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Art Bible

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Pillars

1. As a player, I want to feel electric
2. As a player, I want to feel like I was left behind in an abandoned sci-fi facility
   a. **Use design theory of convergence, the experimental nature of the facility means things don't visually look like they fit because the optimal solution isn't discovered and it is an unstable environment**
3. As a player, I want to feel as if I'm crawling out of hell
4. As a player, I always want to be able to see my way out
5. Everything needs to be abstractable into simple shapes

Moodboard

https://sheridanc-my.sharepoint.com/:i:/g/personal/chanwils_shernet_sheridancollege_ca/EbWUShT9RllErhunuD-Nc1UBBLz1HzVHMA_75QjDANEmLQ?e=8wToJ5

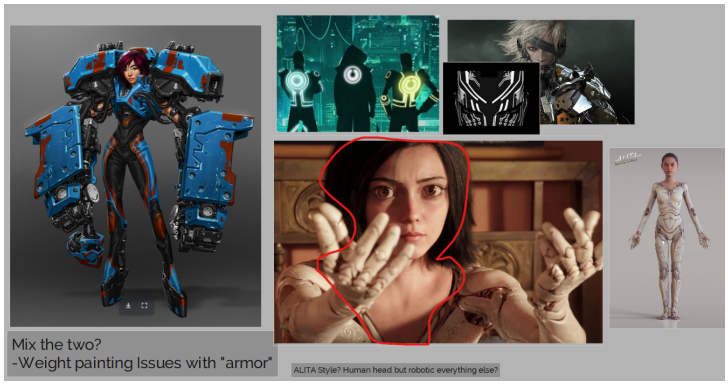
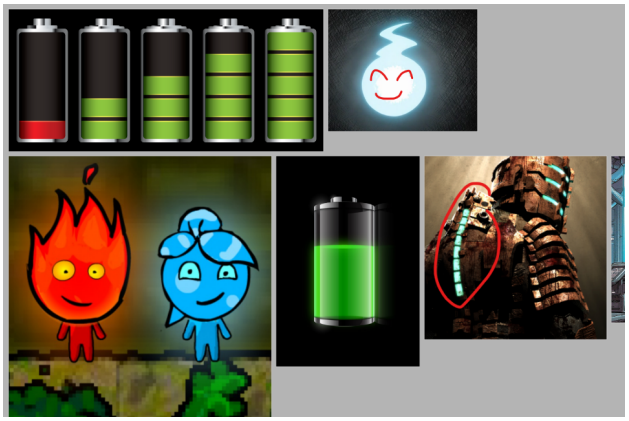
Key References

Here you will find the visual references to help make decisions during development. For instance, if visuals are inciting discussion, we will refer to this section.

