Menu Builder for Unity

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Requirements

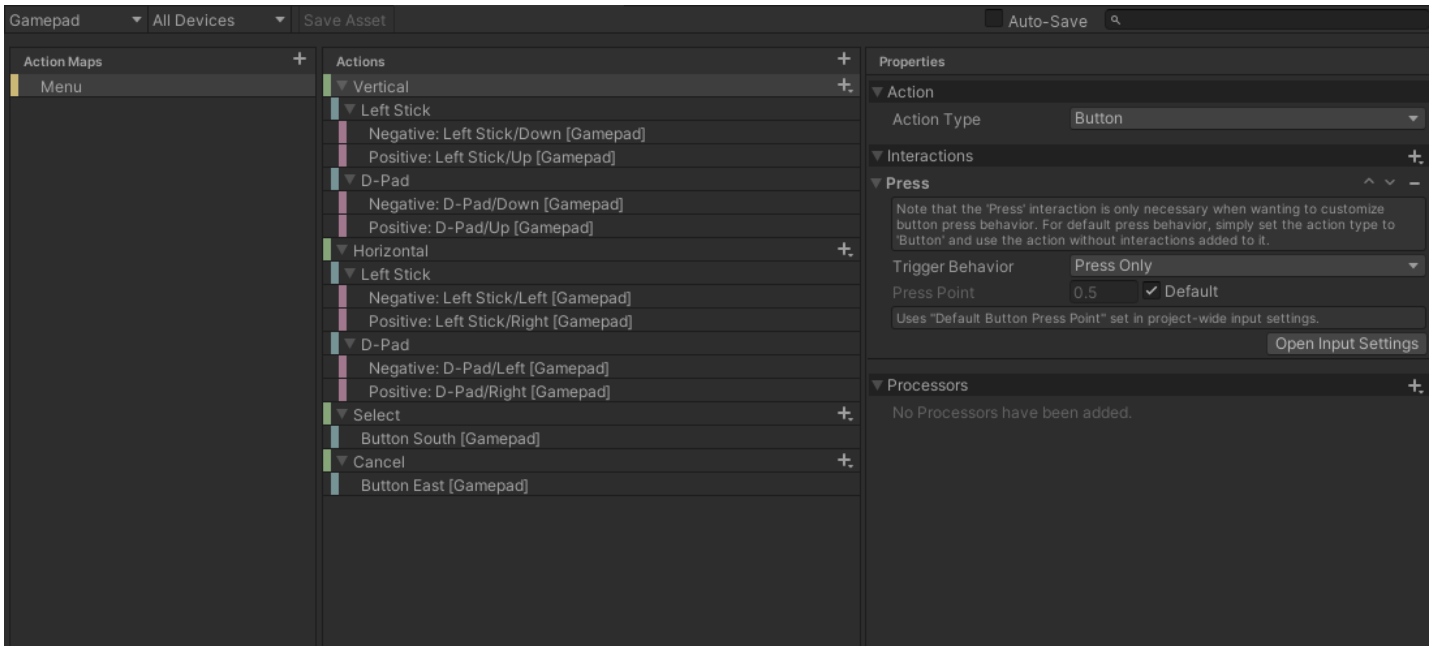
- Unity 2020.3.11f1
- Unity Input System

Features

This tool allows you to create complex menus without writing a single line of code. It includes to following features

1. Keyboard and controller support using the Unity Input System
2. Vertical, Horizontal and Tabbed style menus
3. Wrap-around when exceeding the start/end positions
4. Activated, deactivated, selected and canceled events that can be handled inside the editor

Setting up the input



This library includes demo input actions that should be perfect for any game. If you want to create your own, you can follow these steps:

1. Right click in the project and select Create > Input Actions
2. Use **InputActions** as the name
3. Open the new Input Actions file
4. Create a new control scheme
5. Create a **Menu** Action Map
6. Create the following actions:
    - **Vertical** (1D Axis)
    - **Horizontal** (1D Axis composite)
    - **Tabs** (1D Axis composite)
    - **Select** (Button binding)
    - **Cancel** (Button binding)
7. Specify the key bindings for each action

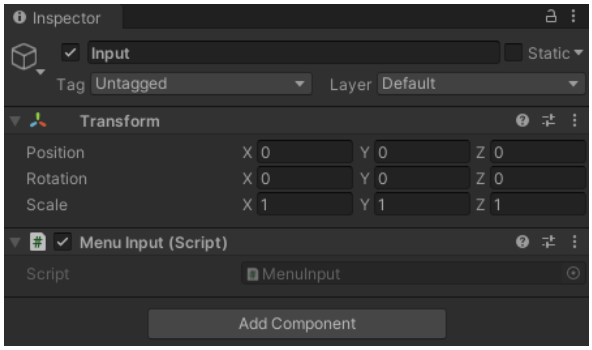
Please refer to the official Unity documentation for more information: https://docs.unity3d.com/Packages/com.unity.inputsystem@1.0/manual/QuickStartGuide.html

Default input

Action	Keyboard	Controller
Navigate Up	Up Arrow W Key	Left Stick Up D-Pad Up
Navigate Down	Down Arrow S Key	Left Stick Down D-Pad Down
Navigate Left	Left Arrow A Key	Left Stick Left D-Pad Left
Navigate Right	Right Arrow D Key	Left Stick Right D-Pad Right
Tab Previous	Q Key Page Down	Left Trigger

Tab Next	E Key Page Up	Right Trigger
Select	Enter Key	South Button
Cancel/Back	Escape Key	East Button

