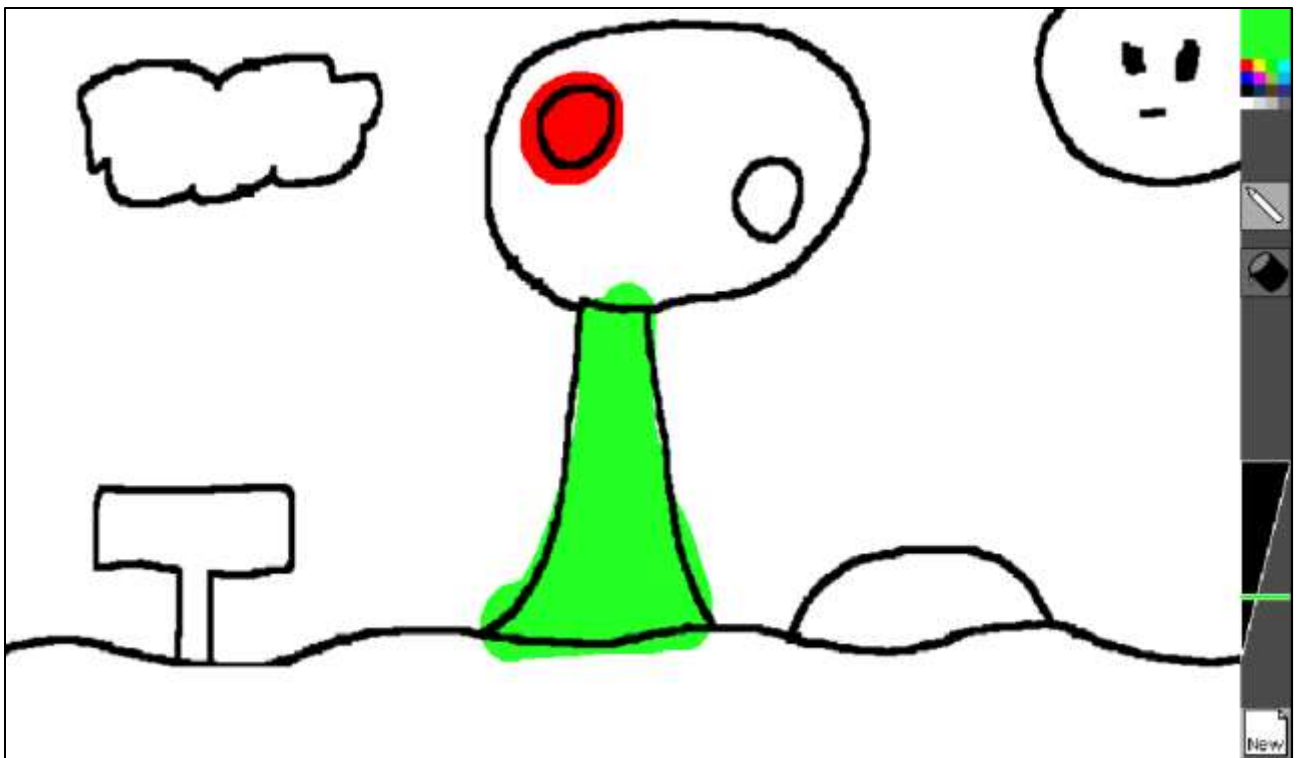


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UNITYCODER.COM

MOBILE PAINT



Mobile Paint

Table of Contents

INTRODUCTION	2
FEATURES	2
LIMITATIONS.....	2
REQUIREMENTS.....	2
FILES IN THE PACKAGE	3
USAGE INSTRUCTIONS	4
KNOWN ISSUES	9
SUPPORT & FEEDBACK.....	10

Mobile Paint

INTRODUCTION

Simple painting program, optimized for mobiles, supports multi-touch.

