

## HEIST PLAYMAKER KIT

\*This kit requires Playmaker. Without Playmaker, this kit will not function.

## WHAT IS IT?

Heist PlayMaker Kit is a Stealth game Template for mobile and desktop. This project is made using Hutong Games <u>Playmaker</u>. Because it's built with Playmaker it's very easy to grasp the logic and the mechanics of the game. The core mechanics reflects a generic stealth game with FOV mesh and player detection by enemy. It got full support for touch based input, aka mobile/tablet input There's also an webplayer/keyboard scene set in the project.

## **INSTALLATION AND USAGE:**

Create a fresh project. Include Hutong Games PlayMaker Asset (Latest Version) while creating it. Please download and install Heist PlayMaker Kit.

That's it!

## **ASSET DESCRIPTION:**

#### Scene Folder:

Webplayer.unity: Scene to use for WebPlayer/Standalone Builds

Mobile.unity: Scene to use for Android/IOS Builds

#### Prefabs:

exclamation: Sprite based prefab which is spawned when player is detected by enemy guard.

footprint: this prefab is spawned at enemy position when the enemy is not visible, giving away a sense of

footstep hearing.

key: this prefab is used to unlock the lock prefab

lock : this prefabs blocks player movement by standing as a locked door which can be opened by a 'key' with same ID.

# **3D Assets :** level : the walls

#### **CustomActions:**

Some custom actions are made specifically for this kit. These are :

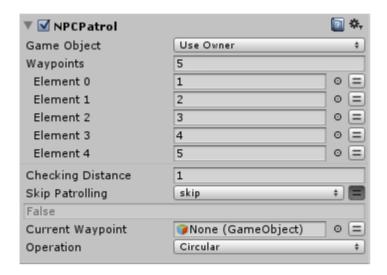
#### **Heist FOVMesh:**

▼ ☑ Heist F0VMesh		<u>□</u> <b>*</b> ,
Fov Mesh Game Object	Use Owner	<b>‡</b>
Player Game Object	Thief	○ =
Range	range	÷ <b>=</b>
10		
Level Of Details	1	=
Layer Mask	1	
Element 0	one	÷ =
Invert Mask		=

This custom action generates a raycast based mesh from the player position. This mesh essentially becomes the FOV of the player.

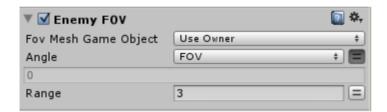
#### **NPC Patrol:**

This custom action is used to move Enemy Al NPC through a series of waypoints to patrol an area. There are two options for patrolling, Circular and ToAndFro. Also, there's a bool - skip patrolling to stop patrolling if required.



#### **Enemy FOV**

This is another option for the Guard to visualize it's enemy FOV. You can give angle of vision and Range. This is for visualization purpose only. The detection of player is implemented separately.



## **IMPLEMENTING THE PLAYER FOV:**

#### FOVMesh

This is unique to this kit. This single gameobject consists of FOVMesh generation through the Heist FOV Mesh custom action and it's display through shaders. A special shader is used (depth mask) to set the render queue of this mesh.

There are two cameras in the scene. One to view the BG and the elements that are visible outside the FOV mesh and one to see the elements inside the FOVMesh. This is done by separating the culling mask of two cameras.

## **IMPLEMENTING THE GAMEPLAY MECHANICS:**

## GameController:

Here, the GameController is used for GUI messages only.

#### Thief:

This is the player controlled character, controlled by get axis vector action in 'move' FSM in Webplayer scene. Whereas in mobile scene the mobilecontroller system controls this gameobject. This gameobject also has a sprite child which switches direction based upon player movement. Also, this gameobject has an 'Inventory' FSM which stores the ID of keys which the thief picks up.

#### Guard:

The Guard is a Navmesh agent which is controlled by NPCPatrol Custom Action in the 'Patrol' FSM. In the 'behavior' FSM script attached to the guard Gameobject, you can see the player detection mechanism. Also, there's a 'footprint' FSM which spawns a footprint at the guards position in a certain interval.

#### **Enemy FOV:**

The guard has one child gameobject Enemy FOV which visualizes the cone of vision of the Enemy.

When the game starts, the Thief is controlled by a character controller driven by WSAD. The player has to sneak in, loot the cash from the vault and get out through exit. The level is separated by rooms. And sometimes the rooms are blocked by locked door. The player has to look for keys which have the same color as of the door, pick it up and use it to unlock the door.

During the process to reach the Cash locked in the vault, he must be aware of the guard. Who patrols the room in a defined path. If the guard spots the player, the game ends. You can only succeed by taking the cash and getting out undetected.

## **GAME CONCLUSION:**

Heist genre is my favourite genre. Many great games are built upon it. I hope this kit would inspire you to start off and make awesome games with the knowledge from it.

If you have more questions or feedback regarding this product please mail me at satyajit@flyingrobotstudios.com