

This unity asset is prepared to control your character with a circle joystick in mobile platforms.

What is New in V1.2

- 4 Additional Scenes (4 Scenes) and Scripts have added to use in Web Player / Flash / PC
- JoystickSingle is renamed as JoystickCircle
- Scene 8 is updated. Left joystick controls the Penelope while Right Joystick controls the camera.

What is New in V1.1

- Returning back time customization added (The time for finger thumb is returning back to origin)
- GUIskins added for iPhone3 / iPhone4 (Now text has bigger font in iPad or iPhone4)

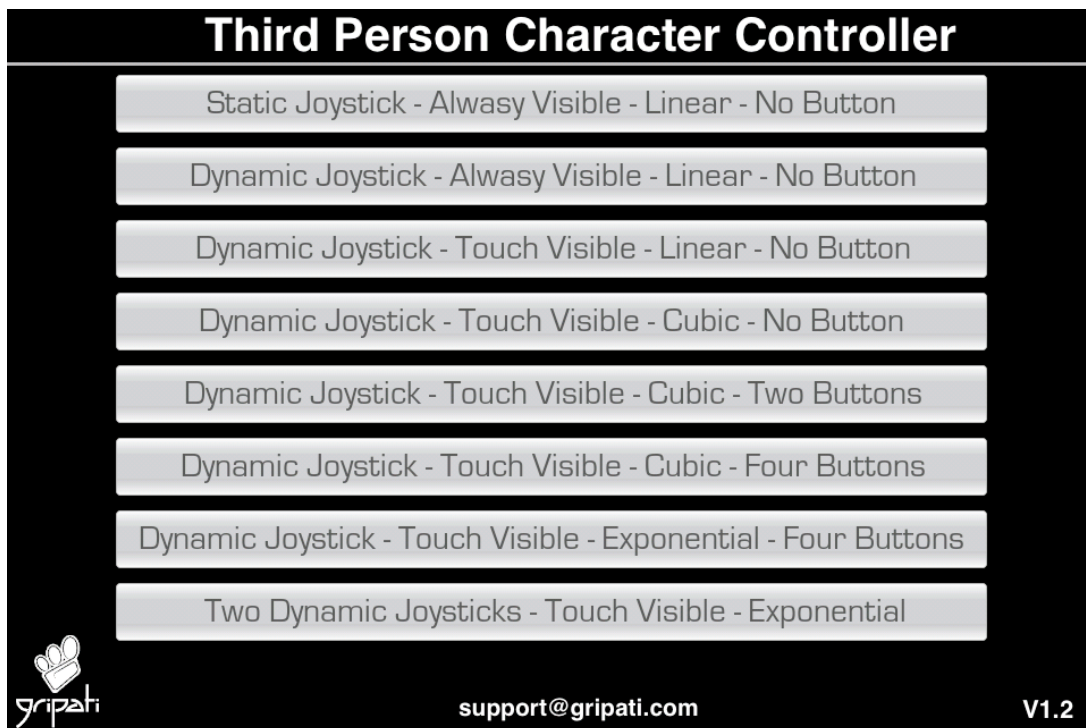
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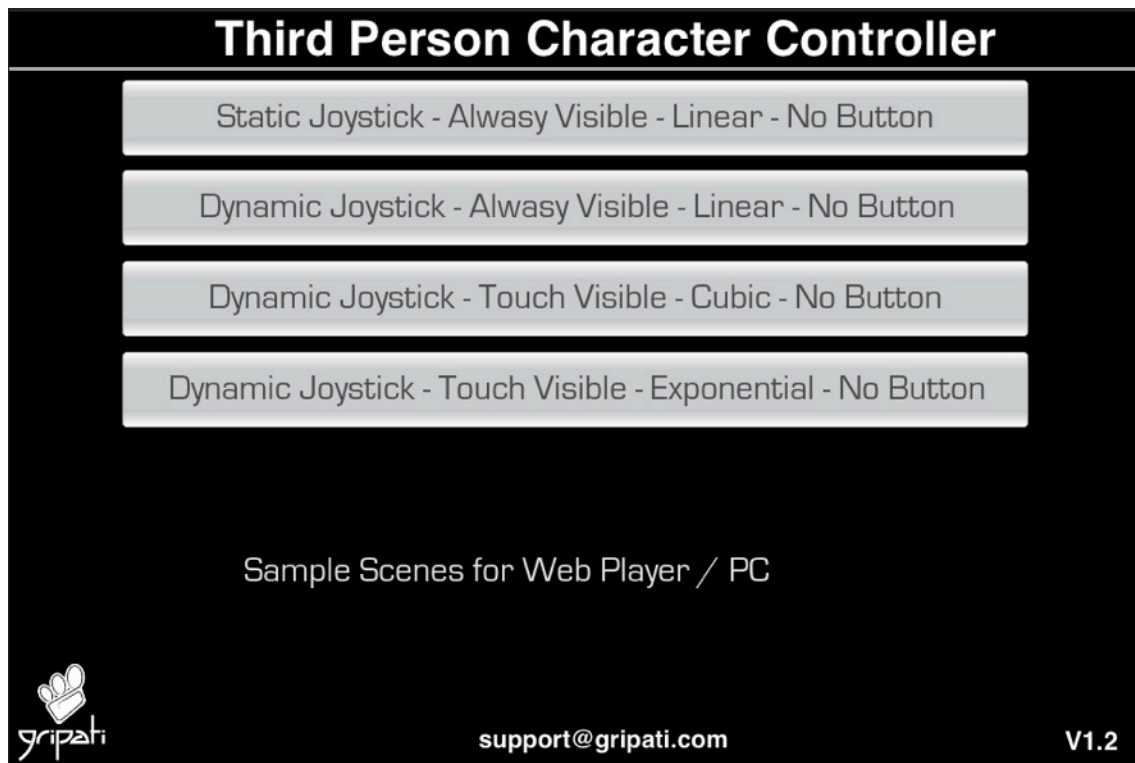
iPhone3 / iPhone4 (also iPad) scale script added (all buttons and other GUITextures has same aspect ratio)