(Can be also used with mouse, code is just commented out)

FEATURES

- Optimized texture painting (much faster than SetPixels, using new 4.3+ features)
- Multi-touch support (paint simultaneously with many fingers)
- Works with Unity Indie & Pro
- Simple painting demo included (see also .apk demo download in the blog)
- Overlay texture on canvas
- Flood fill
- Palette image color picker
- Custom brushes

LIMITATIONS

- Cannot draw all the way on image borders
- Custom brush image is tilted (if you want it to be straight, make it as tilted image originally)
- Drawing fast movements with custom brush won't connect the lines as in pencil mode
- You will need to modify existing C# codes if want to add custom features
- Currently canvas image is just for display, it cannot be filled or painted

REQUIREMENTS

- Unity 4.5 or newer (indie or pro)

FILES IN THE PACKAGE

Files inside the “**MobilePaint/**” folder:

FOLDER / FILE	INFO
/Documentation/ release_notes.txt	Short notes about what is new/changed
/Documentation/ MobilePaint.pdf	(This pdf)
/Materials/Brushes/*	Custom brush samples
/Materials/Mats/CanvasMaterial	Material for the drawing plane
/Materials/Mats/CanvasTextureMaterial	Canvas with texture mask (layer image)
/Materials/Mats/Shaders/canvas	Simple texture shader
/Materials/Mats/Shaders/canvasTexture	Simple texture shader, with mask image
/Materials/UI/*	Example GUITexture images & buttons
/Materials/Palettes/color_palette_sample1	Example color palette *Note: must have [x] read/write enabled
/Scenes/scene_MobilePaint	Example scene (try to build it on your device)
/Scripts/AdjustBrushSize	Example script for brush size
/Scripts/ClearButton	Example script for calling ClearImage()
/Scripts/CloseColorDialog	Closes the color dialog
/Scripts/ColorPicker	New color picker from palette guitexture
/Scripts/CustomBrushDialog	Opens modal brush “window”
/Scripts/CustomBrushPicker	Selection grid for custom brush picking
/Scripts/GUIScaler	Example script for scaling GUITextures based on device resolution
/Scripts/GetStartColor	Gets initial paintcolor for color preview guitextures
/Scripts/MobilePaint	Main script for drawing
/Scripts/PaletteDialog	Opens modal palette “window”
/Scripts/ToggleMode	Swaps between draw & flood fill modes

USAGE INSTRUCTIONS

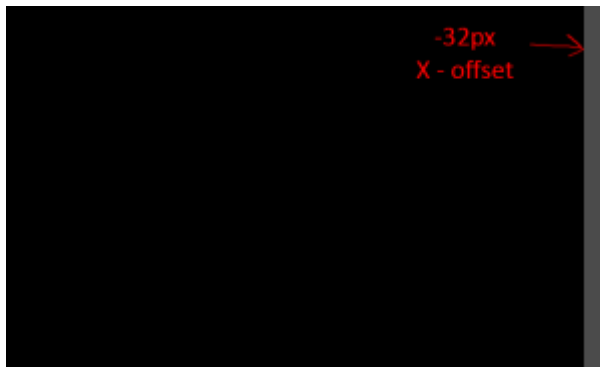
Getting started

- Try building the included "scene_MobilePaint.scene" in your mobile device.
- Check performance (you can use this FPS counter:
<http://wiki.unity3d.com/index.php/FramesPerSecond>)

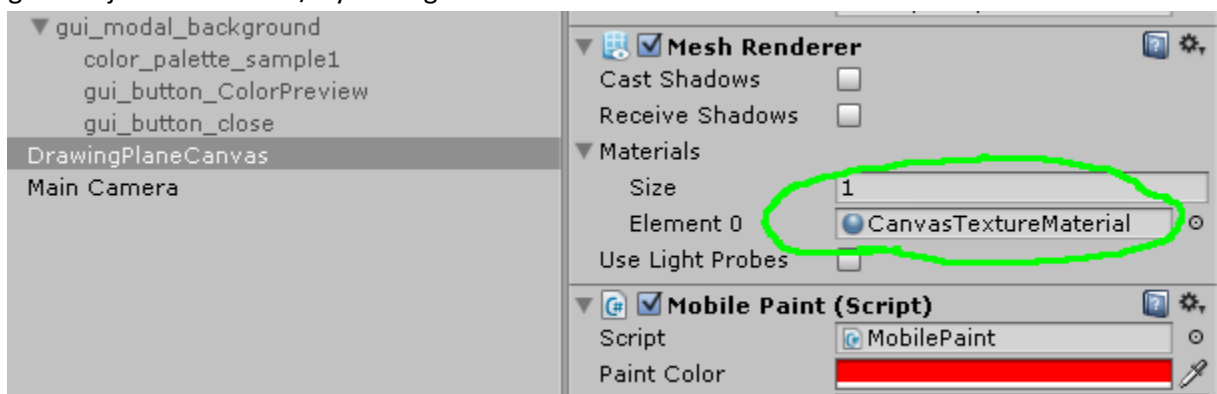
(usage instructions continued in the next page..)

