# **Isometric Shooter**

**GAME TEMPLATE FOR UNITY** 



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## 1 Introduction

## 1.1 Summary

Isometric Shooter is a comprehensive game template for Unity to create your own game in isometric perspective. It includes both Javascript and C# code as well as example scenes to show the capabilities of this asset. This document covers the Isometric Shooter template and its add-ons.

## 1.2 Features

Isometric Shooter has been designed to fulfil most needs for the top down shooter genre, which includes among others:

- Isometric camera setup and input control mechanism
- User interface for map and character selection
- HUD to display health, ammo, kill count and experience points
- 2D and 3D prefabs to create and extend maps
- Campaign and skirmish mode
- Map trigger events to end a map and/or a game session
- Behaviour for regular and boss enemies including kill loot
- Different weapons with detailed bullet configuration including straight and ballistic shots as well as bounce and area effects
- Additional immersion by snow, puddles, crates, pipes, gore, etc.
- Unique 8-bit sound tracks

#### 1.3 About

ASSETCREW currently is a one man show, which means that each code, sound, artwork and level design is provided by one person. Except, the teaser artwork is made by an external artist.

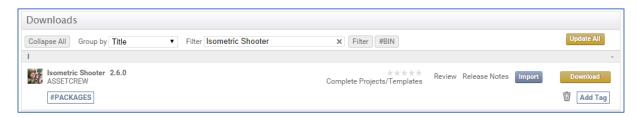
More of ASSETCREW can be found here:

- Unity Asset Store: <a href="https://assetstore.unity.com/publishers/2522">https://assetstore.unity.com/publishers/2522</a>
- Fiverr: <a href="https://www.fiverr.com/assetcrew">https://www.fiverr.com/assetcrew</a>
- Youtube: https://www.youtube.com/playlist?list=PLCDEE7769C75597BA

## 2 Setup

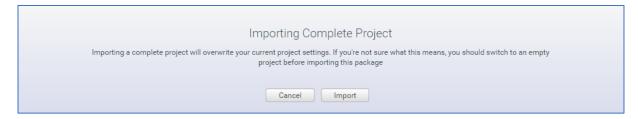
#### 2.1 Download

As soon as you have purchased the Isometric Shooter asset you can download it by going to <a href="http://u3d.as/8c9">http://u3d.as/8c9</a> or just open Unity and go to the Asset Store window to download it from your library (click on "Toggle Download Manager" button and navigate to the asset).



## 2.2 Import

When importing the asset to your project please consider that this asset comes with predefined project settings which will overwrite the existing ones of your current project. So it might be a good idea to back up your project beforehand.



## 3 First steps

## 3.1 Folder structure

The folder structure is supposed to be flat and intuitive to enable developers organizing their stuff with ease. Below the main folders you will find some sub-folders, e. g. for CS and JS related files or to divide between music and sound effects and so forth.



## 3.2 Scene structure

All scenes usually have the same segmented structure with main segments like Main, Settings, Game, End as well as some system specific parts. This way the application can easily activate and deactivate segments when needed.

```
▶ GlobalVars

▼ Main
   Camera
 ▶ Geometry
 ▶ UI
▼ Settings
   Camera
 ▶ SelectMesh
 ▶ SelectMap
 ▶ UI
▼ Game
 ▶ Player
 ► MapList
 ▶ UI
▼ End
   Camera
 ▶UI
 Trash
  EventSystem
```

## 3.3 Project settings

The PhysicsManager settings are a crucial part and must not be changed unless you really need to. In case of any changes I cannot guarantee that the game will work without issues afterwards. So please handle that with extra care. Thanks!

| PhysicsManager                     |                        |         |     | Open |
|------------------------------------|------------------------|---------|-----|------|
|                                    | v •                    | W 0.04  |     |      |
| Gravity                            | X 0                    | Y -9.81 | Z 0 |      |
| Default Material                   | None (Physic Material) |         |     |      |
| Bounce Threshold                   | 2                      |         |     |      |
| Sleep Threshold                    | 0.005                  |         |     |      |
| Default Contact Offset             | 0.01                   |         |     |      |
| Default Solver Iterations          | 6                      |         |     |      |
| Default Solver Velocity Iterations | 1                      |         |     |      |
| Queries Hit Backfaces              |                        |         |     |      |
| Queries Hit Triggers               | ✓                      |         |     |      |
| Enable Adaptive Force              |                        |         |     |      |
| Enable PCM                         | ✓                      |         |     |      |
| Auto Simulation                    | ✓                      |         |     |      |
| Auto Sync Transforms               | ✓                      |         |     |      |
| ▼ Layer Collision Matrix           |                        |         |     |      |
| Default                            | Projectile N           | Default |     |      |

This is also essential for the Tags & Layers settings. Whenever you change, add or remove layers you have to consider and take a look into the physics settings as there will be some major impact.



## 3.4 Code style

The code is written in order to give also beginners a good understanding of how things are working. For instance, you have controller scripts with the logic and on the other hand configuration scripts which contain variables for keeping track to a specific object state.

