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Mobile Application Project

**Benny Bop's Bopping Bombastic Adventure
Endless Runner**

Front End



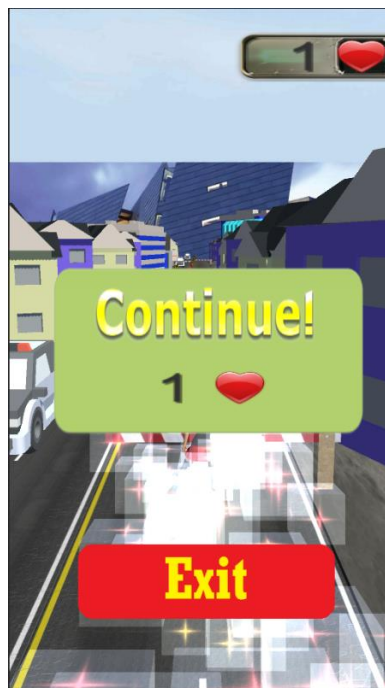
This is of how the home screen will look like when press to play game. Before you start game, you can adjust few options as shown above. If you want to start game, you just click on screen with mouse and game starts.

In-Game Menus

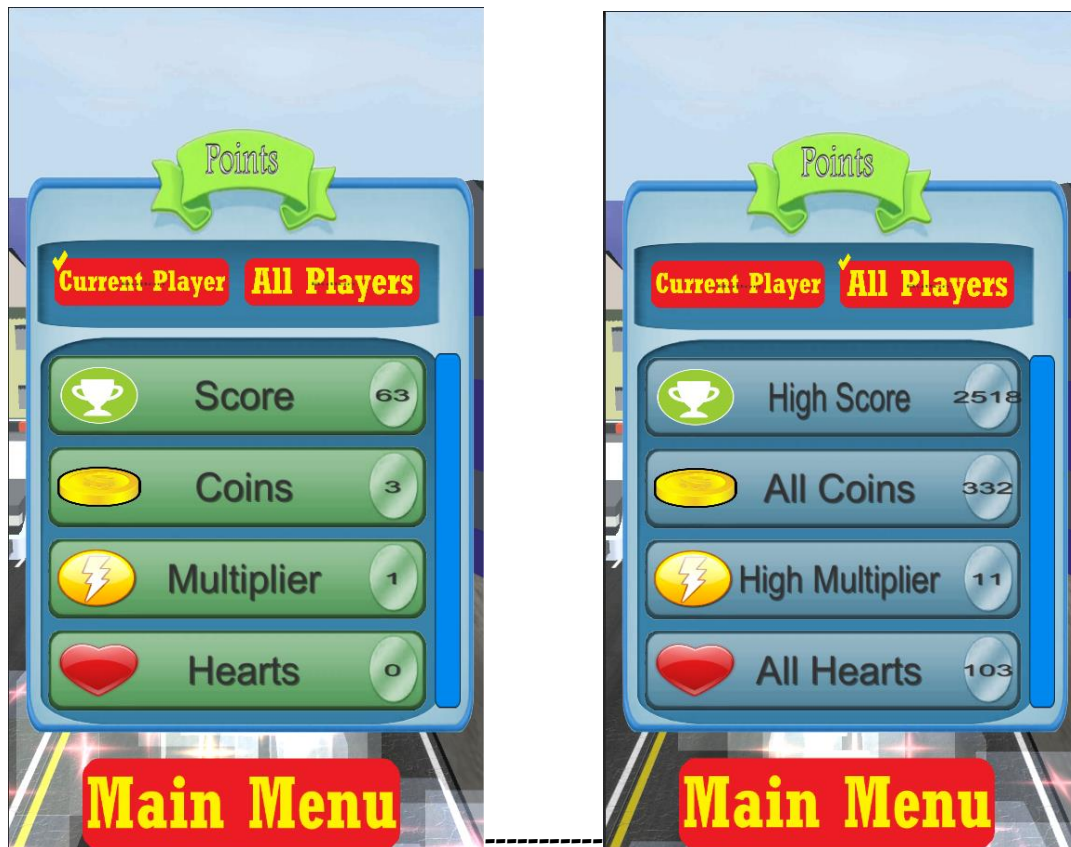


When you start game and you pause it player will be able to:

- Resume
- Restart Game
- Exit game



When player dies you can continue game buy giving 1 heart (if you already have 1 heart) this way player continues from where it left off. Or you can EXIT game to go back to menus.

