Puzzle Creator

Doc Part 1.

Where to begin:

Step 1: Try the demo.

Open scene Demo. *(Project tab: PuzzleCreator → Demo → Demo)*

Default inputs are:

- Arrows to move and Mouse to look around.
- P or Escape for Pause

Step 2:

First follow this tutorial:

1-Tuto 01: Create a puzzle (more info)

Step 3:

I you want to integrate the asset in an existing project read:

2-Tuto 02: Integrate Puzzle Creator in an existing project (more info)

If you want start a project from scratch:

Duplicate the scene Starter *(Project tab: PuzzleCreator → Assets → Scenes → Starter → Starter)*

Open the scene Starter to start your project

(Project tab: PuzzleCreator → Assets → Scenes → Starter → Starter)

Step 4:

To go further read:

-Have a look to the table of content to access all the features included in the asset.

-Read Doc Part 2 to find all the details about puzzle creation.

-Read Doc Part 3 to find all the features to connect the puzzle system to your project.

If you have a problem or an error message in the console Tab: -Read section Troubleshooting in Doc Part 3.

If you don't find information you are looking for in the documentation contact us at:
targetsoundfx@gmail.com

Note:

We really appreciate if you could post a review on the assets store.
It helps us to develop and add new updates to the asset.

Best regards,
Pierre from TargetStudio.

Table of contents:

Doc Part 1: Tutorials

Doc Part 2: Puzzle creation and Detection Modes

How to change the distance to detect a puzzle in Focus Mode (Raycast):
How to Modify the mouse sprites (Focus Mode)

VR Raycast Mode (overview):
How to setup a puzzle for VR Raycast Mode
How to use the VR Hand
Put object VR_Hand inside the virtual hand
Feedbacks: VR Raycast Mode
How to Add a custom feedback on VR Raycast Mode (tuto)

VR Grab Mode (overview)
How to setup a puzzle for VR Grab Mode
How to use the object VR_Hand
Put object VR_Hand inside the virtual hand
Feedbacks: VR Grab Mode
How to Add a custom feedback on VR Grab Mode (Tuto).

Reticule Mode (overview)
How to setup a puzzle for Reticule Mode
Feedbacks: Reticule Mode
How to Add a custom feedback on Reticule Mode (tuto)

Clue/Hint system (Mobile Only)
Add Clue/Hint Module to a puzzle
Create a Clue/Hint
Use multiple Clues/Hints
Lock Clue/Hint
Play Ads to unlock a Clue (need scripting)

Doc Part 3: Integrate puzzle in your project

Part 3: Read First

Window tab: Puzzle Creator (w_PuzzlesCreator)

GlobalPuzzleManager
Overview:
Manage puzzle inputs:
Call methods when puzzle start or stop:
Other Options:
Scripting: Useful methods or variables

ScenePuzzleManager
Overview:
Methods call when scene starts:
Scripting: Useful methods or variables

Save system overview

ObjIsActivated
Overview:
How to setup an object as ObjIsActivated (Tuto).
Save Extension (script needed):

Debugger

Troubleshooting

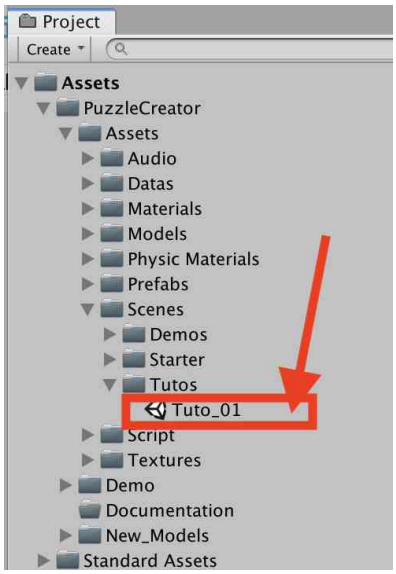
Scripting
How to create a boolean method
Inputs: Switch between inputs types at runtime:
Inputs: Access inputs at runtimes
Useful Methods or variables for AR:
How to add a method (overview):

Doc Part 4: Graphics

Graphics:
Combine Mesh
Sprites and textures
Export to mobile (example with the demo scene)

Tuto 01: Create a puzzle

-In Project tab: Open Tuto_01
(PuzzleCreator → Assets → Scenes → Tutos → Tuto_01)

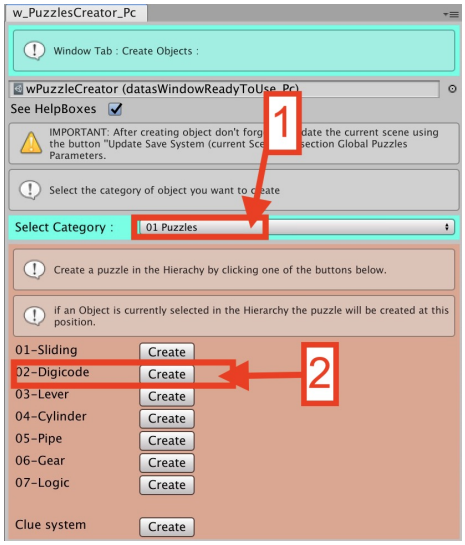


Create a Puzzle

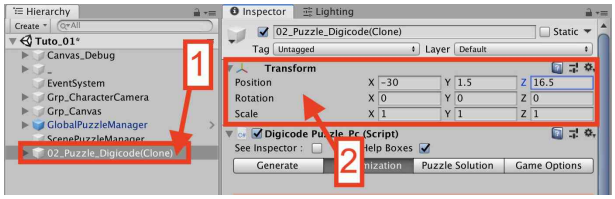
-Open w_PuzzlesCreator_Pc
(Tools → Puzzles → Puzzles creator (w_PuzzlesCreator)

-Select category: 01 Puzzles (spot 1)

-Press button Create next to 02 Digicode (spot 2)



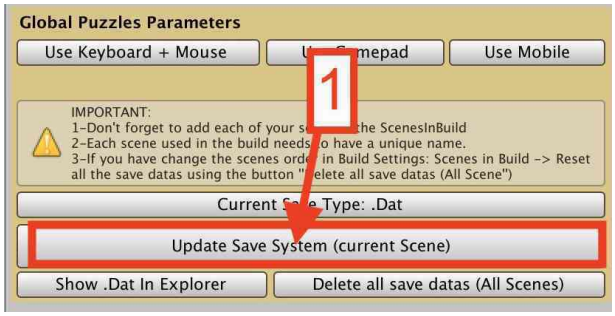
***Info**: A new puzzle is created and auto-selected in the Hierarchy (spot 1).*



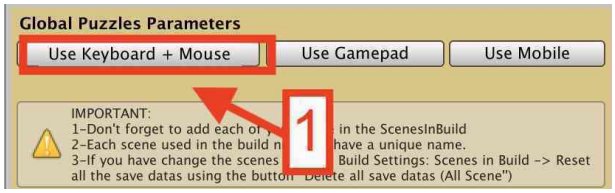
In the Inspector:
Change the puzzle position to (spot 2):
Position: X= -30 Y=1.5 Z=16.5

-In w_PuzzlesCreator_Pc window press button Update Save System (current scene) to add the new puzzle to the save system.

Important: Each time you create or delete a puzzle don't forget to press button Update Save System (current scene) to update the save system.



-Press button Use Keyboard + Mouse.



***Info**: Puzzle inputs are now setup for Desktop buttons*

-Press Play.

-Go next to the puzzle.

-Left click on the puzzle when the puzzle icon appears on screen.

***Info**: Focus camera is activated.*

-Press Four times 0 (0000) on the puzzle button.

***Info**: The puzzle is solved.*
Focus camera is deactivated.

-Press Escape to access the mouse cursor.

-Stop Play Mode.

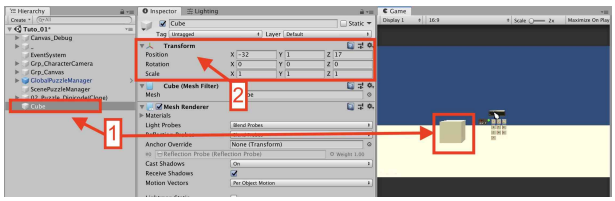
Add a condition to start the puzzle.

***Info**: It is possible to add your custom conditions to access a puzzle.*

Example: In the following example:
There is a cube and a puzzle in the scene.
The player can access the puzzle if the cube is visible in the scene.

-In the Hierarchy, create a cube (spot 1)
(Hierarchy: Right click → 3D Object → cube)

In the Inspector:
Change the puzzle position to (spot 2):
Position: X= -32 Y=1 Z=17



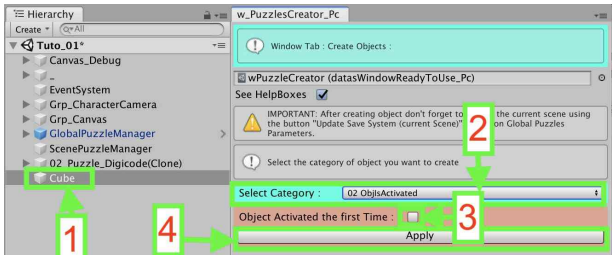
-Open w_PuzzlesCreator_Pc
(Tools → Puzzles → Puzzles creator)

-In the Hierarchy select Cube (spot 1)

-Select category: 02 ObjIsActivated (spot 2)

-Uncheck button Object Activated the first time. (spot 3)

-Press Apply (spot 4)



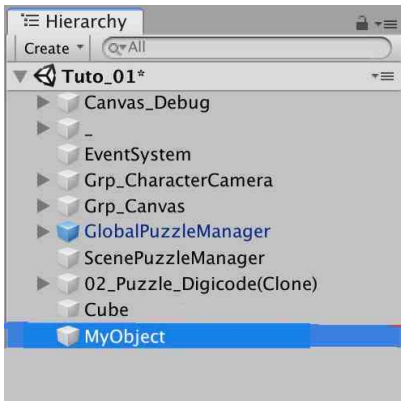
Info: *New scripts are added to the cube*

-In w_PuzzlesCreator_Pc window press button Update Save System (current scene) to add the new puzzle to the save system.

