Assignment 0 Report

Description: For this assignment, I built a game where the player is a military aircraft that flies, collects coins and dodges missiles. The user can control the aircraft with the arrow keys. Every collected coin gives the user one point, while getting hit by a rocket ends the game. The goal of the game is to collect as many coins as possible before getting hit by a missile.

Scene Hierarchy

- Main (Node) - main/root scene
    - TextureRect - background image
    - HUD (CanvasLayer) - layer for menu elements, buttons and score counters
        - Score (Label) - displays collected coins
        - Message (Label) - used to inform user of events
        - StartButton (Button) - used for starting/restarting the game
        - StartTimer (Timer) - used to start the game
    - Player (Area2D) - aircraft that the user controls
        - Sprite2D - aircraft image
        - CollisionShape2D - used to detect collisions with coins/missiles
    - EnemyTimer (Timer) - timer for spawning missiles
    - StartTimer (Timer) - timer for starting game
    - CoinTimer (Timer) - timer for spawning coins
    - StartPosition (Marker2D) - starting position for player
    - Coin (RigidBody2D)
        - Sprite2D - coin image
        - CollisionShape2D - used to detect collisions with other nodes
        - VisibleOnScreenNotifier2D - used to inform us when coin leaves screen
    - Missile (RigidBody2D)
        - Sprite2D - missile image
        - CollisionShape2D - used to detect collisions with other nodes
        - VisibleOnScreenNotifier2D - used to inform us when missile leaves screen