Materials

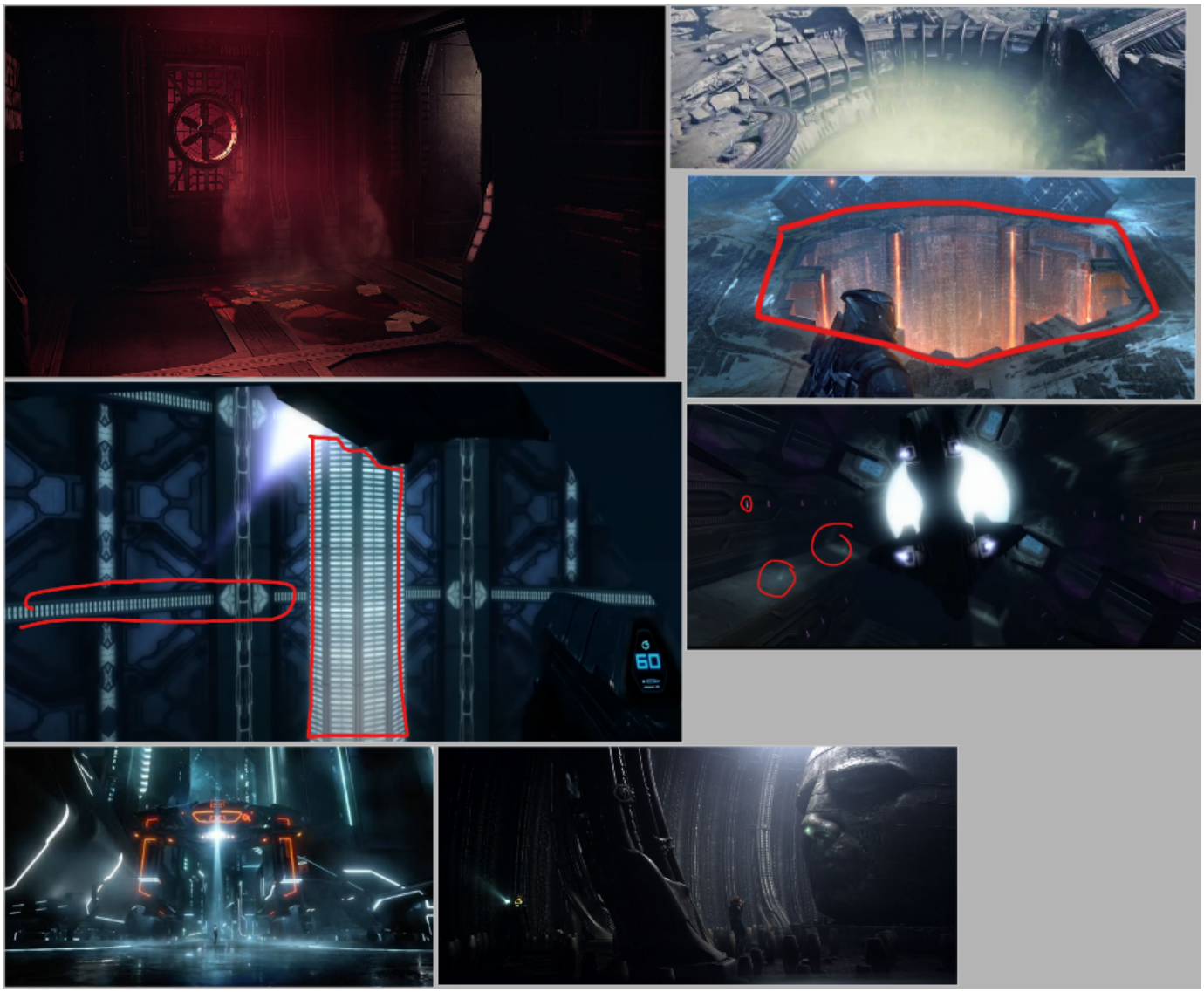
1. Ensure readability through non-PBR textures and unreflective materials.

Characters

Real World	**Electric**
1. Experimented on 2. Mechanical physical body - powered by Electric character 3. Cyborg - Human silhouette	1. Entirely electric 2. Stored within a battery attached to the Real World character 3. Younger sibling
	