Important: Each time you create or delete an object setup as ObjIsActivated don't forget to press button Update Save System (current scene) to update the save system.

-In the Hierarchy, create an empty Object
(Hierarchy: Right click → Create Empty)

-Rename it MyObject (for example).



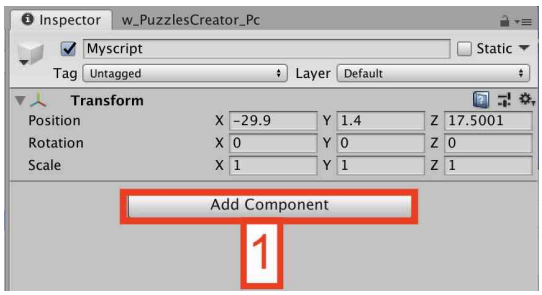
Info:
To avoid to test each frame that access to the puzzle is allowed or denied:

A piece of code is needed.

In the example used in this tutorial this part of code is already included.

To learn how to create your own part of code to check if the access to the puzzle is allowed or denied:
Read Doc Part 3 section Scripting sub section Check if the access to the puzzle is allowed or denied

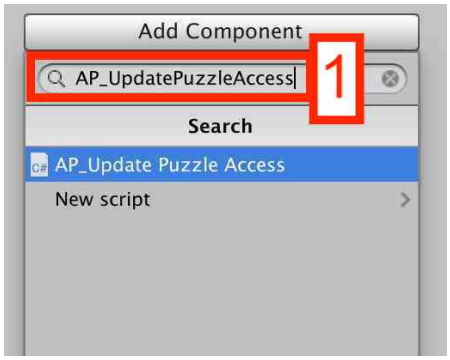
In the Inspector
-Press Add Component (spot 1).



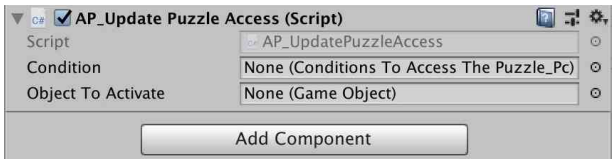
Info: *A new menu appears.*

-Write AP_UpdatePuzzleAccess in the search field (spot 1).

-Press key Enter to add the component to MyObject

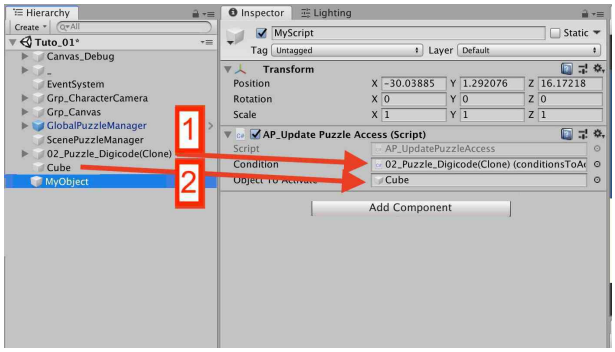


Info*: The script is now attached to MyObject*
This script allows when the player press the Y key during the game:
1-Make the Cube object visible in the scene.
2-Check if access to the puzzle is allowed or denied.



-Drag and drop 02_Puzzle_Digicode(Clone) inside Condition Slot (spot 1).

-Drag and drop Cube inside ObjectToActivate slot (spot 2).



-In the Hierarchy select 02_Puzzle_Digicode(Clone) (spot 1).

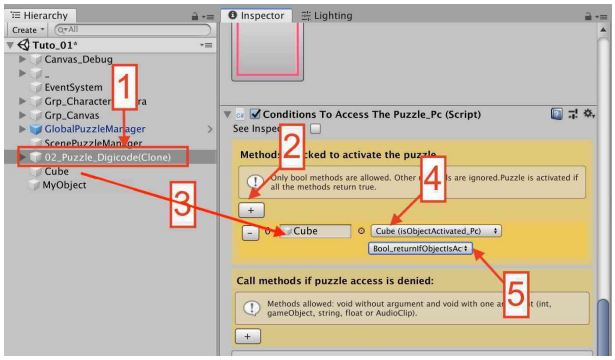
-In the Inspector go to section Method Checked to activate the puzzle.

-Press the button + (spot 2)

-Drag and drop Cube in the empty slot (spot 3).

-Select script Cube (isObjectActivated) (spot 4).

-Select Bool_ReturnIfOBjectIsActivated (spot 5)

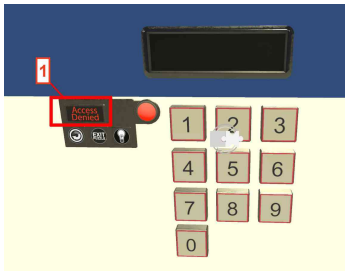


-Press Play.

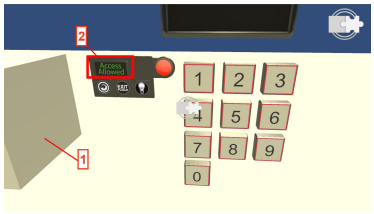
***Info**: The cube is deactivated in the scene view.*

-Go next to the puzzle.

***Info**: Puzzle access is denied because the cube is disable in the scene (spot 1).*



-Press Y
(To enabled the Cube in the Hierarchy (spot 1) and check if the all the conditions are met to access the puzzle).



***Info**:*
Puzzle access is allowed because the cube is enable in the scene (spot 2).

-Left click on the puzzle when the puzzle icon appears on screen.

***Info**: Focus camera is activated.*

-Press Four time 0 (0000) on the puzzle button.

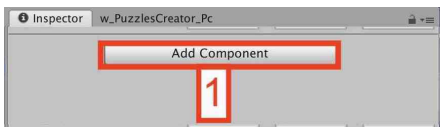
***Info**: The puzzle is solved.*
Focus camera is deactivated.

-Press Escape to access the mouse cursor.

-Press Play button to stop Play Mode.

Add a feedback when puzzle access is denied
-In the Hierarchy select MyObject.

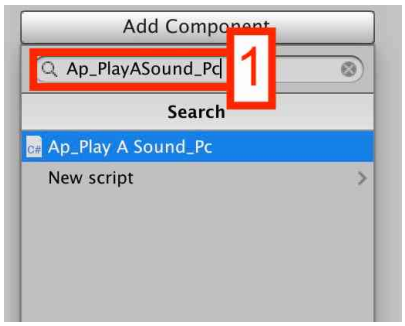
In the Inspector
-Press Add Component (spot 1).



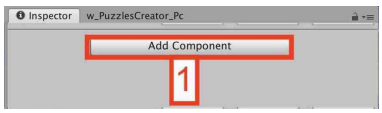
***Info:** A new menu appears.*

-Write Ap_PlayASound_Pc in the search field (spot 1).

-Press key Enter to add the component to MyObject



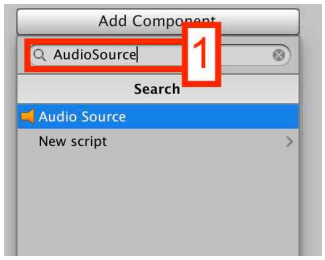
In the Inspector
-Press Add Component (spot 1).



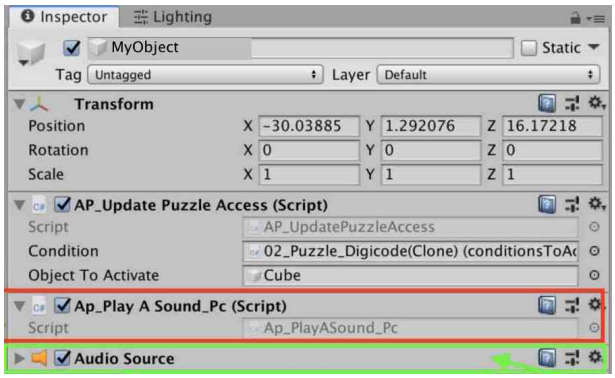
Info: *A new menu appears.*

-Write AudioSource in the search field (spot 1).

-Press key Enter to add the component to MyObject



Info*: Now the component Ap_PlayASound_Pc and the component AudioSource are attached to MyObject.*



-In the Hierarchy select 02_Puzzle_Digicode(Clone) (spot 1)

-Press + in section
Call Methods if puzzle access is denied (spot 2).

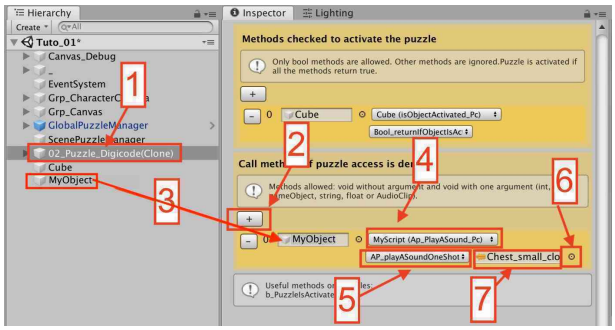
-Drag and drop MyObject in the empty slot (spot 3).