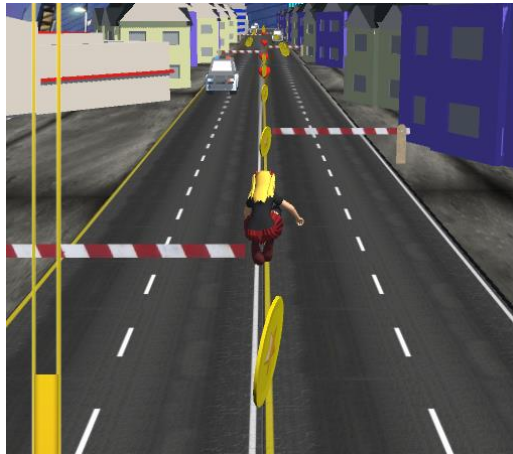


If player dies and can't continue game, player will be able to see their game collected items and achievements in 'Current Player' menu.

Player can also see all players collected items and achievements in 'All Players' menu

Last thing player can do is go back to Main Menu.

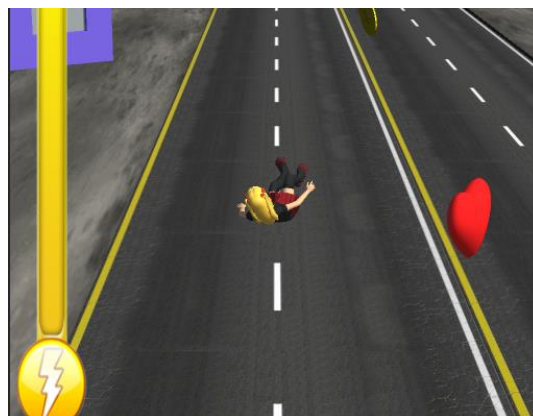
Control Mechanisms



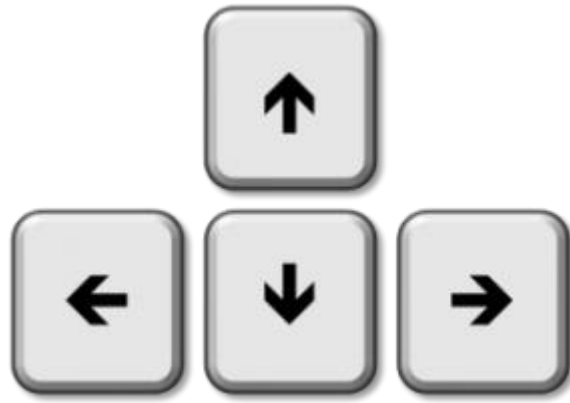
In this game player can jump



Can move left and right



Can slide under some of the obstacles



Player is controlled by using arrow keys.

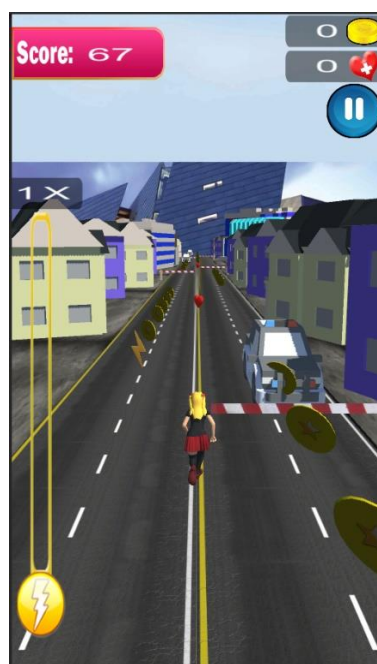
- UP = Jump
- Down = Slide
- Left = Move left
- Right = Move right

The Game

The game will start with camera looking at the player this will give player time to get ready after few second camera will switch to main scene and that's when game has started, from there you start collecting coins, hearts, and power ups, game will speed up every time you score 200,400..etc that's how game difficulty is determent, player can play endlessly if he or she is able to do it, this means game gets faster and faster and its up to player to keep up with all the challenges that is in the game, enemies will appear and come faster in your direction, obstacles will be harder to avoid as well.