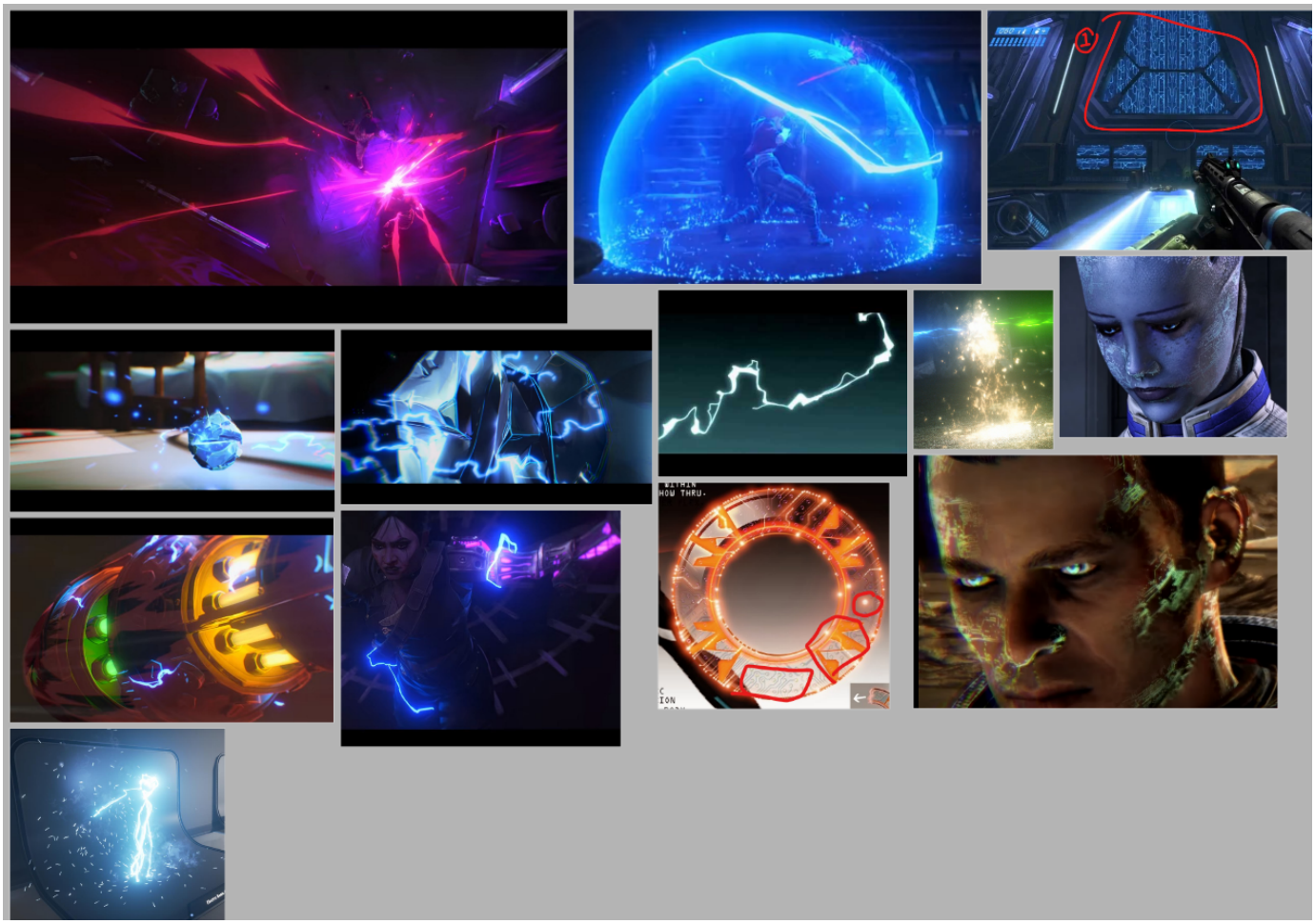
Environment - Sci-fi

1. Dark and ominous
2. Limited lighting & Limited color
3. Electrical circuits populate every surface

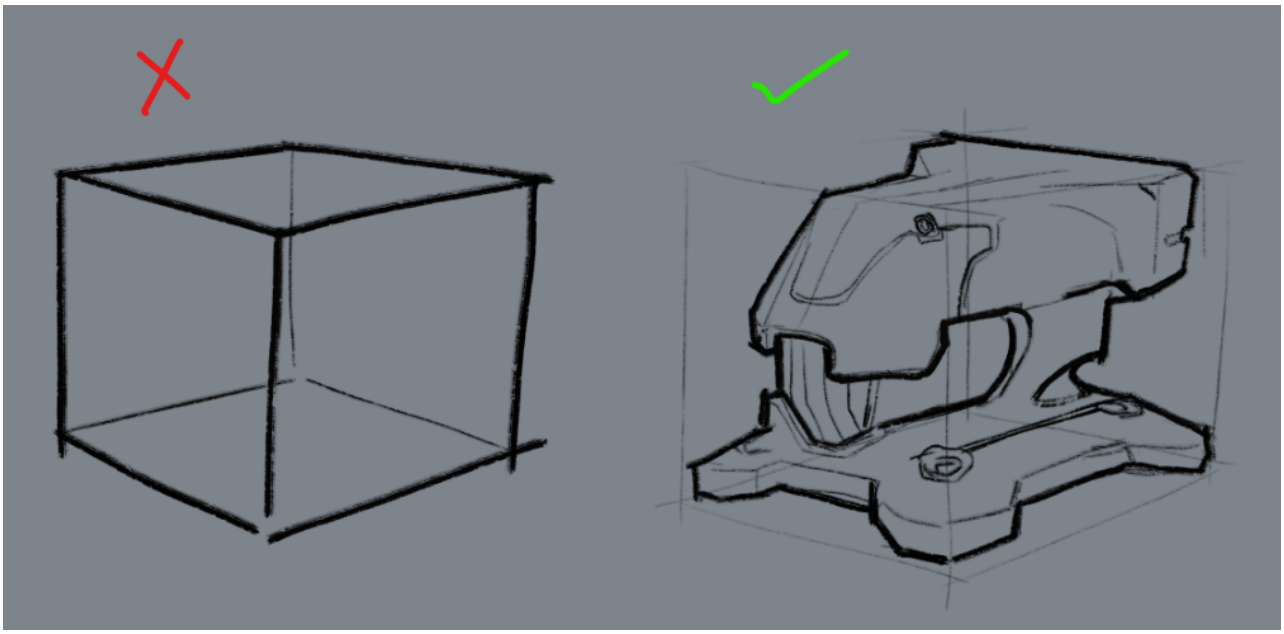


VFX

1. Electrifying and themed in that way
    a. e.g. circuits, sparks, electricity
2. Animated with a cadence on how they move
3. Shape based
    a. Stylized ala Riot's ARCANE

