

RAPID ROLL



Rapid Roll - Created by GrownApps © 2015

Introduction

Welcome to our new game called Rapid Roll. The game was inspired by endless runner games. The game was originally developed for iOS and android; furthermore, the game was successfully tested on android.

We assume that you are a bit familiar with Unity engine, so you are able to use prefabs and gameobjects. If not I would suggest you to learn tutorial on official site of Unity.

Link: <https://unity3d.com/ru/learn/tutorials/modules>

The game have been scripted in C#. In this guide we will try to explain how scripts work with an explanation of their use in the game.

All sprite that used in this game were drawn in CorelDraw.

Rapid Roll:

The aim of the game is to jump from one platform to another and avoid thorns on the way. There different types of platforms such as regular platform, broken platform, moving platform and disappearing platform. Moreover, there is an opportunity to teleport the ball from one side to another.

Open the project in Unity engine. You probably see blue screen in the scene and game windows. Open the folder “**Scenes**” in the folder “**Rapid Roll**”. There is the scene called “**GameScene**”. “**GameScene**” is the main scene of the game where the game actually runs. If you open “**GameScene**” you see actual game scene and gameobjects. In hierarchy you can see gameobjects that were used in the game. Now

we want to give some information about each of the gameobjects in the hierarchy so you can easily understand their use in the game.

GameObjects in the scene “GameScene”:

“Background” - background sprite.

“Ball” - the main gameobject in the game. It has its collider to detect collision with other gameobjects. It uses the sprite called **“Ball”** which is located in **“Texture” folder**. In order to detect collision with other gameobjects we added box collider to the gameobject. The gameobject is rigidbody2D and has three attached scripts called **“BallMovement.cs”, “DestroyBall.cs”** and **“TeleportBall.cs”**.

“BallMovement.cs” script aims to move the ball along x axis and move the ball towards **“MovingPlatform”**. **“DestroyBall.cs”** script aims to destroy the ball and instantiate **“BallParticle”** when it collides with **“Thorns”**. **“TeleportBall.cs”** script aims to teleport the ball from one side to another side of the screen.

“BallParticle” - broken pieces of the ball.

“BrokenPlatform” - gameobject which breaks during collision with the ball. It has three attached scripts such as **“BlockMovement.cs”, “DestroyPlatforms.cs”** and **“BrokenPlatform.cs”**. **“BlockMovement.cs”** aims to move platforms up. **“DestroyPlatforms.cs”** destroy unrequired platforms. **“BrokenPlatform.cs”** destroy **“BrokenPlatform”** (Green) if collides with the ball.

“BrokenPlatformCollided” - gameobject which instantiated when **“BrokenPlatform”** is destroyed. It has three attached scripts such as **“BlockMovement.cs”, “DestroyPlatforms.cs”** and **“DestroyBrokenPlatform.cs”**. You are already familiar with two of them.

“DestroyBrokenPlatform.cs” will destroy pieces of the Broken platform when collides with **“Thorns”**.

“DestroyBall” - destroys the ball if the ball goes below main camera.

“DisappearingPlatform” - disappears after collision with ball after some time. It has three attached scripts such as **“BlockMovement.cs”**,

“DestroyPlatforms.cs” and **“DisappearingPlatform.cs”**.

“DisappearingPlatform.cs” destroy the platform (Orange) after collision with ball in 2 seconds.

“GameOverScene” - load when the ball is destroyed. It has children such as gui texts. It has attached script called **“RemoveGameOverScene.cs”** which remove GameOver page when the game is running.

“LeftWall” - gameobject to teleport the ball to the right.

“Main Camera” - camera in the game. It has 4 attached scripts such as

“RandomPlatforms.cs”, **“StartButton.cs”**, **“SoundMute.cs”** and

“GameOver.cs”. **“RandomPlatforms.cs”** script generates random platforms.

“StartButton.cs” script shows GUI Buttons on the screen before game begins.

“SoundMute.cs” mute and unmute the sound. **“GameOver.cs”** shows GUI Buttons on the screen when game is finished.

“MovingPlatform” - moving platforms in the game. It has three attached scripts such as **“MovingPlatform.cs”**, **“BlockMovement.cs”** and

“DestroyPlatforms.cs”. **“MovingPlatform.cs”** script indicates a direction for **“MovingPlatform”**.

“Platform” and **“Platforms”** - regular platforms. They have two scripts attached such as **“BlockMovement.cs”** and **“DestroyPlatforms.cs”**.

“RightWall” - gameobject to teleport the ball to the left.

“Score” - GUI Text showing the score. It has two attached scripts such as

“AllTextSizes.cs” and **“Score.cs”**. **“AllTextSizes.cs”** script for all text sizes for different GUI texts. **“Score.cs”** script indicate score and highscore.

“StartScene” - load when the game before the game starts. It has children such as gui texts. It has attached script called **“RemoveStartScene.cs”** which remove Start page when the game is running.

“TeleportSignRight” and **“TeleportSignLeft”** - sprites aimed to show that the ball can teleport.

“Thorns” - destroys the ball when collides. It has two scripts attached such as

“BlockMovement.cs” and **“DestroyPlatforms.cs”**.

Now you are familiar with the game! You can change the style and add other features.