-Select script is Ap_PlayASound_Pc (spot 4).

-Select AP_playASoundOneShot() (spot 5).

-Press the small cercle (spot 6).

-Choose AudioClip Chest_small_close_01 (spot 7).



-Press Play.
Info*: The cube is deactivated in the scene view.*

-Go next to the puzzle.
Info*: Puzzle access is denied because the cube is disabled in the scene.*

-Left click on the puzzle when the puzzle icon appears on screen.

Info*: A sound is played because puzzle access is denied.*

-Press Escape to access the mouse cursor.

-Press Play button to Stop Play Mode.

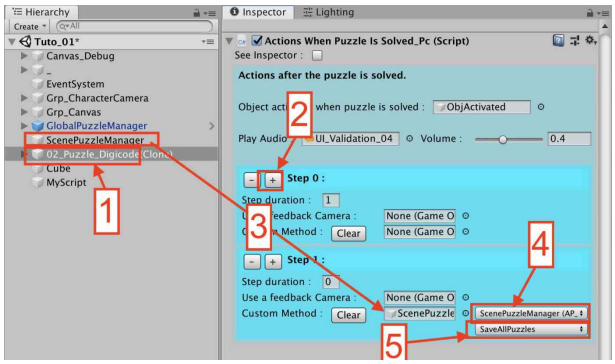
Add Actions when the puzzle is solved:

Each puzzle has a script named
ActionsWhenPuzzleIsSolved_Pc attached to it.

This script allows to setup actions when the puzzle is solved.
It is possible to add your scripts and actions like open door, show something...

In this example after solving the puzzle:
Step 1: Stay 1 seconds in front of the puzzle.
Step 2: Save all the puzzles in the scene.

-In the Hierarchy select 02_Puzzle_Digicode(Clone) (spot 1)



In the Inspector in section
Actions after the puzzle is solved:
-Press button + next to Step 0 to create a new step (spot 2).

Info: *A new step is created*

-Drag and drop ScenePuzzleManager in the Custom Method empty slot Step 1(spot 3).

-Select script AP_ScenePuzzleManager_Pc (spot 4)

-Select the method saveAllPuzzles() (spot 5)

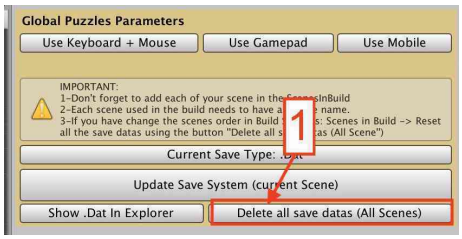
Important:
To prevent a bug during the save Process:
Do not use step 0 to call saveAllPuzzles().

Keep the step 0 as it is by default (1s duration).
Use step 1 to call saveAllPuzzles()

-Open w_PuzzlesCreator_Pc window tab.
(Tools → Puzzles → Puzzles creator)

-Press Delete all Save datas (all Scenes)

-Press Yes



-Press Play.

-Go next to the puzzle.

-Press Y (To enabled the Cube)

-Left click on the puzzle when the puzzle icon appears on screen.

-Press Four time 0 (0000) on the puzzle button..

Info:
-The puzzle is solved
-The camera stay 1 second in front of the puzzle.
-All the puzzles and objects contained in the save System in this scene are saved.
-Focus camera is deactivated.

-Press Escape to access the mouse cursor.

-Press Play button to stop Play Mode.

-Press Play again to start Play Mode.

Info:
When the scene starts puzzles are initialized using the save system.
Now when the scene is launched:
-The puzzle starts with its solved state.

-Press Escape to access the mouse cursor.

-Press Play button to stop Play Mode.

Info:
It is possible to delete the save datas by pressing the button Delete all Save datas (all Scenes). This button delete all the Puzzles datas in the project.

To delete the puzzle datas only for the current scene:
-Go to File → Build Settings
-Press add Open Scene

Now when the button Update Save System (current scene) is pressed the puzzle datas are deleted for this scene.

***Important**: If you change the scene order in the SceneInBuild window you need to press Delete all save datas (All Scenes) to update the save system.*

Info:
In this example the player interacts with the puzzle using the Focus Mode:

It is possible to choose between 4 types of puzzle detection.

Focus Mode: The camera focuses on the puzzle when the player click on it. Design for Mobile and desktop Mouse + Keyboard / Gamepad

VR Raycast: A ray is sent from an object in the scene. Design for VR.

VR Grab: Interacts when two objects collide (for example, the player's virtual hand and the puzzle). Design for VR.

Reticule Mode: A ray is sent from the center of the screen to interact with the puzzles. Design for AR and Desktop Mouse + Keyboard/gamepad

(More about how to use each detection type in the Doc Part 2 section Puzzles Detection Mode)

End of this tutorial:
-In the next tutorial you will learn how to integrate the puzzle system inside an existing project.

Tuto 02: How to integrate Puzzle Creator in an existing project.

-For the example we are going to integrate puzzle in an existing project using:
-The Unity Standard character controller.

-If you already have your character in your project go to **step 2:**

-If you have problems to integrate the asset in your project read the section Integration Troubleshooting (more info here)

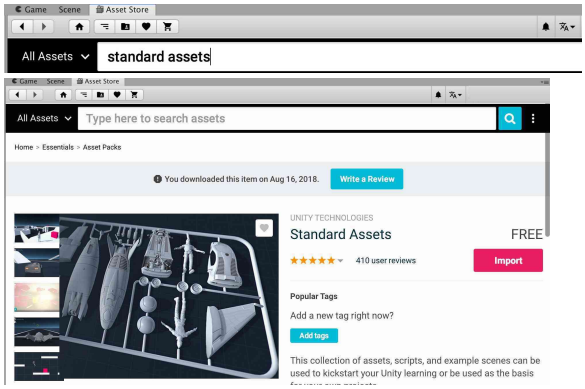
WARNING: Before importing Puzzle Creator in your project make a copy of your project.

Step 1 Basic Setup:

For this example:
-We have created an empty Unity project
-We have downloaded the Unity Standard assets from the asset store.

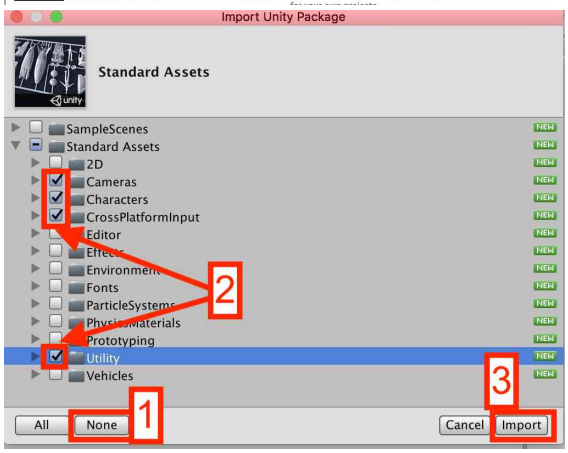
Info: To download the standard asset:
-Press (PC) ctrl+9 or (Mac) command+9

Search standard assets



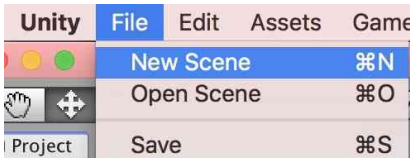
-Press the button Download and or the button Import

-A new window appears.
-Press none.
-Check the boxes (spot 2):
Cameras
Characters
CrossPlatformInput
Utility

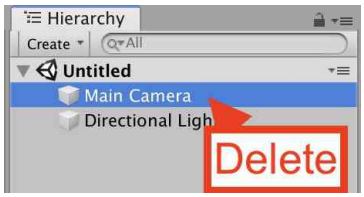


-Press button Import (spot 3).

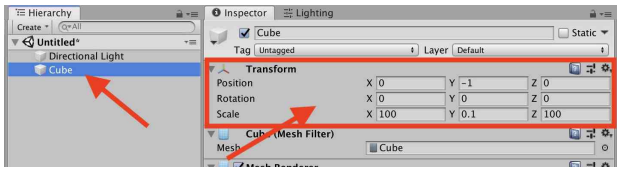
-Create a new scene



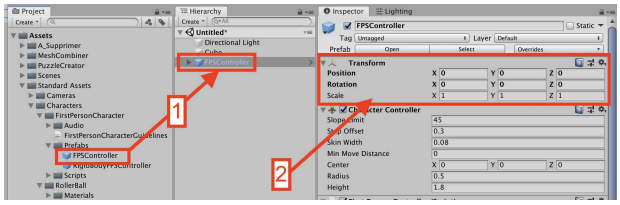
-Delete the camera in the hierarchy



-Create a cube.
Change transform to:
position: x=0 y=-1 z= 0
scale: x=100 y=0.1 z=100



-Drag and drop the FPSController prefab in the scene view (spot 1).
(Project Tab: Standard Assets → Characters → FirstPersonCharacter → Prefabs → FPSController)



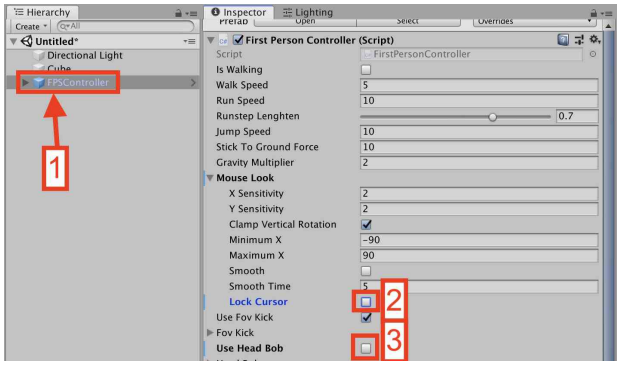
Set transform to (spot 2):
position: x=0 y=0 z= 0
rotation: x=0 y=0 z= 0

-Press Button Play.