Settings

- Select "DrawingPlaneCanvas" gameobject from Hierarchy
- MobilePaint script has few public variables:
 - **Paint Color** : the initial color to paint with
 - **Resolution Scaler** : 1 = full resolution, 0.5= half resolution (faster) , 0.25 = quarter resolution (event more faster), and so on.
 - **Brush Size** : Initial brush size
 - **Brush Size Min** : Minimum brush size
 - **Brush Size Max** : Maximum brush size
 - **DrawMode** : 0=drawing, 1=flood fill
 - **ScreenSizeAdjust** : Leaves space for UI (default value is x=-32, y=0, that means, right side of the screen has -32 pixels removed from painting area. *This value is automatically scaled based on GUIScaler calculations, so in HD devices it would end up being more than -32px)
*example: Original screen size 800x480, becomes: 768x480

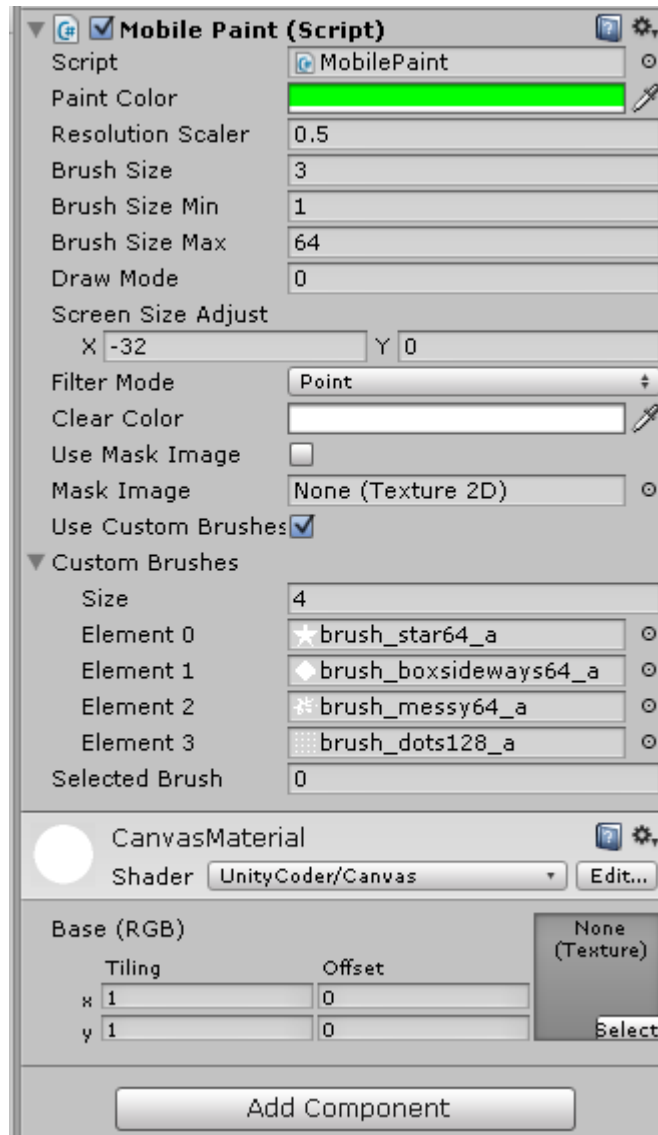


- **Filter Mode** : Texture filter mode ("Point" is best & fastest)
- **Clear color**: Color used for new image (clearing)
- **[] Use Mask Image**: Should we assign mask/layer image?
- **Mask image**: Assign your image here (example included "sample_linedrawing1.png").
*Note: You must assign "CanvasTextureMaterial" material to "DrawingPlaneCanvas" gameobject to use mask/layer image.