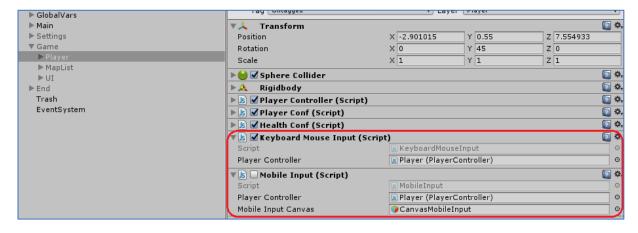


When I started with this game template a few years ago I only used Javascript, so most of the scene are made with this scripting language. Later due to many user requests and due to my own preference, I started to add C# code as well. The logic between those two languages is identical and is also going to be in the future.

## 4 Input controls

#### 4.1 General

Both keyboard + mouse and touch controls are supported. To switch between them you have to go to the /Game/Player and activate or deactivate the respective component (see screenshot below).



## 4.2 Keyboard + mouse

With keyboard and mouse controls the following keys are mapped:

- W, S, A, D for side and forward movement
- Space to jump
- Mouse for aiming
- Mouse wheel for weapon select
- Mouse left button to shoot

#### 4.3 Mobile

With mobile controls the following simple touch layout will be displayed (see screenshot below):

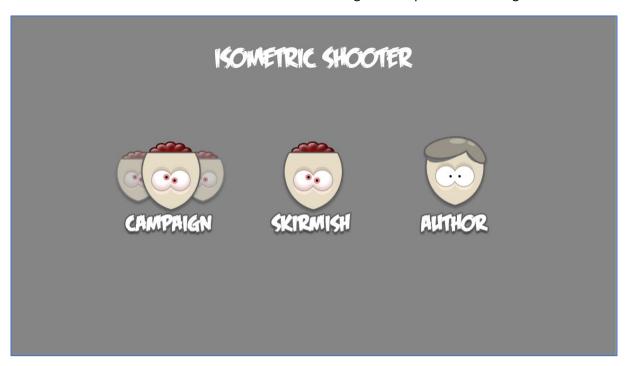
- Move button for side and forward movement + aiming
- Jump button to jump
- < and > buttons for weapon select
- Shoot button to shoot



## 5 Scenes

#### 5.1 Isometric Shooter

The IsometricShooter scene is a comprehensive example of what is possible with this game template. It demonstrates how to provide campaign and skirmish mode with character and map selection and this way covers some different settings like a cemetery map with zombies and a green lawn map with aliens. This scene is the best base to understand how this game template works at a glance.



#### 5.2 Mission Wolf

The MissionWolf scene is a showcase for a specific setting where the player has to fight through the mad hordes of an evil leader. It contains two maps and shows the usage of different enemy behaviours like idle, waypoints, attack and spawning of additional enemies after certain time delay.



#### 5.3 Prefabs

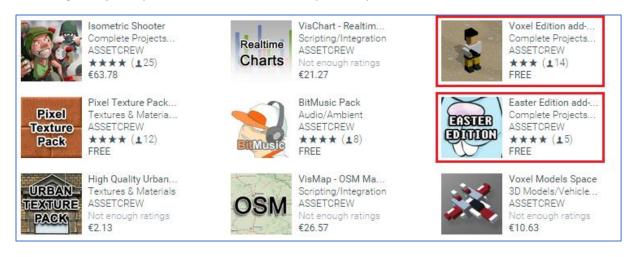
The Prefabs scene is just a collection of available prefabs for demonstration purpose. This scene can be started but does not provide any game content or mechanics.



## 6 Add-ons

## 6.1 Installation

All add-ons require the main Isometric Shooter template to be installed beforehand. There is no possibility to run and add-on itself, because add-ons do not contain any code. I had to make that clear to some users at Youtube which obviously did not read the product description carefully. I am not offended by those comments, but it would be a pity if someone unfamiliar with the add-on would be discouraged to just try one of the add-ons which by the way are all free.



#### 6.2 Easter Edition

I know this sounds crazy — a map full of mad rabbits which throw carrots at you and defend a boss enemy and his massive Easter egg. The main purpose besides a lot of fun was to show how the ranking systems would take effect and what can be spawned and looted more than just ammo and health supplies. Here, you already knew it, you can loot Easter eggs. Each egg will increase the XP of the player and that way affect the ranking.



#### 6.3 Voxel Edition

After several scenarios of 2D character I wanted to show that the Isometric Shooter game template is also capable of 3D characters. Therefor I made a scene consisting of 3D voxel objects created with Voxel Shop and based on an Indiana Jones like scenario.



## 7 Roadmap

#### 7.1 Tutorials

I will make new video tutorials on Youtube. This will help developers to understand the game template even better and will give the opportunity to directly post comments for feedback and questions.

## 7.2 Development

The next thing which is prepared and will be developed is melee attack. Then I will try to find a simple and fast pathfinding for enemies. Occasionally I will add more prefabs and maybe a new scene with a different setting — usually one of movies or genres I like the most. But you are free to request or propose something you would like to see next.

#### 8 Contact

Please do not hesitate to contact me at <a href="mailto:support@assetcrew.com">support@assetcrew.com</a> or write comments on Youtube.