

Packages User Guide

This document explains how the four packages can be implemented, and how they work concurrently with one another.

Package 1: First Person Movement Package

In this package you will find a prefabs folder. Inside that folder is a prefab for the player. In the prefab, two scripts are used; "Player" Which handles movement, and "Shoot" which handles shooting. For now, we only need to focus on the movement script. In the inspector, the speed should be 5, the fps camera should be the main camera, mouse sensitivity 5, and pitch range 45.

Using WASD keys, the player will be able to move around the scene when playing. The prefab uses a character controller alongside the movement script, with horizontal inputs multiplied by the set speed.

The player prefab also holds the camera, as this is a first person game. The camera has a script called "Mouse Lock", which keeps the cursor centred at all times.

Package 2: Shooting Package

This package handles the shooting mechanic of the game. The prefab that we previously used in Package 1 should contain a script called "Shoot". In the inspector, player camera should be the main camera, the bullet prefab should be the bullet found in the prefabs folder, and the player is simply the player prefab.

The bullet prefab contains a script called "Bullet Movement". It uses this simple line of code in the update method;

```
transform.position += transform.forward * speed * Time.deltaTime;
```

The public float of speed is set at 20.

This means that whenever a bullet is spawned, it will become a projectile. Changing the speed affects how fast it flies.

The "Shoot" script simply calls for a bullet to be spawned every time the player clicks the mouse button down, forward and central from the position of the main camera.

Please note that once the shooting package is imported, the user will still have to apply the variables to the script. Main camera goes in the camera slot, the bullet prefab goes in the bullet slot, and the player goes in the player slot.

Package 3: Enemy Package

This package contains a prefab for an enemy boulder, containing a script named "Enemy Movement".

The enemy follows the player around the map, killing the player and ending the game if they make contact. However, the player can shoot the enemy in order to kill it. It also contains code to destroy the enemy when a bullet hits it.

Package 4: Light Package

This package contains all the prefabs for the light switching mechanic. In the game, the player will need to stand on four different buttons that will turn on a light of a different colour, all while avoiding the enemy boulder.

This package also contains a scene that includes all the packages together, called “EverythingTogether” This will act as the small game object, as part of the hand in.

The prefabs in this package are the individual buttons, with their corresponding light attached as a child. The scene in this package has them placed in the four corners of the plane, but you can move them wherever you wish.

The script that turns the lights on is a simple on trigger enter script, using the tag of “Player” to register the colliders working.