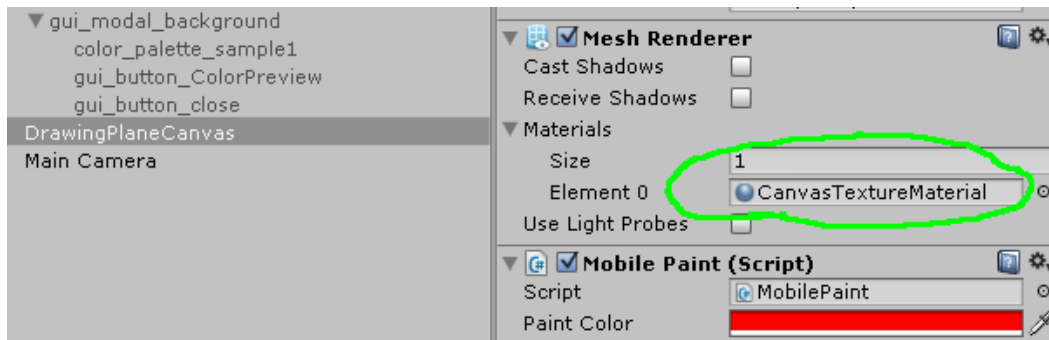
- **[] UseCustomBrushes**: Is custom brush tool enabled
- **CustomBrushes**: Array of custom brush images.
*Note: Read/write must be enabled for the texture (from importer settings)

- Settings view:

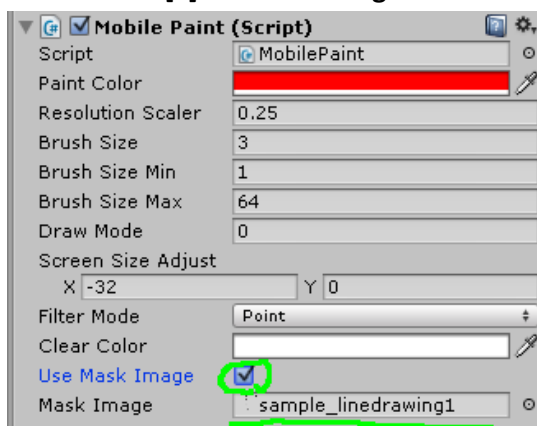


Using mask texture

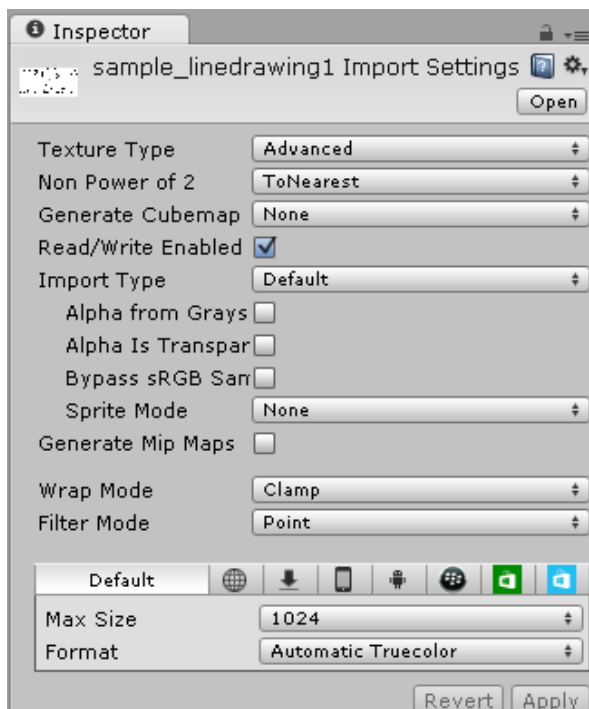
- Select "DrawingPlaneCanvas" gameobject from hierarchy
- Check that "CanvasTextureMaterial" is used on the mesh renderer:



