Team Name-Invincibles

Project name- Duet Dodge game

Team members-

IMT2020523 Kedar Deshpande

IMT2020105 Rakshit Bang

Idea of project-

To make a game similar to 'Duet' in which we have to avoid collision of incoming blocks and beads by rotating beads on a given ring.

Implementation-

For the incoming blocks (random x position) we referred to last year's space shooter game.

We implemented the movement of beads using polar coordinates.

Right arrow key moves both the beads by 0.2 rad in clockwise direction and left arrow key in anticlockwise direction.

Problems faced-

We faced some problems in collision detection part due to pixel coordinates.

We faced display problems due to different screen sizes of different devices.

Solutions to the problems-

Collision detection worked better when we used two limiting cases for each x and y coordinates properly considering the left topmost vertex of the blocks.

Display issues were sorted when we modified pixel coordinates in terms of screen.width and screen.height .

Learnings-

This project was full of learnings for us. We learnt a few things about JavaScript and HTML.

We learnt making projects in a shorter time which made us to think faster.

It was also quite fun and educative to apply math concept in games like these to allow movements only in a particular region.