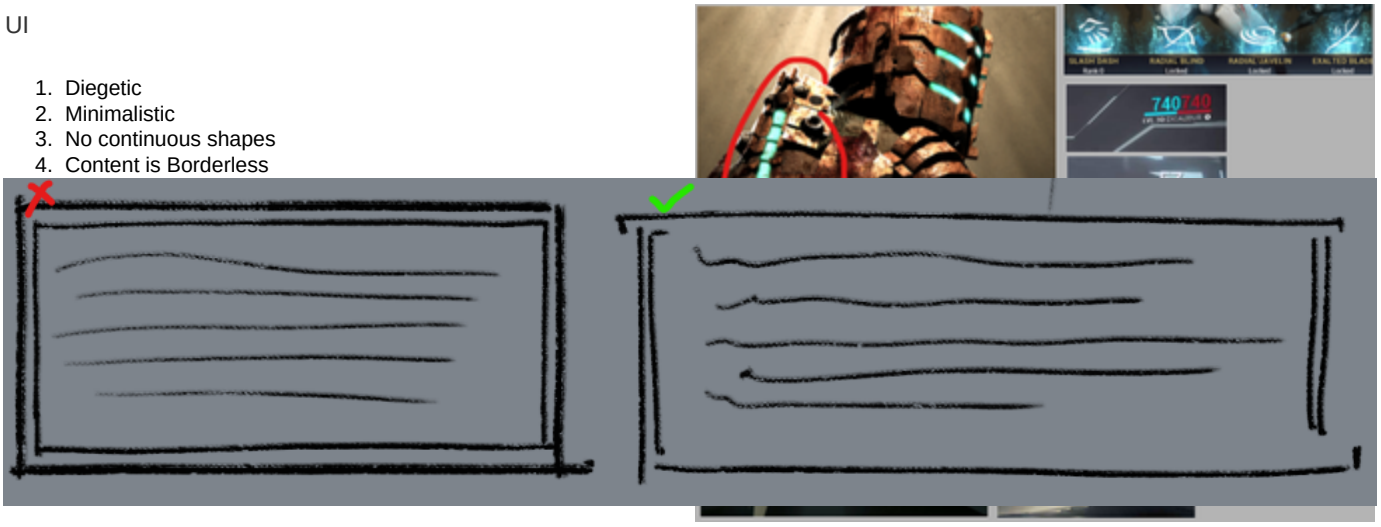


Props

1. Break the box
   a. 
2. Must be shocking and relate to electrical components
3. Safe = round, dangerous = angular

UI

1. Diegetic
2. Minimalistic
3. No continuous shapes
4. Content is Borderless



File Structure

Data oriented:

3D

- Models
- Source Files
- VFX-Shaders
- Animations
- Textures & Alphas
- Materials

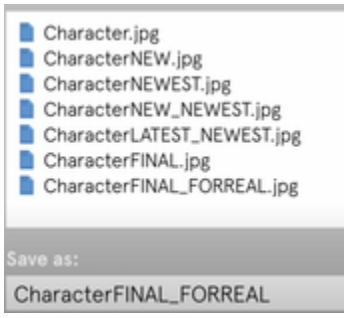
2D

- UI
  - Sprite sheets (UI)
- Marketing
  - Splash screens

File naming conventions

Rules

1. Everything is lower case
2. **No spaces**
3. Use "_" between the parts of the file name
4. DO NOT do things like
   a.



   b. Use version control + comments and we can have just one file to maintain.