***Info**: Using the arrows the character moves in the scene.*

-Press Button Play to stop Play Mode

-In Hierarchy select FPSController.



-In Inspector uncheck Lock cursor
(Mouse look → Lock cursor).

***Info**:*
-In this example we are going to use a puzzle setup for Focus Mode. In this mode the puzzle system must be able to control if the cursor is lock or not to the center of the screen.
By default the Unity character force the cursor to be always locked in the center of the screen. There is an option in the player controller to deactivate this option.

-In the Inspector uncheck use Head Bob

Step 2: Import Puzzle Creator

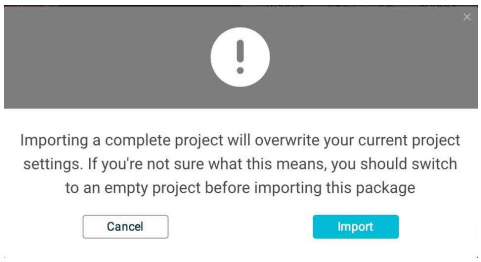
-Press Ctrl+9 or command+9 to open the Asset store tab.

-Search Puzzle Creator.

-Press Import.

Info: a window appears.

-Press Import.

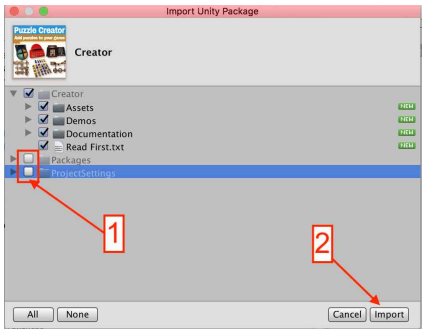


Caution:

It is **VERY IMPORTANT** to uncheck the next 2 folders to prevent breaking your project settings.

-Uncheck folder Package

-Uncheck folder ProjectSettings



-Press Import

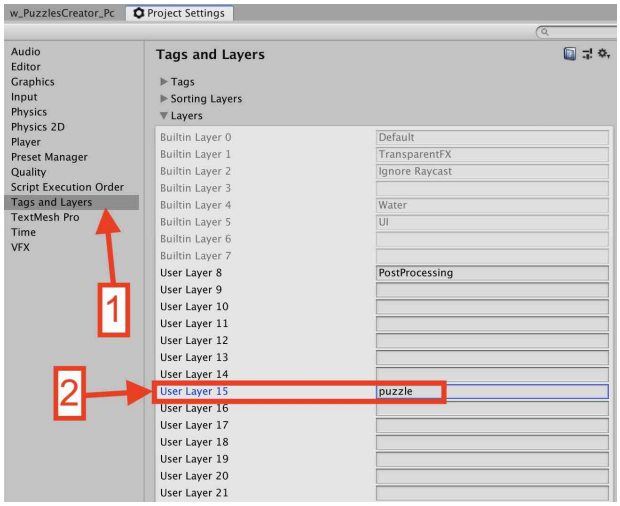
Step 3: Setup Layers

-Go to Edit → Project Settings

Important: By default Puzzle Creator use 4 layers: Layer 15,16,19,20

-In Project Setting tab select Tags and Layers (spot1)

If the layer 15 is empty write puzzle in the empty text field (spot 2)



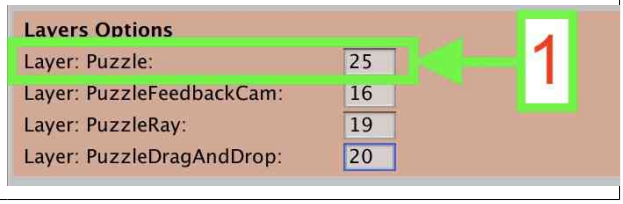
Info: If Layer 15 is already used select an empty layer.

Choose a layer different to:
16,19,20,31(internally use by Unity)

For example choose layer 25 and rename it puzzle.

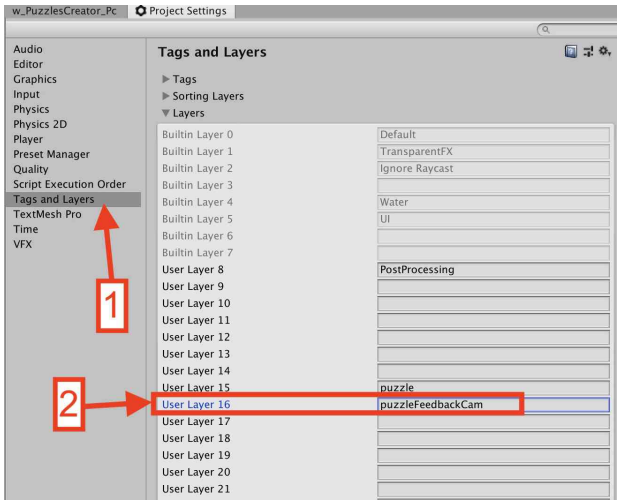
-Go to Tools → Puzzles → Puzzles Creator (w_PuzzleCreator)

-In section Layer Options change the Layer: Puzzle corresponding to the layer chosen in the previous step.
In our example write 25 (spot 1)



-In Project Setting tab select Tags and Layers (spot1)

If the layer 16 is empty write puzzleFeedbackCam in the empty text field (spot 2)



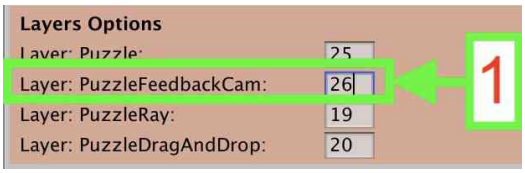
Info: If Layer 16 is already used select an empty layer.

Choose a layer different to:
15,19,20,31(internally use by Unity)

For example choose layer 26 and rename it puzzleFeedbackCam.

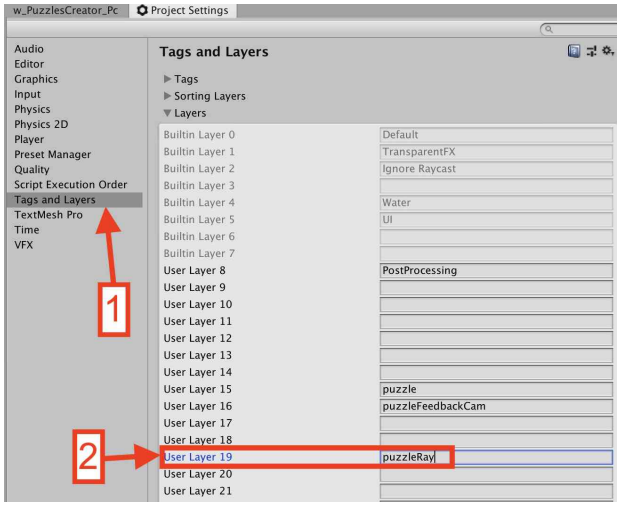
-Go to Tools → Puzzles → Puzzles Creator (w_PuzzleCreator)

-In section Layer Options change the Layer: puzzleFeedbackCam corresponding to the layer chosen in the previous step.
In our example write 26 (spot 1)



-In Project Setting tab select Tags and Layers (spot1)

If the layer 19 is empty write puzzleRay in the empty text field (spot 2)



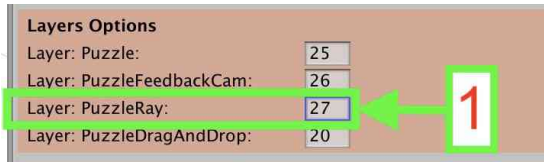
Info: If Layer 19 is already used select an empty layer.

Choose a layer different to:
15,16,20,31(internally use by Unity)

For example choose layer 27 and rename it puzzleRay.

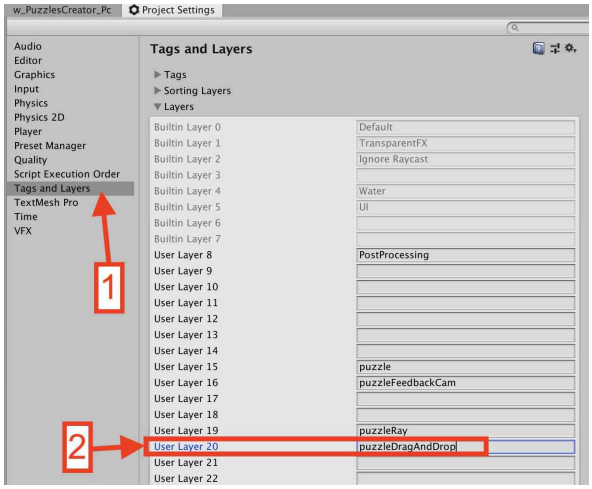
-Go to Tools → Puzzles → Puzzles Creator (w_PuzzleCreator)

-In section Layer Options change the Layer: puzzleRay corresponding to the layer choosed in the previous step.
In our example write 27 (spot 1)



-In Project Setting tab select Tags and Layers (spot1)

If the layer 20 is empty write puzzleDragAndDrop in the empty text field (spot 2)



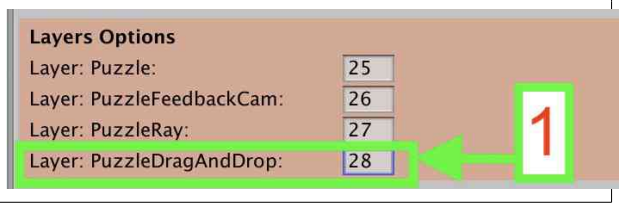
Info: If Layer 20 is already used select an empty layer.

