library to understand how the World class works and how we can implement those classes and methods for our game. Understand how collisions and interactivity between objects, obstacles, and the screen, and the user's inputs are implemented in dyn4j and plan how to use or reuse them for our game.
- Plan some extra ideas in the case that we finish earlier than expected. Some examples include: colors for the robot, moving obstacles, moving holes, teleporting balls, ≥ 2 players, etc.

Justin Huang:

- Finish the Ball class

Anvesh:

- Implement the Obstacle and Level classes

Chris:

- Implement the RoThro class

Challenges:

- i) Learning how dyn4j library's classes and methods work. We will try to understand dyn4j through online tutorials and their website. Also, there are sample classes and games in the website along with their code.
- ii) Implementing some of the library's classes for our game. We will have to be specific in terms of which classes to use and what to modify. This will require us to first build a class diagram and define the rules of the game precisely, first.
- iii) Defining the rules of the game concisely and precisely, i.e, understanding how the game works ourselves.

Major Tasks and Schedule:

Task	When	Responsible
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Obstacle Class	May 9, 2025	Anvesh
Rothro Class	May 9, 2025	Chris
Ball Class	May 2, 2025 11:59 PM	Justin
Level Class	May 16, 2025	Anvesh