How To Use Package - For Game Scene

- 1- Import the Package
- 2- Open CharacterController_Gripati > Scenes > o DemoIntro
- 3- Hit Play Button

The menu comes up and here select your scene to play.





This is the introductory scene for Web Player / Flash / PC

Introduction

In the intro scene you can see 8 button for each customized scene with given details below;

Scener1:

- Static Joystick Position
- Thumb Area & Thumb Finger are always visible
- Force calculation is Linear
- No Extra Button
- Returning Back (here 0.0sec)

Scene2:

- Dynamic Joystick Position
- Thumb Area & Thumb Finger are always visible
- Force calculation is Linear
- No Extra Button
- Returning Back (here 0.2sec)

Scene3:

- Dynamic Joystick Position
- Thumb Area & Thumb Finger are visible with touch
- Customizable FadeIn & FadeOut time (here 0.4 sec)
- Force calculation is Linear
- No Extra Button
- Returning Back (here -1.0 sec - disabled)

Scene4:

- Dynamic Joystick Position
- Thumb Area & Thumb Finger are visible with touch
- Customizable FadeIn & FadeOut time (here 0.4 sec)
- Force calculation is Cubic
- No Extra Button
- Returning Back (here 0.4sec)

Scene5:

- Dynamic Joystick Position
- Thumb Area & Thumb Finger are visible with touch
- Customizable FadeIn & FadeOut time (here 0.4 sec)
- Force calculation is Cubic
- Two Extra Buttons: Multitouch
- Returning Back (here 0.2sec)

Scene6:

- Dynamic Joystick Position
- Thumb Area & Thumb Finger are visible with touch
- Customizable FadeIn & FadeOut time (here 0.4 sec)
- Force calculation is Cubic
- Four Extra Buttons: Multitouch
- Returning Back (here -1.0 sec - disabled)

Scene7:

- Dynamic Joystick Position
- Thumb Area & Thumb Finger are visible with touch
- Customizable FadeIn & FadeOut time (here 0.4 sec)
- Force calculation is Exponential
- Four Extra Buttons: Multitouch
- Returning Back (here 0.4sec)