Choose a layer different to:
15,16,19,31(internally use by Unity)

For example choose layer 28 and rename it puzzleDragAndDrop.

-Go to Tools → Puzzles → Puzzles Creator (w_PuzzleCreator)

-In section Layer Options change the Layer: puzzleDragAndDrop corresponding to the layer chosen in the previous step.
In our example write 28 (spot 1)



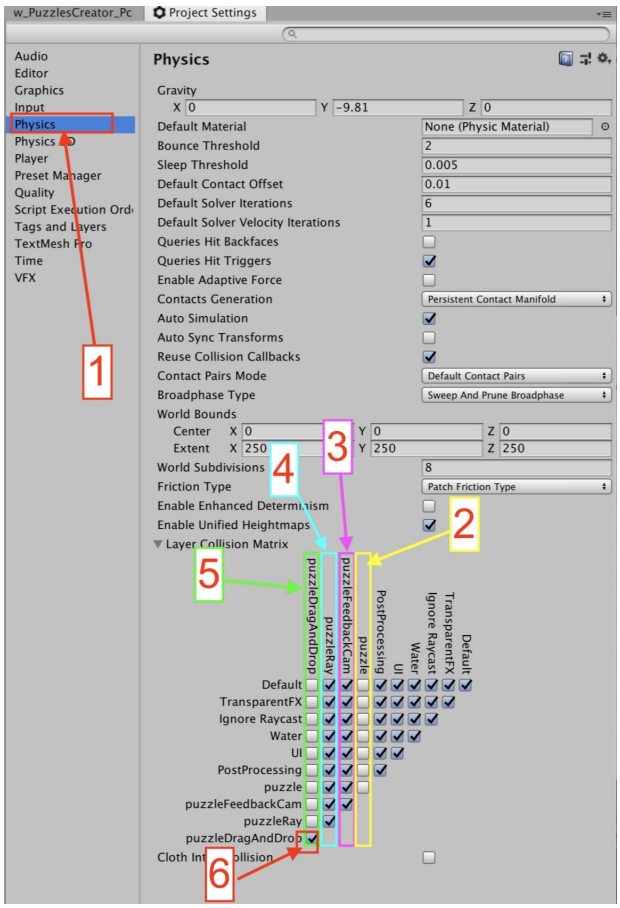
-In Project Setting tab select Physics (spot1)

-For layer puzzle (spot 2):
Uncheck all the boxes.

-For layer puzzleFeedbackCam (spot 3):
Check all the boxes.

-For layer puzzleRay (spot 4):
Check all the boxes.

-For layer puzzleDragAndDrop(spot 5):
Uncheck all the boxes except box for collision between puzzleDragAndDrop and puzzleDragAndDrop (spot 6).



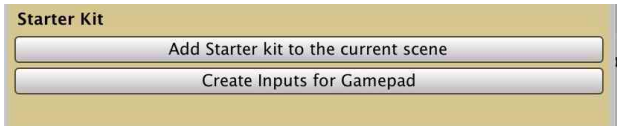
Step 4: Setup the Starter Kit

***Info**: Whenever you want to use the puzzles in a new scene:*
-You need to add the StarterKit to the new scene.
-You must follow step 4: Setup the Starter Kit.

***Warning**: Do not rename object contained in the StarterKit.*

-Go to Tools → Puzzles → Puzzles Creator (w_PuzzleCreator)

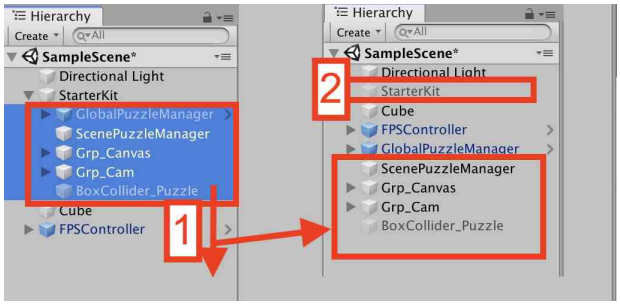
Info: A new window w_PuzzlesCreator_Pc appears.



-Press button Create Inputs for Gamepad to create the two inputs used by the gamepad.

-Press Button Add Starter Kit to the current scene to create the needed objects to use puzzle in the scene.

***Info**: A gameObject StarterKit is created in the Hierarchy.*

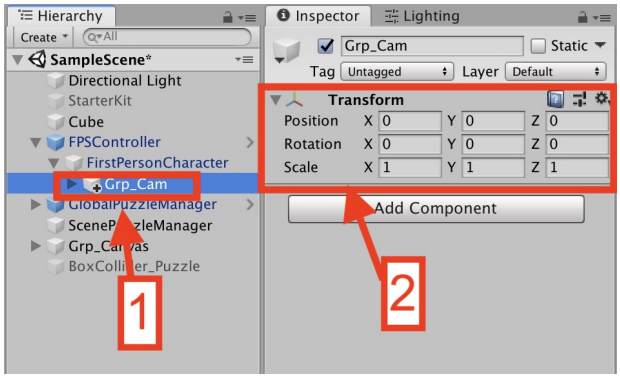


-Select all the objects inside object StarterKit.

-Drag and drop those objects on the root of the Hierarchy (spot 1).

-Delete the Object StarterKit (spot 2)

Case 1: You are using the Unity FPS Controller:
-Drag and drop Grp_Cam inside FirstPersonCharacter (spot 1)
(Hierarchy → FPSController → FirstPersonCharacter)



Case 2: You are using your own character:
-Drag and drop Grp_Cam inside the camera used by your character.

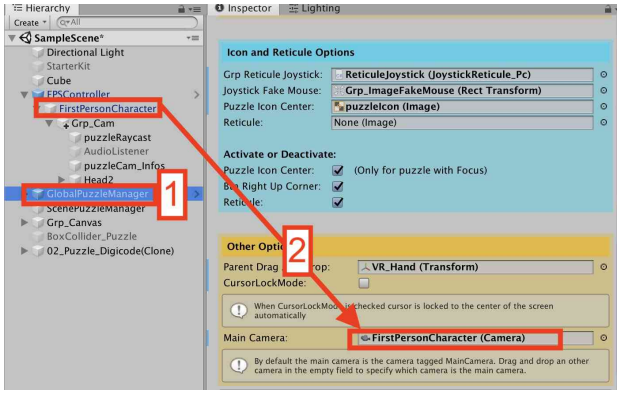
-Select Grp_Cam.

-In the inspector check if the transform (spot 2):
Position: x = 0 y=0 z=0
Rotation: x = 0 y=0 z=0
Scale: x = 1 y=1 z=1

Step 5: Check Camera Setup

***Info**: By default puzzle creator system consider the camera tagged "MainCamera" in hierarchy as the camera used by the player.*

If your player camera is not tagged "MainCamera":



-In the Hierarchy select GlobalPuzzleManager (spot 1)

-In the Inspector drag and drop your camera inside slot Main Camera (spot 2)

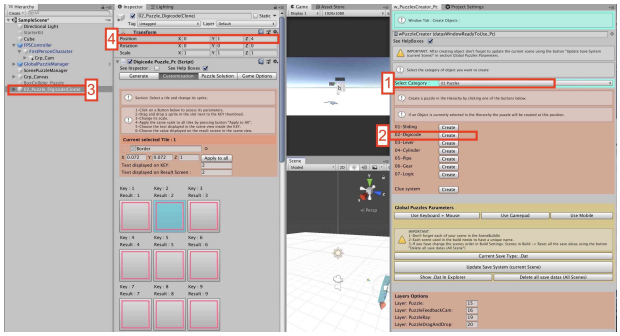
Step 6: Test

-Go to Tools → Puzzles → Puzzles Creator (w_PuzzleCreator)

-In w_PuzzlesCreator_Pc select category: 01 Puzzles (spot 1)

-Press Button Create next to 02-Digicode (spot 2).

***Info**: the puzzle is created and auto-selected in the Hierarchy (spot 3).*



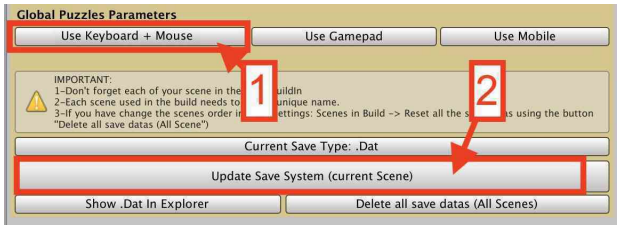
Case 1: You are using the Unity FPS Controller:
-Change the puzzle transform position to:
position: x=0 y=1 z= 4

Case 2: You are using your own character:
Choose a position not to far from your character that fit your project.

-In w_PuzzlesCreator_Pc

-Press button Use Keyboard + Mouse (spot 1) to use the keyboard and the Mouse during the game.

-Press Update Save System (current Scene) to add the puzzle to the save system (spot 2).



-Press button Play to start play mode.

-Move next to the puzzle.

-Click on the puzzle when the puzzle icon appears on screen.

-Solved the puzzle by pressing four times 0 (0000) on the puzzle button.

***Info**: Puzzle is solved.*

-Press Escape to access the mouse cursor.

-Press button Play to exit play mode.

Integration (troubleshooting):

I don’t see the cursor when Focus Mode is activated:

Check if your character have a parameters that force the cursor to be lock on the center of the screen.

