What is Scratch Card?

This is easy-to-use asset, which allows you to create scratch card objects. So all you need it's to add prefab to scene:

- **ScratchCard.prefab**

choose Main Camera, set Sprite to set your scratch object and Erase texture.

This works well on Personal and Pro Unity, suitable for WebGL, Standalone and mobile platforms. And all this takes less then 1 mb on your drive.

Quick Start

As mentioned above, to create scratch object, add prefab «**ScratchCard**» from «Assets/ScratchCard/Prefabs/**ScratchCard.prefab**», you need set Main Camera, Sprite for scratching, Texture for Eraser and Scratch Surface will have behavior! That is all!

ScratchCardManager script

ScratchCardManager script creates and configures ScratchCard. **ScratchCardManager** script has such parameters:

- **Main Camera** - it's Main Camera of scene;
- **RenderType** - render type of scratch card: MeshRenderer, SpriteRenderer or CanvasRenderer;
- **ScratchSurfaceSprite** - sprite for scratching;
- **EraseTexture** - texture for erasing (erasing brush);
- **Card** - reference to **ScratchCard** script;
- **Progress** - reference to **EraseProgress** script;
- **MeshCard** - reference to GameObject with <u>MeshRenderer</u>;
- **SpriteCard** - reference to GameObject with <u>SpriteRenderer</u>;
- **ImageCard** - reference to GameObject with <u>Image</u>;

After instantiate **ScratchCard.prefab**, you need set **Main Camera**, **CardType**(optional), **ScratchSurfaceSprite** and **EraseTexture.**
**ScratchCardManager** script has such methods:

`void Awake()` - setting up the scratch card;
`public void SetEraseTexture(Texture texture)` - setting up the erase texture for the scratch card;
`public void ResetScratchCard()` - reset scratch card.

Note that if you use Canvas, ScratchCardManager.ImageCard object must be child of Canvas.

If you want to use ScratchCard images with transparent areas, for a more accurate progress result you should choose **ScratchCard/MaskProgressCutOff**

shader as shader for **ScratchCardManager.MaskProgressShader** field. Also you can setup material for getting better result of progress calculations, using Cut Off field. Cut Off field value is using to compare sampled RenderTexture alpha values with sampled Source Texture alpha values.
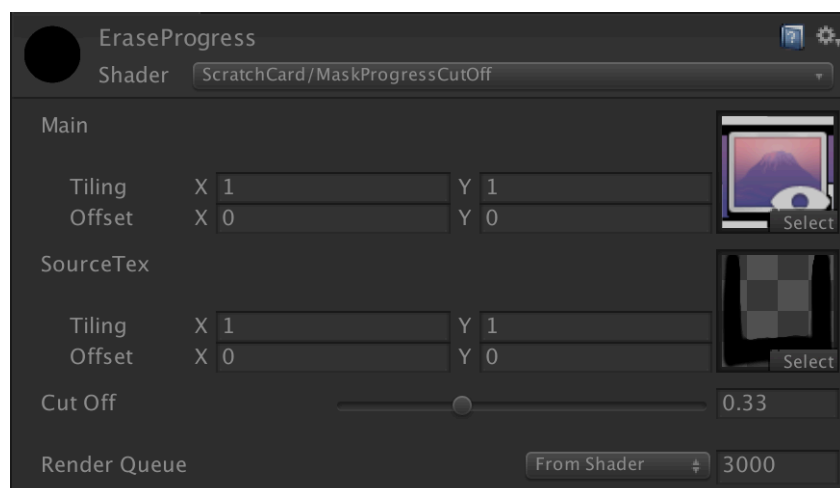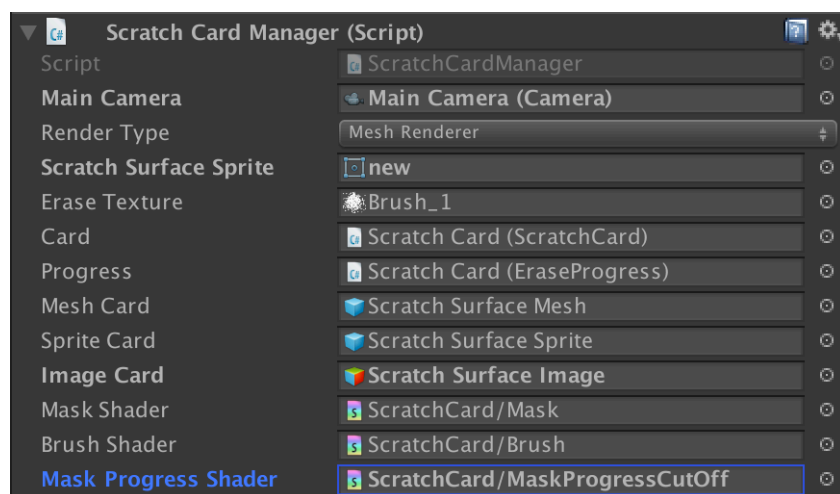
ScratchCard script

ScratchCard script creates and configures RenderTexture, and draws the quads in RenderTexture. You can use SpriteRenderer, MeshRenderer or Image for scratch effect.

ScratchCard script has such parameters:
- **Main Camera** - it's Main Camera of scene;
- **Surface** - transform of Surface object, which can contain Render Component;
- **RenderTextureQuality** - quality(size) of RenderTexture texture: High, Medium, Low;
- **Eraser** - Material of Eraser(brush);
- **Progress** - Material of Progress;
- **Scratch Surface** - Material of Scratch Surface.
- **Reset** - Reset Scratch card to original state.

EraseProgress script

EraseProgress script creates and configures RenderTexture, and calculate amount of 15x15 pixels alpha-channel from ScratchCard RenderTexture. Using this script can affect on the performance of device.

ScratchCard script has such events:

`public event ProgressHandler OnProgress;` - invoke, when user scratch surface;

`public event ProgressHandler OnCompleted;` - invoke, when user complete scratch surface.

Multiply scratch cards

If you want to use a few scratch card at the same time, you need choose specific Scratch Surface Material for **ScratchCard** script for each scratch card or set it to «None» - in that way, **ScratchCardManager** will create it automatically.

WebGL Build

By some reason, WebGL may ignore .shader and doesn't add files into build. To fix it, add shaders to Graphics Settings or move them to «Assets/Resources/» folder.

Please let me know if you have any questions.

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