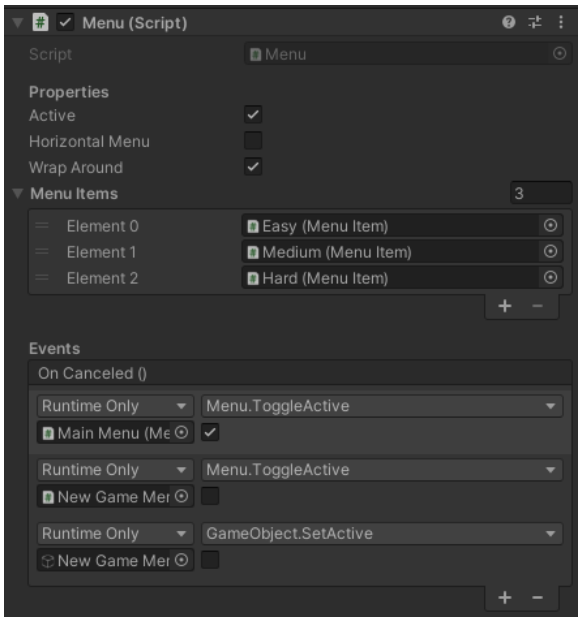
Handling input inside the scene



1. Add a new empty game object to your scene
2. Add a **Menu Input** component to this new game object

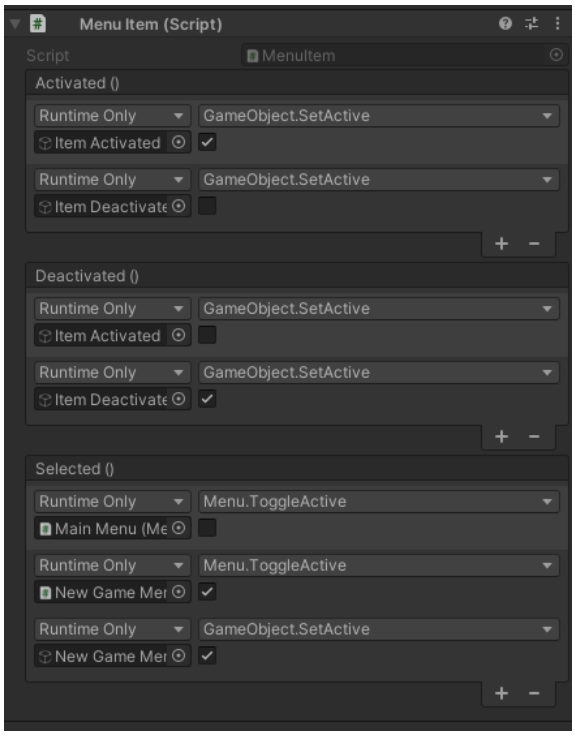
This **Menu Input** component will read the input from the Unity Input System (using the InputActions file) and invoke the correct events when needed

Creating a menu



1. Add a new empty game object to your scene
2. Add a **Menu** component to this new game object
3. Set the properties of the menu
    - **Active:** A boolean value indicating if the menu can receive input events
    - **Menu Style:** The type of menu you're using (Vertical, Horizontal or Tabbed)
    - **Reset Index After Loading:** Reset the selected index after loading the menu (or disabling and enabling it)
    - **Wrap Around:** Enable/disable the wrap-around feature when exceeding the start/end position of the menu
    - **Menu Items:** A list of all menu items managed by this menu
4. Set up the canceled event (optional)

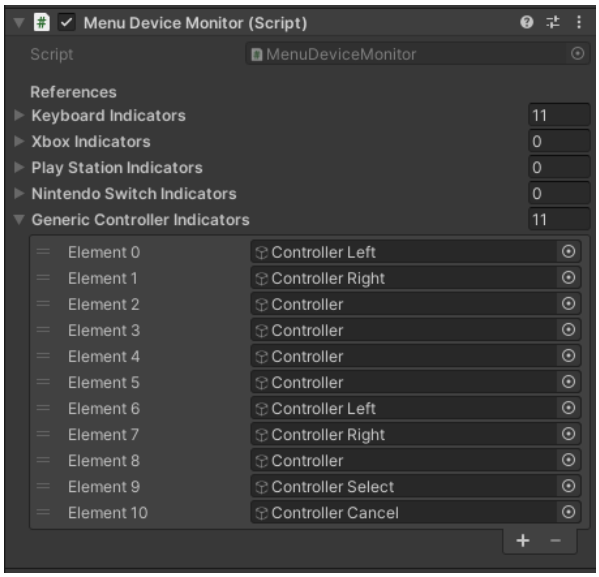
Creating a menu item



1. Add a new empty game object to your scene
2. Add a **Menu Item** component to this new game object
3. Set up the activated event (optional). This is invoked when the menu item is active
4. Set up the deactivated event (optional). This is invoked when the menu item is deactivated
5. Set up the selected event (optional). This is invoked when the menu item is selected
6. Design the menu item

Remember to add the menu item to the menu. Otherwise no events will be invoked

Creating input indicators



1. Add a new empty game object to your scene
2. Add a **Menu Device Monitor** component to this new game object
3. Create device indicators for all the controllers/input devices you support
4. Specify all the device indicators in the **Menu Device Monitor** component

The Menu Device Monitor requires an instance of Menu Input in the same scene

Demo

This library includes a demo scene that shows you how to create vertical, horizontal and tabbed menus. It also includes different menus using different features available in the library (including device/input indicators). There's a **Input** directory that contains an **InputActions** file that should be perfect for your game