Parts of the file name

- Subject matter
- Object
- Extension

“subjectmatter_object_description.extension”

e.g. character_electricguy.psd

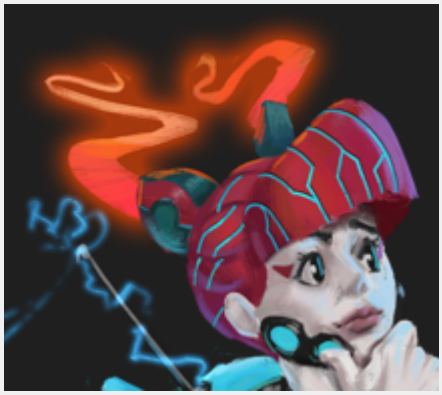
Interactable Objects

- Only things that **can be interacted with** will get **EMMISSIVES** and Bloom
- ON VS Off
  - Using lights and color
- Wires that are turned on ARE GREEN
- Wires that Surge interacts with are visually distinct and Blue

Separating Visuals By Character

Data:

- Use an **Orange** color/one that matches her Pigtails



- Focus on adding lights AROUND the objects like switches
  - Like little LEDs on the floor around the switch as seen below
  -
- Brutalism - Data is strong and can manipulate the world by forcing it to bend to her will
  -

Surge:

- Focus on adding emissive ON the objects
- **BLUE** relates to Surge
- **Scale things down** - the electric world must be much smaller to increase difference

Polycount Limits

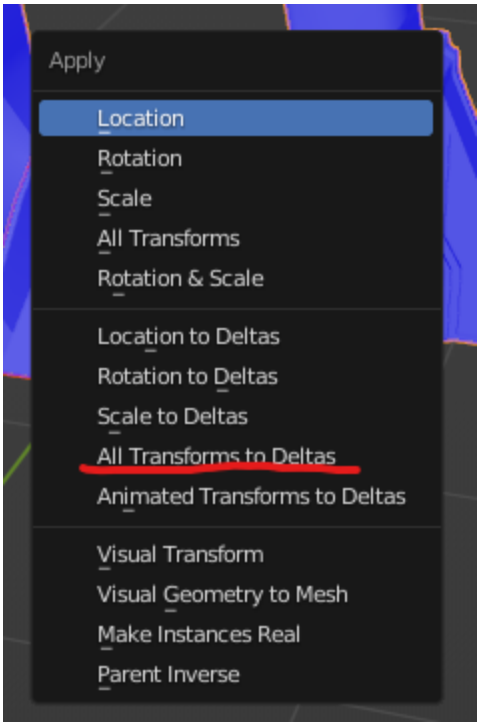
There is no hard cap as long as it you consider where normal map baking and using high quality textures (e.g. generating them from substance painter/designer) which should hold most of the visuals.

Will update once designs are fleshed out more.

- Create assets modularly
  - Consider how things will blend together between edges, corners and at different angles that may be needed
  - e.g. our game's main environment is a cylinder so there should be consideration of the angle at which wall panels will meet
- Mesh LODs - Consider the level of focus that the player will spend looking at the asset
  - e.g. if its a object far away, get an LOD to load (figure out how to do this in Unity)
    - https://docs.unity3d.com/Manual/LevelOfDetail.html
    - Must hand make LOD meshes (see above resource)
  - **If a player will look at it with scrutiny and try to pick it apart, add more detail (tris, textures)**
    - e.g., DO NOT make a tiny coin (cylinder) that takes up 1% of the screen have 2,300 tris, it should be far less than that.

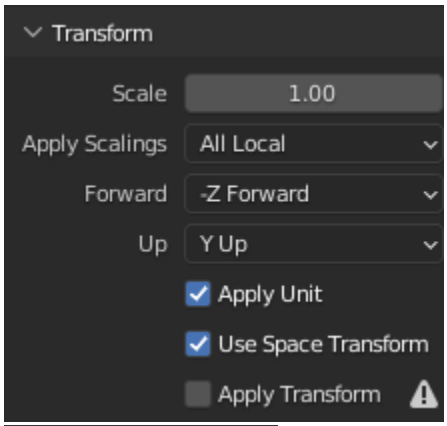
Blender to Unity

- **File Format: FBX** for anything with complex children
  - Ensure the origins line up within Blender and when exporting by applying "All Transforms to Deltas" instead of "All Transforms" because the latter will move your origin in Blender whereas the former maintains it.
    -

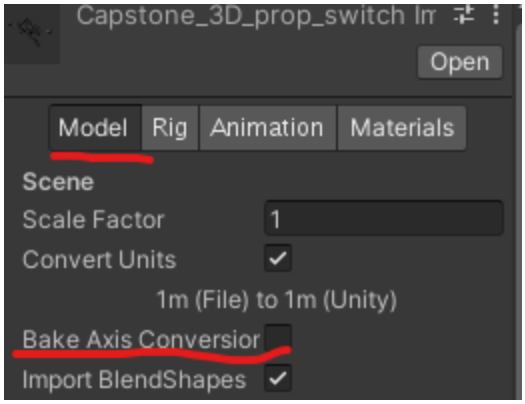


- and use “Pivot” mode in Unity
- onent FMOD Window Help

- Ensure that on Export, the asset is using +Y as the up vector, so export things in that way and In Unity Import, press “Bake Axis Conversion”



- Ensure asset is facing Y+ in Blender
-

- 

  2 Answers

  Sorted by: Highest score (default)

  1

  In a 3D environment there are several ways to orient the axes when you are referring to what is front, back, up, down. Blender and Unity (and other 3d apps) use different coordinate systems, where blender has +z pointing upwards Unity has +y.