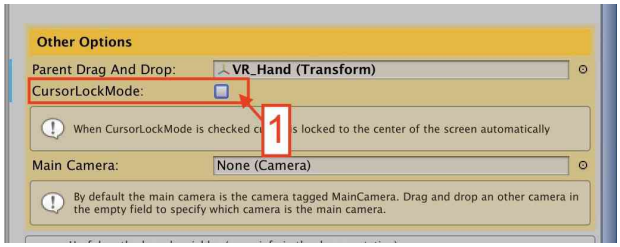
Currently you find this parameter on the character controller.
If you can’t find the option in your project you can use the other detection modes that doesn’t need to change the lock mode in your game. For example use the Reticule Mode.
(more info about detection mode in the Doc Part 2)

I want to manage myself cursor Lock Mode:

-It is not possible to manage manually the cursor lock mode when a puzzle is activated using Focus Mode. In that case the cursor lock state is forced to
`Cursor.lockState = CursorLockMode.Confined;`

-By default, the cursor is locked to the center of the screen:
-When the game starts.
-When the player exit a puzzle setup in Focus Mode.

It is possible to deactivate this option:
-In the Hierarchy select GlobalPuzzleManager.
-In the Inspector go to section Other Options and uncheck the option CursorLockMode.

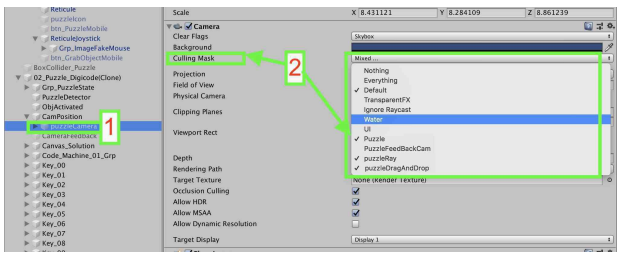


Some Objects doesn’t appears when focus mode is activated

-Select puzzleCamera inside the puzzle (spot 1)
(Your puzzle → CamPosition → puzzleCamera)

-In the Inspector go to script Camera.
-Click on the Culling Mask dropdown menu (spot 2).

-Choose Everything to allows the camera to display



everything on screen.
Or
-Select only the layers you want to be displayed.

I need to customize what happen when the player enter and exit a puzzle:
It is possible to call your own methods when the player enter or exit a puzzle.

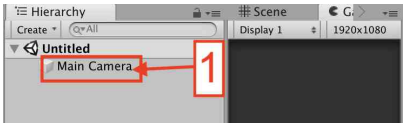
Read sections (Doc Part 3):
GlobalPuzzleManager
Call methods when puzzle start or stop:
Other Options

Tuto 3: AR Integration (Vuforia Example)

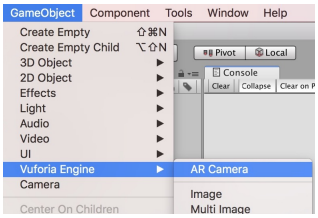
For this Tutorial we consider you have already:
-Created a new Unity project
-Download and install Vuforia.
-Download and setup in your project
Puzzle Creator
(More info on Tuto 2 Step 2 and Step 3)

-Create a new scene. (Ctrl + N)

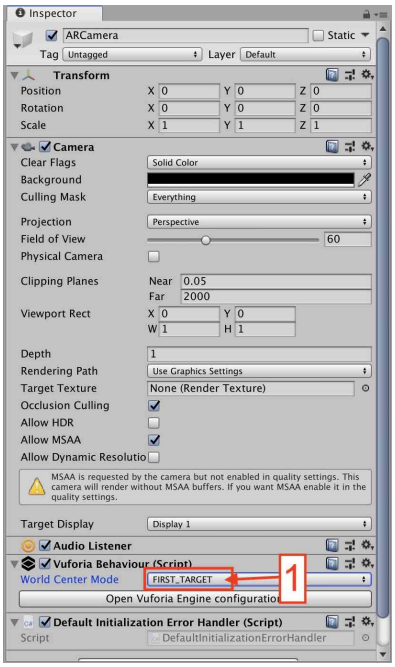
-In the Hierarchy delete the object Main Camera (spot 1).



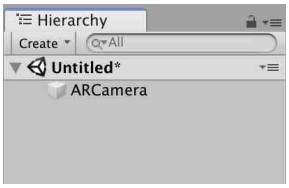
Go to GameObject → Vuforia Engine → AR Camera to create the Vuforia Camera.



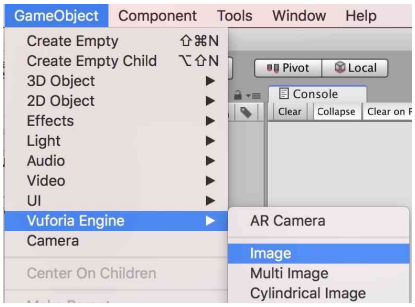
-In the Hierarchy select ARCamera.
-In the Inspector Select FIRT_TARGET in the filed World Center Mode (spot 1).



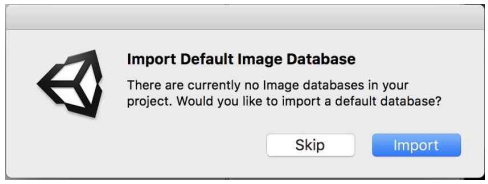
-In the Hierarchy deselect ARCamera.



Go to GameObject → Vuforia Engine → Image to create an Image Target.

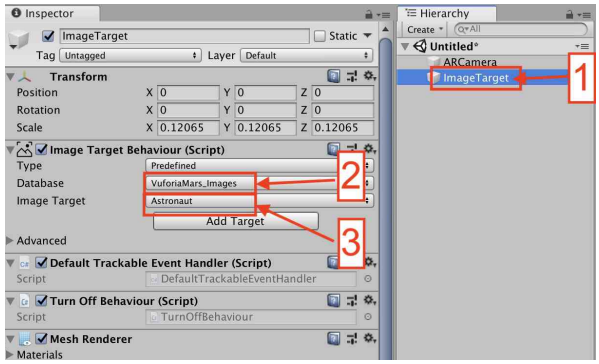


-If the message on the picture on the right appears on screen press Import.



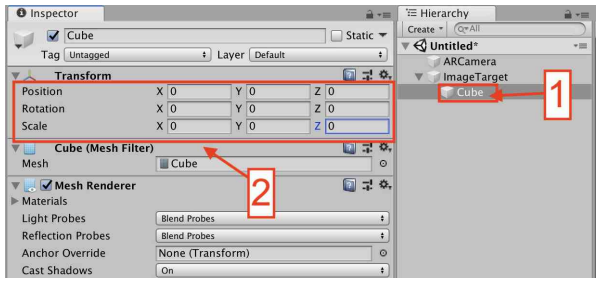
-In the Hierarchy select ImageTarget.

In the Inspector Select:
-VuforiaMars_Images on the Database field.
-Astronaut for the field Image Target.

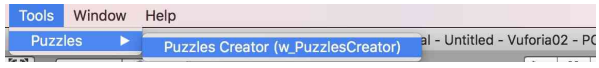


-Create a Cube and put it as a child of ImageTarget
(spot 1)

-Select Cube in the Hierarchy.
-In the Inspector Change its transform to (spot 2):
Position: X=0 Y=0 Z=0
Rotation: X=0 Y=0 Z=0
Scale: X=0 Y=0 Z=0

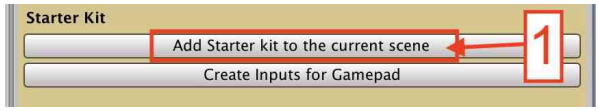


-Go to Tools → Puzzles → Puzzle Creator (w_PuzzlesCreator)



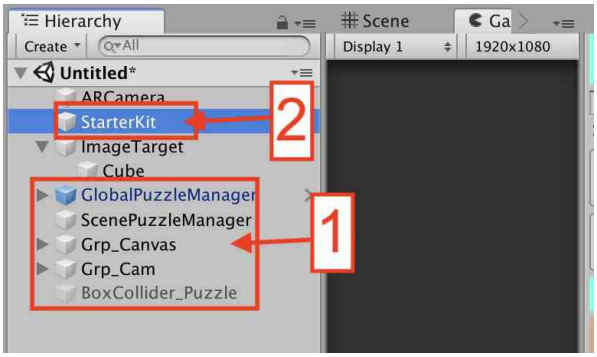
-In the new window w_PuzzlesCreator press the button Use Mobile on section Global Puzzles Parameters (spot 1).

-In window w_PuzzlesCreator press the button Add Starter Kit to the current project on section Starter Kit (spot 1).



Warning: Do not rename object contained in the StarterKit.

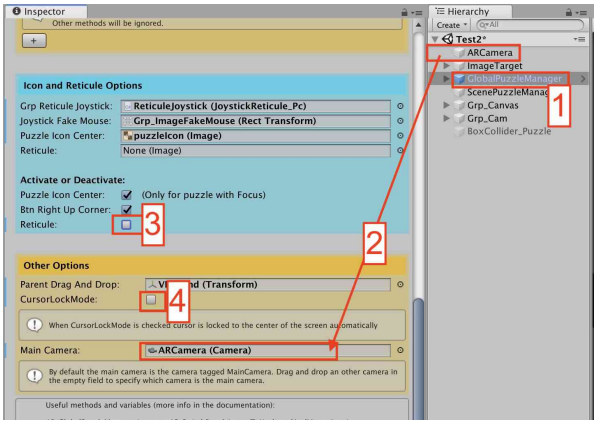
***Info**: A gameObject StarterKit is created in the Hierarchy.*



-Select all the objects inside object StarterKit.

