Self-Portrait Collage (Due 1/18)

Create a "self-portrait" in Unity through found 3D objects. (Unity primitives are fair game too!) The portrait can take whatever form you want, as long as it is a collage of objects. It doesn't literally have to resemble of your face, in fact, it's more fun if it doesn't. It can be a sculpture composed of objects you like or that represent things that are important to you.

Assignment

1. Create a new Unity project called "YourName_Portrait". (Keep track of where you save the project - you will need to know that when submitting the assignment.)
2. Create the portrait in a new scene. Rules:
   - Don't make any 3D models yourself. See "Finding Free 3D Models" section for info on how to find models. Your piece should have at least 3x distinct 3D models (but more is better). Scale, rotate, translate, duplicate, etc. them as you see fit. Modify the model's materials to make it your own. Embrace glitches. (Using primitives is okay, so long as they have a texture on them.)
   - Don't forget lighting. Use at least 1x directional light, 1x spotlight and 1x point light. Play with the color and intensity of the lights. Use light to create a mood.
   - (Bonus) Change the ambient lighting as well. I.e. in the "lighting" window: remove the skybox & change the ambient light settings (reference - see "Scene Tab"), and then in the camera's settings, change the background color (reference).
   - (Bonus) Add some rigidbody physics to make the portrait dynamic. E.g. you could have some objects spin in place.

Submitting the Assignment

Before the start of class on 1/18, direct message me on Slack:

1. A screenshot of your portrait.
2. A zip of your Unity project folder. Note: the project folder is the one that contains `Assets`, `Project Settings`, etc. If you share a zip of the `Assets` folder itself, I won't be able to see your project - it needs to be the folder that *contains* the `Assets` folder.

I'm @mikehadley on Slack. To upload a zip file or image to Slack, simply drag and drop it from your computer into the direct message window.

References

- The Dada technique of photomontage - a form of collage that used mass media publications as material. Examples: Hannah Höch, Raoul Hausmann
- Alfredo Salazar-Caro is a New Media artist who has worked with new media portraiture, 3D scanning and the uncanny valley: Triptych 1.0, Portrait of Elizabeth Mputu, Grecco Brother's Portrait, Fourth-Dimensional Self
- Katamari Damacy - a game that has nothing to do with portraiture, but is all about "collage" in a way.

Finding Free 3D Models

Disclaimer: we haven't talked about 3D models much in class yet, so if a particular file gives you trouble or doesn't import properly, skip it! There are a lot of reasons why a model might not work, so I don't want anyone getting lost in those complications.

You can find free 3D assets from:

- TF3DM - all sorts of free 3D models. Look for fbx/obj/dae files. Those have the best chance of being imported well in Unity.
- Google's 3D Warehouse - more geared towards buildings. Download the dae (Collada) files.
- The free "3D Models" section of the Unity asset store (link). A decent range of models, all built specifically for use in Unity. (We haven't talked about how to import from the asset store yet, but you can figure it out on your own.)
- TurboSquid - has an okay selection of free models. Use the advanced search features to limit the price to free (example search). Again, look for fbx/obj/dae files.
- Blend Swap - a site with lots of free Blender models. If you know what you are doing and you have Blender installed, this can be a good option.

Unity has the capability to read many different types of 3D model formats (see this guide). For this assignment, look for files that are either:

1. `.fbx` (Filmbox)
2. `.dae` (Collada)

3. `.obj` (Wavefront Object)
4. `.blend` (If you have Blender installed!)
5. `.ma` / `.mb` (If you have Maya installed!)