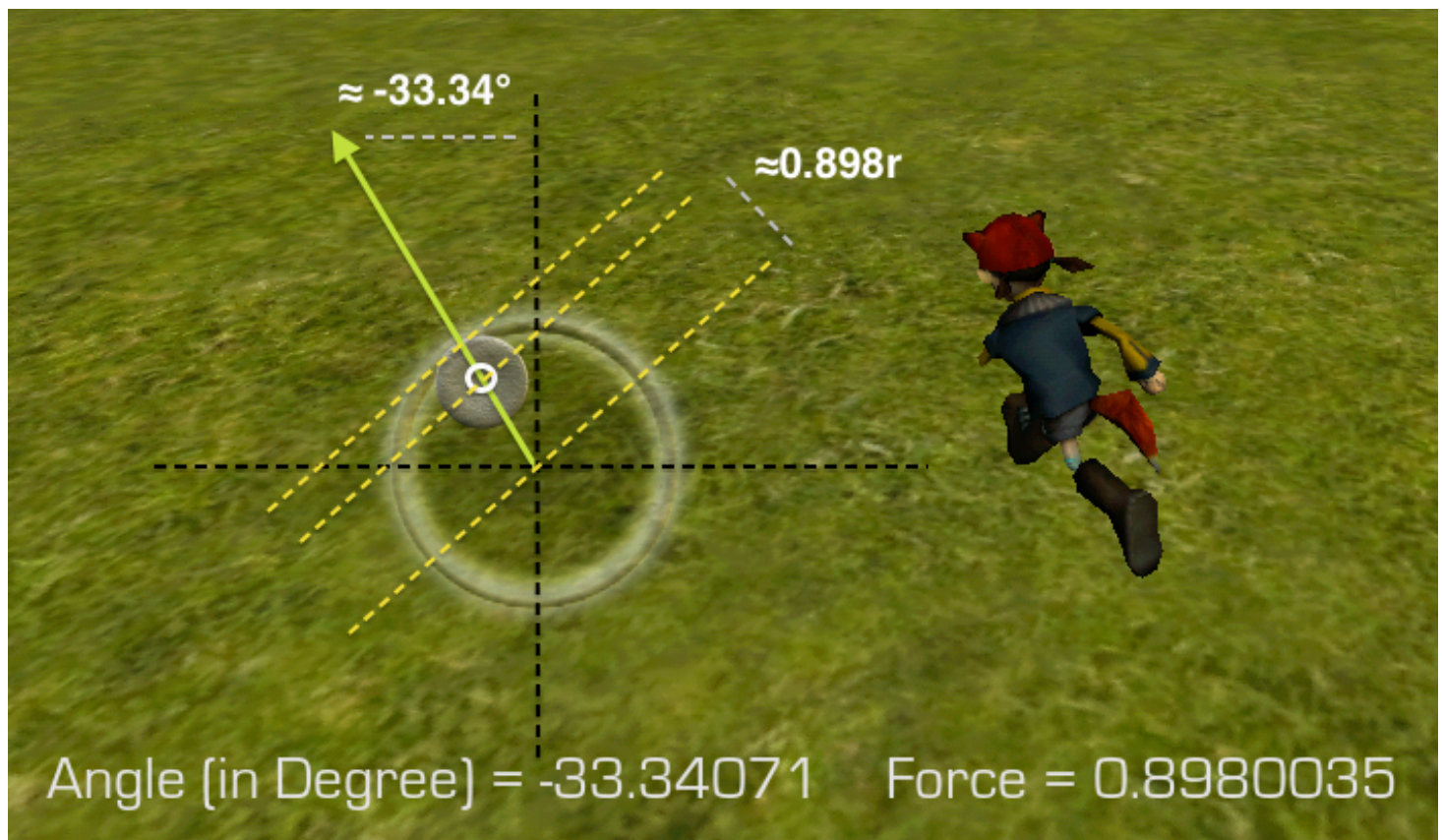
Scene8:

- Two Dynamic Joysticks
- Thumb Area & Thumb Finger are visible with touch
- Customizable FadeIn & FadeOut time (here 0.4 sec for each of them)
- Force calculation is Exponential
- No Extra Button
- Returning Back (here 0.2sec for each of them)

Angle and Force Calculation:

The angle is calculated according to Thumb Finger Center and current Touch Point (touch is identified by FingerID, so we remember the finger and do not mix other buttons.)