-Drag and drop those objects on the root of the Hierarchy (spot 1).

-Delete the Object StarterKit (spot 2)

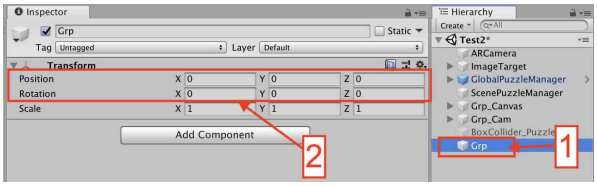


-In the Hierarchy select GlobalGameManager (spot 1)

-In the Inspector drag and drop ARCamera inside empty slot Main Camera (spot 2).

-Uncheck Reticule (spot 3).

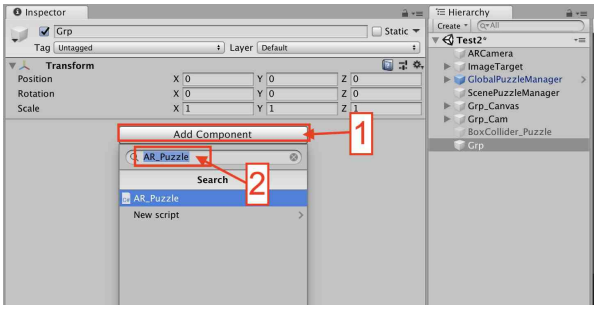
-Uncheck CursorLockState (spot 4)



-In the Hierarchy create an empty Object.

-Rename it Grp (for example)(spot 1).

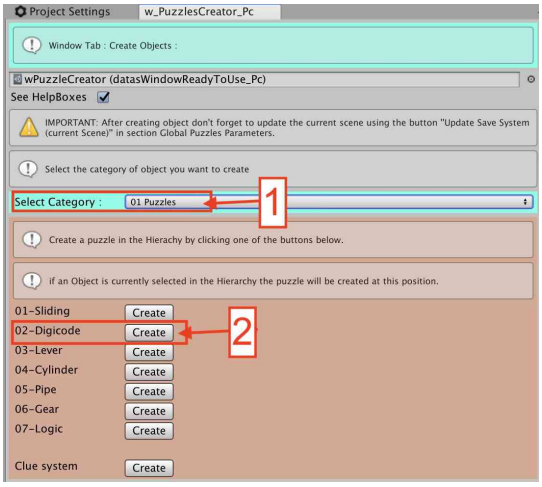
-Select Grp and change its transform to:
Position: X=0 Y=0 Z=0
Rotation: X=0 Y=0 Z=0



-In the Inspector press button Add Component (spot 1)

-In search field write AR_Puzzle (spot 2)

-Press keyboard key Enter to add the component.

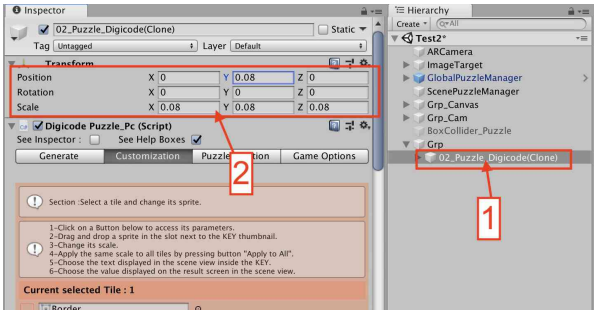


-Go to Tools → Puzzles → Puzzle Creator (w_PuzzlesCreator)

-In window w_PuzzlesCreator select in 01 Puzzles (spot 1)

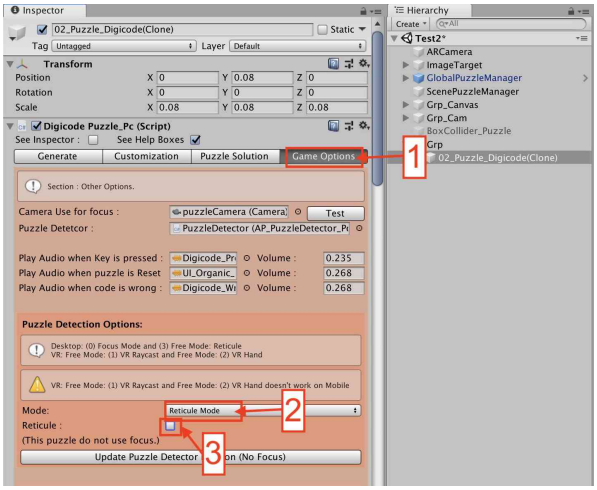
-Press button Create next to 02-Digicode (spot 2)

Info: *Object 02_Puzzle_Digicode(Clone) is created in the Hierarchy.*



Move 02_Puzzle_Digicode(Clone) inside Grp (spot 1)

-In the Inspector Change 02_Puzzle_Digicode(Clone) transform to (spot 2):
Position: X=0 Y=0.08 Z=0
Rotation: X=0 Y=0 Z=0
Scale: X=0.08 Y=0.08 Z=0.08

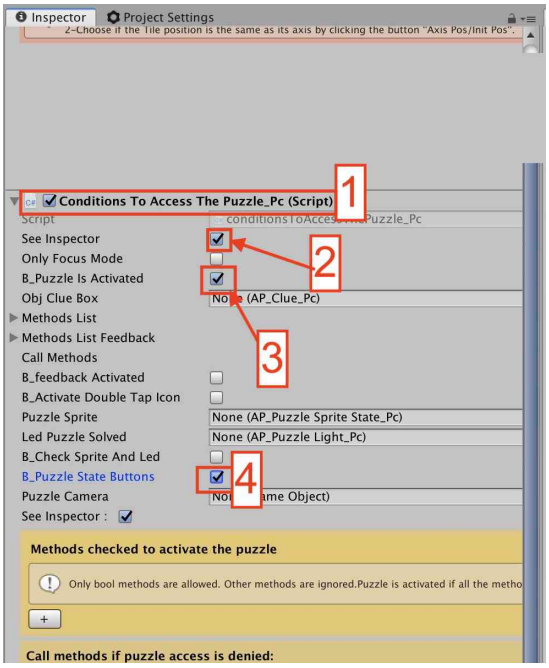


-In the Inspector click on button Game Options (spot 1)

-Select Reticule Mode in the dropdown menu (spot 2)

-Uncheck Reticule box (spot 3)

info*:*
By default the player can't interact with a puzzle.
b_PuzzleIsActivated (forces the activation of the puzzle).
b_puzzleStates (allows the player to interact with the reset button of the puzzle).



-Select your puzzle in the Hierarchy

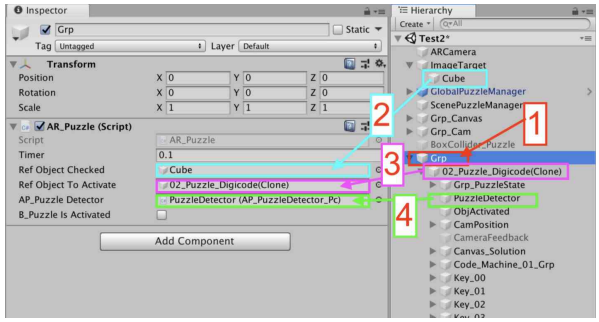
-In the Inspector go to section ConditionsToAccessThePuzzle (spot 1)

-Check the box see inspector (spot 2)

-Check the box B_Puzzle Is Activated (spot 3)

-Check the box B_Puzzle State Buttons (spot 4)

-In the Hierarchy select Grp (spot 1)



In the Inspector:
-Drag and drop Cube inside the empty slot Ref Object Checked (spot 2).

-Drag and drop 02_Puzzle_Digicode(Clone) inside the empty slot Ref Object To Activate (spot 3).

-Drag and drop PuzzleDetector inside the empty slot AP_Puzzle Detector (spot 4).
(Hierarchy: 02_Puzzle_Digicode(Clone) → PuzzleDetector)

-In the Hierarchy select GlobalGameManager

-In the Inspector press button
Update Save System (current scene) (spot 1).

Now you can test the scene.
When the Image Marker is detected the puzzle is displayed on screen.

Tips:
If you want to easily test the scene:
Use a Mobile device as a remote.
https://docs.unity3d.com/Manual/UnityRemote5.html

AR Summary:

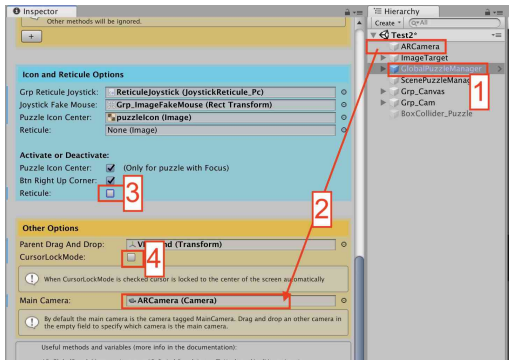
1-You must select mobile Inputs in window w_PuzzlesCreator by pressing the button Use Mobile (spot 1).

