

BBM 104, Assignment 4 Report

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1) Problem Definition

Our problem for this assignment was to create a game according to a retro game called "Road Fighter" with GUI using JavaFX.

2) Solving the Problem

I've started with an empty gui and add my entities (sprites like road, cars etc.), then with keylisteners and functions I have learned to move entities by changing their coordinates. My last problems were check collisions between enemies themselves and enemies with the car, after that I have added menu, inside the same function that has collision control I have checked if an enemy passed our player or not. After everything is done, I have made a little change to make it a little bit realistic, when we stop pressing w, our speed is not becoming zero but is equal with enemy cars which looks like player is moving along the enemies.

3) Classes and Objects

Assignment4 – This is my main class which starts application and creates menu MenuScene – Creates the scene for menu, which includes exit, start new game and info GameScene – Where game, collisions, score and everything checked and created models/Button8Bit – Custom button that extends button and has its own style models/InfoLabel – I have used this to draw texts to screen

models/Enemy – Enemies with rectangular area

models/Player – Octagonal area, speed, move function.

Little Note: Making the collision according to my car shape was the most annoying thing because I wanted to use .intersects(r) function but it has to be between a shape and a rectangular shape. Front side of the cars were sphere so enemy-player intersection didn't work and I have changed player cars back side area as like as a sphere like in front side and made enemies rectangular.

Level Calculation: If score is above Level*Level*5, level goes up.