The force is $[0.0, 1.0]$ calculated by the distance between Thumb Finger Center and current Touch Point. There are three types of force calculation (Linear, Cubic and Exponential). They are used according to game need. If you like to see that game character starts to walk just after player center point touch and slowly sliding her finger; then you may use Linear. However, if you would like to see that slowly start but fast continue in walking speed then you may select Cubic or Exponential. Note that, Cubic or Exponential calculation may take time, if you consider the performance on older devices.



If the force calculation is Linear :

Distance = Distance between Thumb Finger Center and current Touch Point

if Distance < Radius of Thumb Area

Force = Distance / Radius of Thumb Finger

else

Force = 1.0 which means that touch point is out of our Thumb Area Circle

If the force calculation is Cubic :

Distance = Distance between Thumb Finger Center and current Touch Point

if Distance < Radius of Thumb Area

$$\text{Force} = \text{Distance}^2 / \text{Radius of Thumb Finger}^2$$

else

Force = 1.0 which means that touch point is out of our Thumb Area Circle

If the force calculation is Exponential :

Distance = Distance between Thumb Finger Center and current Touch Point

if Distance < Radius of Thumb Area

$$\text{Force} = (e^{(\text{Distance}^2 / \text{Radius of Thumb Finger})} - 1) / (e - 1)$$

else

Force = 1.0 which means that touch point is out of our Thumb Area Circle

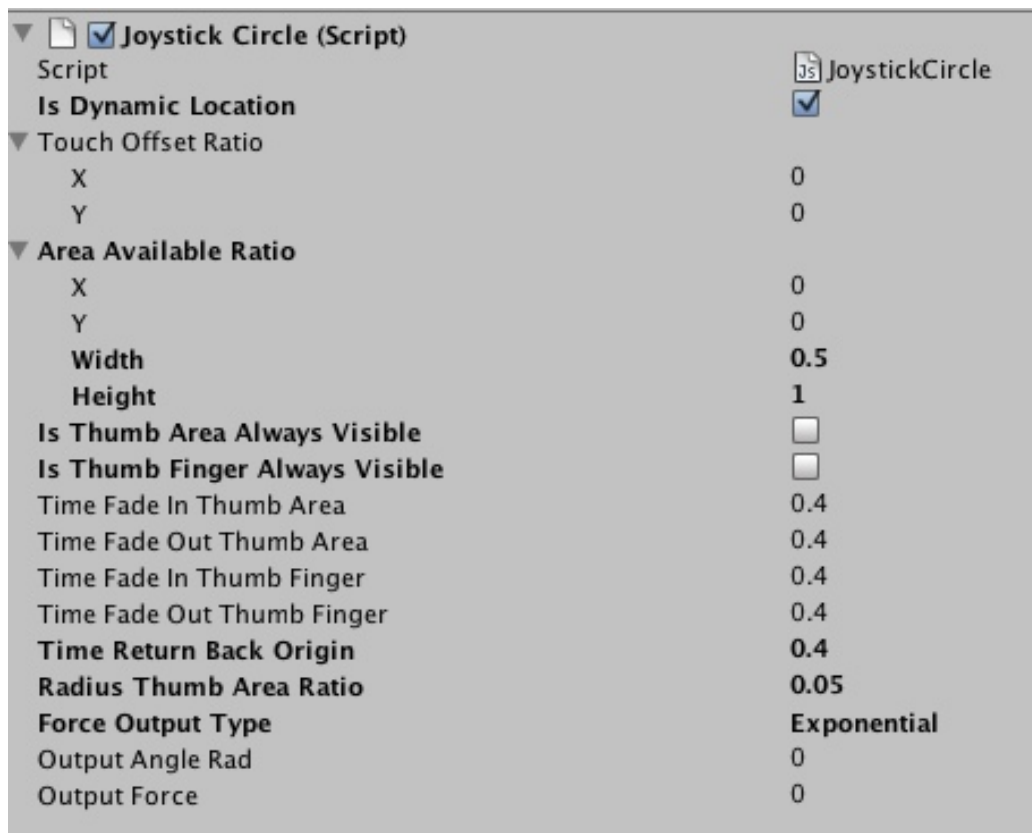
Detail of Scripts:

There are two scripts (JoystickCircle and ControllerGUIButton) which are used mainly, the others are related with camera and GUI operations.