2-On the GlobalPuzzleManager you need to (spot 1):

-Drag and drop your main camera in slot Main Camera (spot 2)

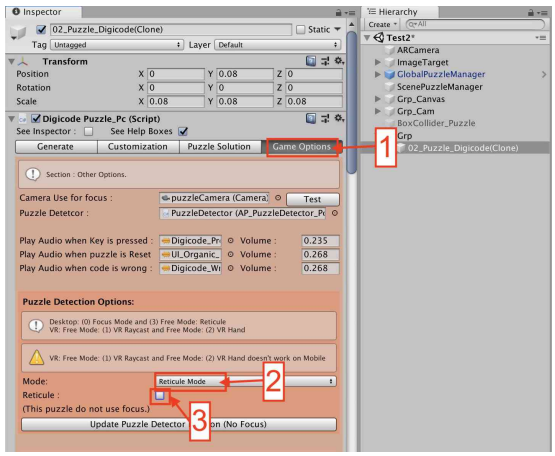
-Uncheck the Box Reticule to remove the reticule on the center of the screen (spot 3).

-Uncheck the box CursorLockMode (spot 4).
*(**Info**: When CursorLockMode is check the cursor is forced to be on the center of the screen. This options doesn't work with AR)*



3-Inside a puzzle (spot 1)

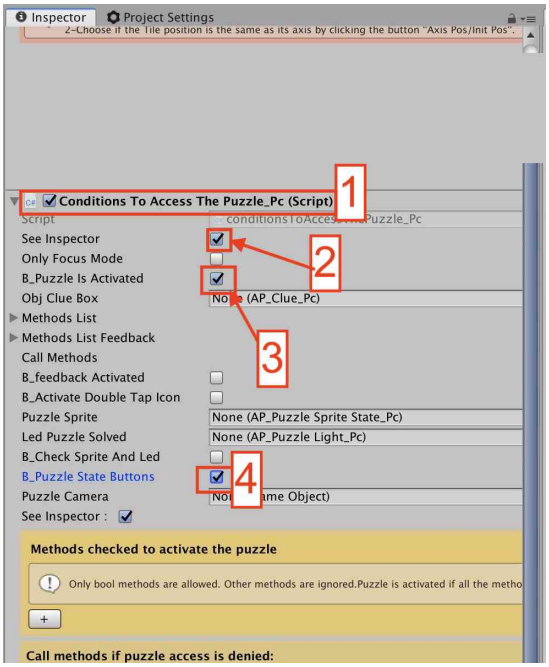
You must use:
-Reticule Mode (spot 2)
-Uncheck Reticule (spot 3)



4-By default the player can't interact with a puzzle.

info:
It is the object puzzleDetector that activates the puzzle when the player enters the puzzle area.
This system does not work with the AR.

You must manually enabled the variables:
b_PuzzleIsActivated (forces the activation of the puzzle).
b_puzzleStates (allows the player to interact with the reset button of the puzzle).



-Select your puzzle in the Hierarchy.

-In the Inspector go to section ConditionsToAccessThePuzzle (spot 1)

-Check the box see inspector (spot 2)

-Check the box B_Puzzle Is Activated (spot 3)

-Check the box B_Puzzle State Buttons (spot 4)

5-You can use the AR_Puzzle script as a base to make a puzzle appear and disappear.

(Project tab: PuzzleCreator → Assets → Script → Demo → AR_Puzzle)

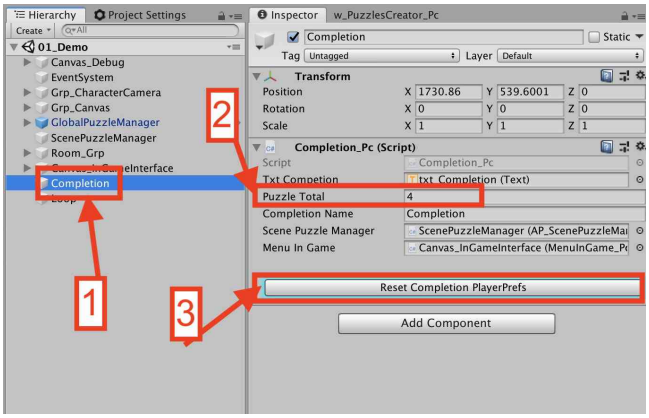
Learn more: Study case: The Demo scene.

Completion System

***Info**: The system lets you know if all the puzzles have been solved.*
If all the puzzles are solved the game ended.
A UI is displayed on screen.

Open the scene 01_Demo (spot 1)
(Project tab: PuzzleCreator → Assets → Scene → Demo → Demo Desktop → 01_Demo)

***Info**: Puzzle completion is manage by Completion (spot 1)*



If in the Hierarchy it is possible to choose how many puzzles need to be solved to win the game (spot 2).

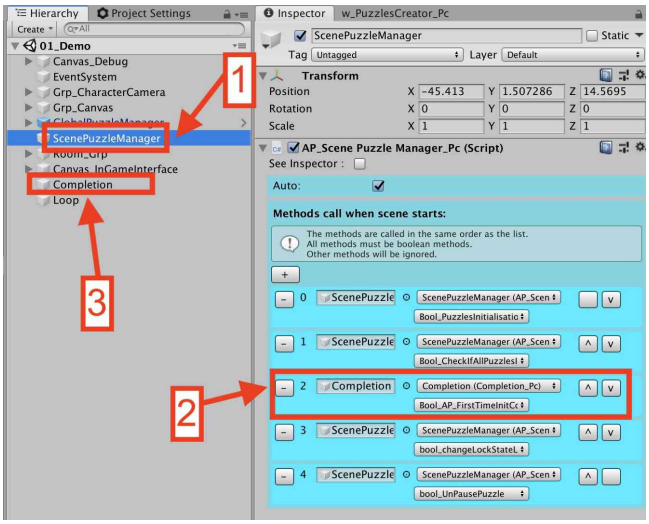
It is possible to delete the completion save by pressing the button
Reset Completion PlayerPrefs.

***Scripting** (Call manually reset completion)*:
Call the method AP_ResetDemo()
This method is part of script Completion_Pc.cs
this script is on the Completion object in the Hierarchy

-In the Hierarchy select ScenePuzzleManager (spot 1)

In section Methods call when scene starts:
The method Bool_AP_FirstTimeInitCompletion() is called (spot 2)

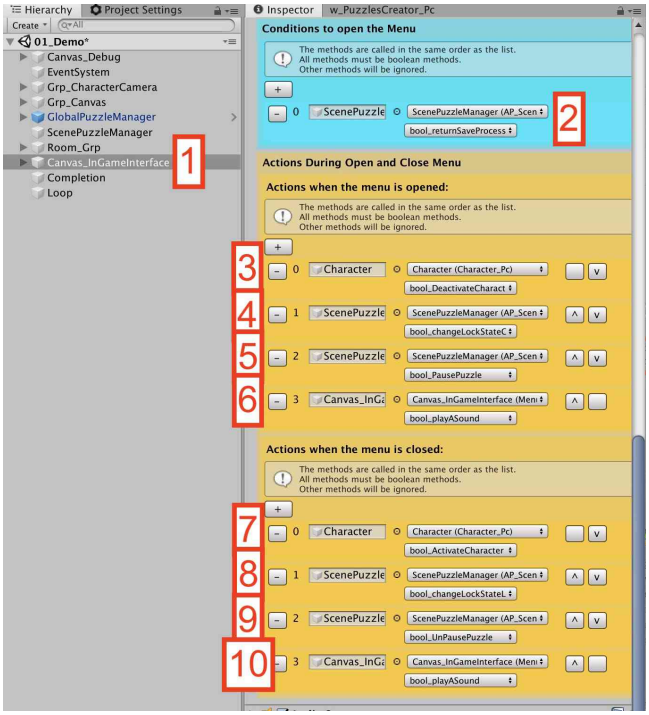
This method contained in Object Completion (spot 3) allows to initialized the completion system.



In Game UI

A UI is used to display:
-Pause menu
-End of the game menu.

During the game: UI is manage by Canvas_InGameInterface (spot 1)



In section Condition to open the menu (spot 2) a method is called to check if the saving puzzle process is not running.
Call the method *bool_returnSaveProcess()*
This method is part of script *AP_ScenePuzzleManager_Pc*
this script is on the *ScenePuzzleManager* object in the Hierarchy

In section Actions when the menu is opened:
-Character movement is deactivated (spot 3)
Call the method *bool_DeactivateCharacter()*
This method is part of script *Character_Pc.cs*
this script is on the *Character* object in the Hierarchy

-The cursor is not locked to the center of the screen (spot 4)
Call the method *bool_ChangeLockStateConfined()*
This method is part of script *Ap_ScenePuzzleManager.cs*
this script is on the *ScenePuzzleManager* object in the Hierarchy

-Puzzles are Paused (spot 5)
Call the method *bool_PausePuzzle()*
This method is part of script *Ap_ScenePuzzleManager.cs*
this script is on the *ScenePuzzleManager* object in the Hierarchy

-A sound is played (spot 6)
Call the method *bool_playASound()*
This method is part of script *MenuInGame_Pc.cs*
this script is on the *CanvasInGameInterface* object in the Hierarchy

In section Actions when the menu is closed:
-Character movement is activated (spot 7)
Call the method *bool_ActivateCharacter()*
This method is part of script *Character_Pc.cs*
this script is on the *Character* object in the Hierarchy

-The cursor is locked to the center of the screen (spot 8)
Call the method *bool_ChangeLockStateLock()*
This method is part of script *Ap_ScenePuzzleManager.cs*
this script is on the *ScenePuzzleManager* object in the Hierarchy

-Puzzles are unpaused (spot 9)
Call the method *bool_UnPausePuzzle()*
This method is part of script *Ap_ScenePuzzleManager.cs*
this script is on the *ScenePuzzleManager* object in the Hierarchy

-A sound is played (spot 10)
Call the method *bool_playASound()*
This method is part of script *MenuInGame_Pc.cs*
this script is on the *CanvasInGameInterface* object in the Hierarchy