# PAPER PLAY



## Paper Play - Created by GrownApps © 2015

#### Introduction

Welcome to our new game called Paper Play. The game was inspired by endless runner games. The game was originally developed for iOS and android (aspect ratio: 10:16); 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: <a href="https://unity3d.com/ru/learn/tutorials/modules">https://unity3d.com/ru/learn/tutorials/modules</a>

The game has 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.

## **Paper Play:**

The aim of the game is to go as far as you can with paper plane avoiding mountains on the way and to achieve the highest score. Moreover, there is an opportunity to teleport the plane 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 "Paper Play". 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 game objects. In hierarchy you can see gameobjects that were used in the game. Now we want to give some information about each of the game objects in the hierarchy so you can easily understand their use in the game.

# Game Objects in the scene "GameScene":

<u>"GameOverPage"</u> - load when the plane 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.

"Main Camera" - camera in the game. It has 4 attached scripts such as "NewObjects.cs", "StartPage.cs", "SoundMute.cs" and

"GameOverPage.cs". "NewObjects.cs" script generates random mountains and trees on the way. "StartPage.cs" script shows GUI Buttons on the screen before game begins. "SoundMute.cs" mute and unmute the sound.

"GameOverPage.cs" shows GUI Buttons on the screen when game is finished.

"Mountain" - gameobject with sprite renderer of a mountain sprite. It has children sprites such as trees and shadow of the mountain. It has two attached scripts such as "ObjectsMovement.cs" and "DestroyObjects.cs". "ObjectMovement.cs" aims to move objects downward. "DestroyObjects.cs" destroys unrequired

"MountainSecond" - gameobject with Sprite Renderer of the mountain sprite (another mountain style). It has children sprites such as trees and shadow of the mountain. It has two attached scripts such as "ObjectsMovement.cs" and "DestroyObjects.cs".

objects.

<u>"Plane"</u> - the main gameobject in the game. It has its collider to detect collision with other gameobjects. It uses the sprite called "Plane" which is located in "Texture" folder. In order to detect collision with other game objects we added polygon collider to the gameobject. The gameobject is rigidbody2D and has three attached scripts called "PlaneMovement.cs", "DestroyPlane.cs" and

"TeleportPlane.cs". "PlaneMovement.cs" script aims to move the plane along x axis. "DestroyPlane.cs" script aims to finish the game when it collides with "Moutain/MountainSecond". "TeleportPlane.cs" script aims to teleport the plane from one side to another side of the screen.

<u>"Score"</u> - GUI Text showing the score. It has attached script such as **""Score.cs"**.

"Score.cs" script indicate score and highscore.

<u>"StartMountainTree"</u> - fixed position demonstration game object with children such as mountains and trees, and with attached two scripts such as **"ObjectsMovement.cs"** and "**DestroyObjects.cs**".

<u>"StartPage"</u> - 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.

<u>"TeleportSignRight" and "TeleportSignLeft"</u> - sprites aimed to show that the plane can teleport.

<u>"TeleportWalls"</u> - gameobjects to teleport the plane to the left and to the right. <u>"Tree"</u> - tree sprites.

Now you are familiar with the game! You can change the style and add other features. Don't forget that the screen size 16:10 Portrait (aspect ratio: 10:16).