Joystick Circle:

The main joystick controller script. By using this script you can navigate thumb finger image inside thumb area with given configuration. There are two output values “Output Angle Rad” and “Output Force”. The angle is calculation by the current touch and the Thumb Finger position.

The configuration setting image is given below with details;



Is Dynamic Location : This boolean value indicates that joystick will be a stable position or not. If Dynamic is selected, then thumb area and center is located dynamically (which is most wanted use)

Touch Offset Ratio: The ratio (ratio according to screen width, height) [0.0, 1.0] which is used for offset by touch point. If you would like to see that the thumb area will appear a little high to see where you are touch exactly; then you may enter Y value as 0.1 or -0.1.

Area Available Ratio: This ratio (ratio according to screen width, height) [0.0, 1.0] is used for joystick availability area definition. Here, we set X and Y to Zero which makes our touch point start top left corner. In addition, we can only use half of the screen by making width = 0.5 with all height (height= 1.0)

Is Thumb Area Always Visible= This value indicated that the thumb area visibility time. If you make it true, than thumb area will not be disappear. Otherwise, it will appear and disappear with given fadein time.

Is Thumb Finger Always Visible= This value indicated that the thumb finger visibility time. If you make it true, than thumb area will not be disappear. Otherwise, it will appear and disappear with given fadein time.



Time Fade In / Fade Out Thumb Area: If you don't select the "Is Thumb Area Always Visible" than the time for fadeIn and FadeOut for Thumb Area is defined by these values. If 0 or lower values entered, then the thumb area will appear instantly.

Time Fade In / Fade Out Thumb Finger: If you don't select the "Is Thumb Finger Always Visible" than the time for fadeIn and FadeOut for Thumb Finger is defined by these values. If 0 or lower values entered, then the thumb finger will appear instantly.

Radius Thumb Area Ratio: The value indicated the radius of the thumb area. If you enter 0, then the radius is calculated by the width of the Thumb Area Texture.

Force Output Type: You can select the force calculation type as; Linear, Cubic and Exponential. (See Angel and Force Calculation)

Controller GUI Button:

The main GUI Button controller script. Adding this script to given GUI Texture, than you may control your texture as multi-touch enable GUI button. Here you can set the over image and the function name to call when touch down, touch up inside or touch up outside.

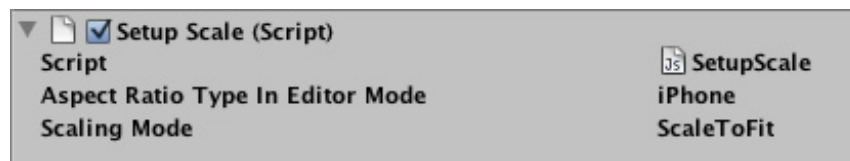


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Setup Scale:

This script is used for auto-scaling while (remaining aspect ratio of the image) of GUITexture whose scale metrics are determined in iPhone or iPad on editor mode.

You should attach this script to the GUITexture and set the scale metric (note: you shouldn't give width or height in pixels!). Then select your editor mode and choose the fit options : Scale to Fit or Scale to Fill. See the affect after building and uploading your game to your device.



Additional Note:

In this package, the important part is the Joystick Circle , so please do not concentrate on other codes or scripts.

You can check the information about joystick;

http://www.gamasutra.com/view/feature/6323/a_guide_to_ios_twin_stick_shooter_.php?print=1&fb_source=message

You can see the demo in flash : <http://gripati.com/flash/third-person-character-controller/>

Contact Information

You can send email to "support@gripati.com" regarding to question about this Asset Store Package with the topic name "Asset Store: Third Person Character Controller".

We hope you like and enjoy your Third Person Controller Joystick. If you use the joystick in your game and would like share with us, we can kindly add your game link.

Kind Regards,

Developer Group of Gripati Digital Entertainment