Goal in Endless Runner is to collect as many coins as you can, when you pick up heart you gain life so when you die you can respawn and continue but collecting hearts gets harder as well and next time player dies 2 hearts will b required to continue game, as you can see this affects game difficulty as well.

When player picks up lightning bolt player starts to run faster and becomes invincible for few seconds



Objectives

The title of the game is Endless Runner and the genre of the game is 3D Endless Runner. The player will be able to control the game with the up, down, right and left keys on the keyboard. The player will have to move to avoid enemies and obstacles as they proceed through the game. The main idea is that there will be Enemies that the player will face, and player must avoid them in order to advance to the next level. The Game will be created using Unity and is for people who enjoy simple games that are enjoyable to play.

- Difficulty

Difficulties in my game increases throughout game play, it depends on score every time score goes up gameplay gets faster.

- Enemies and obstacles

will come at player faster after every time score goes up.

- Background

For my Background I decided to go with a modern looking town.

Enemies/Targets

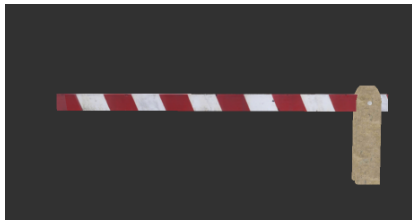
Enemy Car



The Enemy car will come at player in speed to kill player




Obstacle

Lumber



Player will die if it crushed in to obstacle.

Collectibles/Power ups

Collectibles	Powers
	Pick up heart to collect health
	Pick up coins to beat score
	Every time multiplier fills player gets power up, player runs faster and can go through obstacles.

Game Assets

I tried to create my own assets as much I could I used blender and photoshop to make 3D models and photoshop for menu sprites. I got some assets from online like Player character that comes with animation, buildings, enemies and obstacles.

Gameplay Guidelines

The guidelines for this game are very simple that the player try to avoid as many enemy's and obstacles as possible and complete the game. The players will earn high score after every gameplay. Player will be rewarded game high score which Player 2 can try and beat after starting new game.

Conclusion

In the end this was challenging experience game is playable but there is some bugs, time was big difference in completing game, as its final year there is lot of projects to do for all the modules and almost not enough time to polish this game on the level I would have like to. I don't have any unit tests done on this game as it was bit late when I realized I had to do Unit tests as well.

I used GitHub to as my developer diary as I have everything iv done committed in there

Unity3D Version used – 2019.4.13f1

References

LearnOnline - learnonline.gmit.ie

YouTube - [YouTube](#)

Player movement - https://www.youtube.com/watch?v=p5OWasgD1no&ab_channel=gamesplusjames

Infinity Level - [I Made a Game with Infinite Levels... - YouTube](#)

Pause menu - [PAUSE MENU in Unity - YouTube](#)

Animation - [How to Animate Characters in Unity 3D | Animator Explained - YouTube](#), [Unity Tutorial 29 - Animating 3D objects in Unity - YouTube](#), [Unity 5 - 2D Animation in a 3D Game - YouTube](#)

Settings menu - [Creating a Graphics Settings Menu - YouTube](#), [SETTINGS MENU in Unity - YouTube](#)

Creating a scoreboard and adding scores on collisions - [How to make a HIGH SCORE in Unity - YouTube](#), [Unity Creating a scoreboard and adding scores on collisions - YouTube](#)

Health System - [How to create a lives counter \(health bar\) in 2D Unity game | Easy Unity 2D tutorial. - YouTube](#),

Game Music - [Freesound - Freesound](#)

Photo shop - [Photo editor online - Pixlr.com](#)

For some of the assets - [Kenney • Assets](#), [New Year Sale - Asset Store \(unity.com\)](#)

3D modelling - blender.org - Home of the Blender project - Free and Open 3D Creation Software

Form my game I didn't copy and paste any code that I have referenced I simply took them as lessons and for better understanding on how to build game in Unity.

My Github repo : <https://github.com/ika25/MobileApp3>