



## A MOBILE ARCADE GAME

This asset is for people who want to make their first step in the Unity Engine. It's a quite basic mobile game. Kind of an endless runner but you are flying in a futuristic city.

### **What's in ?**

- Scripts (written in C#).
- Models (made in Cinema4d) and their prefabs.
- Scene (main menu and the game).

### **Setup problem :**

If you import this asset in a existing project. The buttons that change scene may not work. To prevent this, you need to add the scene in your build settings :

*Go to File → Build Settings : In the “scene in build” inner window, drag and drop the two scene if they aren't already in.*

### **The Game :**

The game is quite basic since it's a endless runner (or flyer :^ ) . You control the ship with the arrow keys or with the accelerometer of your phone.

The ship is always going to go forward but you can slightly move it left, right, up or down to avoid collision with other object (which causes game over).

#### **This game include :**

##### **– Score and HighScore handling :**

*The score of the player will increase while the player advance without touching anything. The score will be saved once the game is over and will be displayed in a window. This score will be saved even if the player leave the game.*

##### **– Accelerometer use and calibration (quite useful) :**

*Accelerometer can be used if the game is played with a compatible device. The accelerometer is calibrated every once the game is launched and if the player touch a particular button. The calibration is useful as it allow the player to play in whatever position he wants.*

– **Unity Ui : works without anyother assets :**

*Not much to say, i've used the Unity Ui system in a very simple way, button are often linked to two lined code*

– **Endless generation :** Or how to make the player feel building are everywhere around him while using the fewest object we can :

*This is what the city is made of. Each “[]” is a building.*

```
[] [] [] [] [] []  
  [] [] [] [] [] []  
[] [] [] [] [] []
```

*A set like this is instanciased at the beginning of the game, and then when a row is found to be behind the player; we move it ahead of him, and adjusted to the player coordinates.*

*With a set like this (3 row of 6 building), the player will never find a way out of the city.*

– **Cool graphical aspect while using basic lights, mobile shaders, no shadows, etc...**

*I wanted the game to look cool but I wanted it to be optimized on mobile devices. So there is no cool effect like global illumination, DOF... (but you can still put some anti aliasing in the menu if you want).*

*The building are not textured and use a very basic mobile shader.*

*Rendering path are set to forward to allow batching.*

*There is some linear fog to not make the player realise there are building placed just before him.*

*The cool trick which give the game this curious aspect is the Gradient Ambient Source. Take a look at it in the Lighting window.*

Also keep in mind that this game is like 90% code. So if you want to modify it, you will to take a look at the code. It have heavily commented it so there should be no issue for you to know what each function does.

If you have any questions, fell free to mail me to : [quentin.muntadas@orange.fr](mailto:quentin.muntadas@orange.fr)

Thanks you very much and good luck !