- Then enable [x] Use Mask Image from "DrawingPlaneCanvas" gameobject and assign mask image:



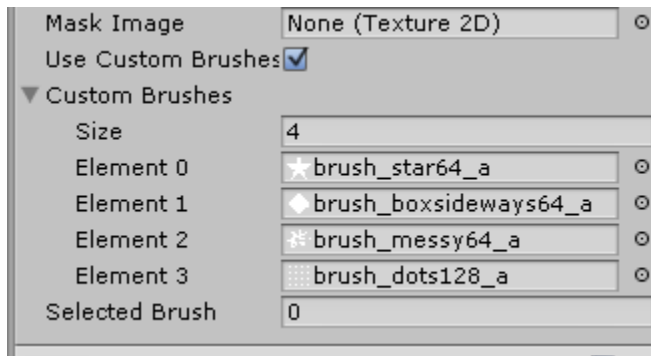
- *Note: Mask texture needs to have [x] Read/Write enabled from inspector:



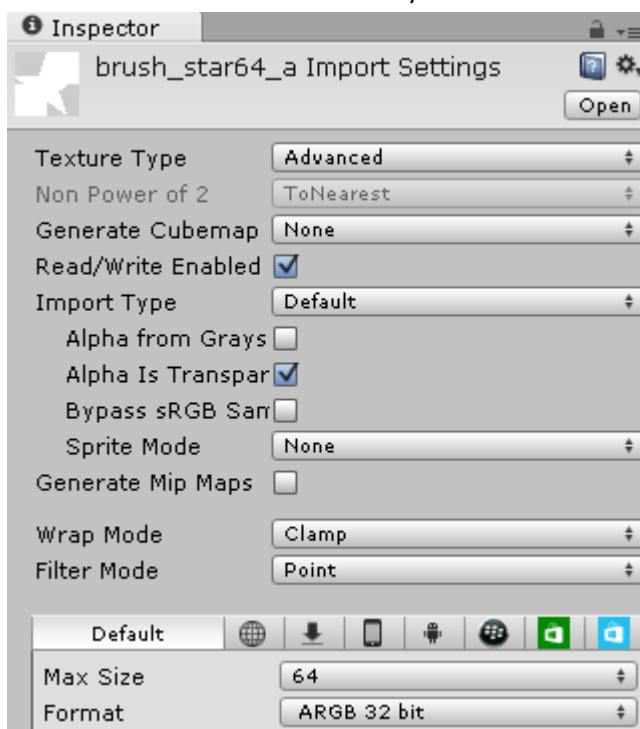
- *Note: Alpha is not used from mask texture (see example image at "Sample images/" folder)

Using custom brushes

- Enable [x] UseCustomBrushes from “DrawingPlaneCanvas” gameobject
- Assign textures into CustomBrushes array:



- Make use the textures have Read/Write enabled from import settings:



Other notes

- If you add your own GUITexture elements whichs are NOT meant to be clicked, set their layer as “Ignore raycast” (otherwise they would block the drawing raycast)

KNOWN ISSUES

- Corners cannot be painted with a big brush (see screenshot below)
Reason: for optimization reasons, clamping happens inside ClampBrushInt()



SUPPORT & FEEDBACK

Send comments / feedback & requests to my blog:

<http://unitycoder.com/blog/2014/07/15/asset-store-mobile-paint/>

**Unity asset store forum link will be added there later*

Email: support@unitycoder.com

- Add product name: "Mobile Paint" to the subject
- Include Asset Store invoice number in the email
- Include screenshot(s) if something strange is happening (helps solving the problem)

Or, Using Unity3D forums private message:

<http://forum.unity3d.com/members/mgear.22727/#info>

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