  You will find that exporting from blender to unity handles the axes conversion so that the axes match the conventions used in each app, this is why the bone axes don't match what you expected.

  Unless you have trouble with your animations going wrong, the easiest solution is to get used to the two apps using different axis systems for the same models.

  To be technical blender uses the right-handed cartesian coordinate system with +z pointing up, this is more common in 3D CAD applications and matches placing a graph on the desk in front of you and raising a z-axis from it. It is also common for some 3D apps to have the z-axis pointing backwards as it matches with the z-depth that refers to the distance from the camera, and fits with having x0,y0 at the bottom left of the window.

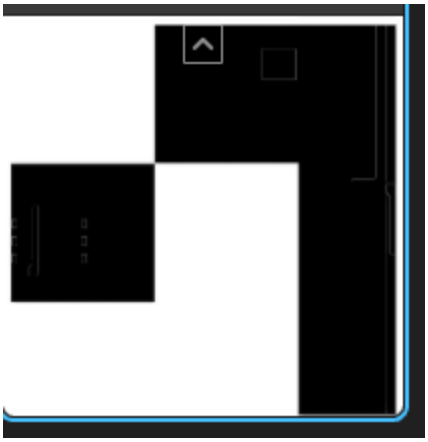
  I realized that choosing forward and up axis correctly is the key when exporting the FBX (From Blender in my case) When I choose forward and up axis in export settings in Blender and check the Bake Axis Conversion in Unity import settings, everything looks correct with rotation of (0,0,0)

  Tried on a model with complex hierarchy and lots of children layers. It actually works!

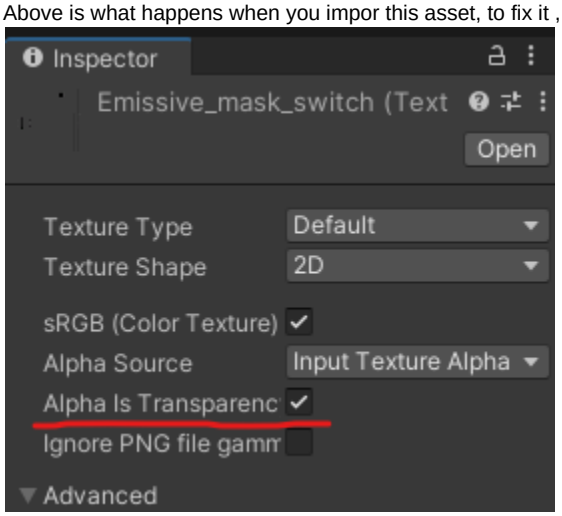
  So for assets you already have, importing it to Blender and exporting it again with correct settings would be the solution.

Emissive Masks:

1. Export a mask based on the UV information of each 3D asset
   a. It must be a PNG and the areas that are emissive need to be black while the rest is transparent

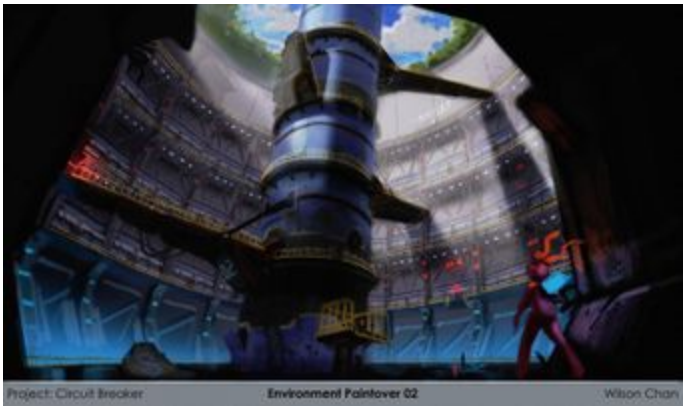


b. Above is what happens when you impor this asset, to fix it , select “Alpha Is Transparency” within import settings of the asset

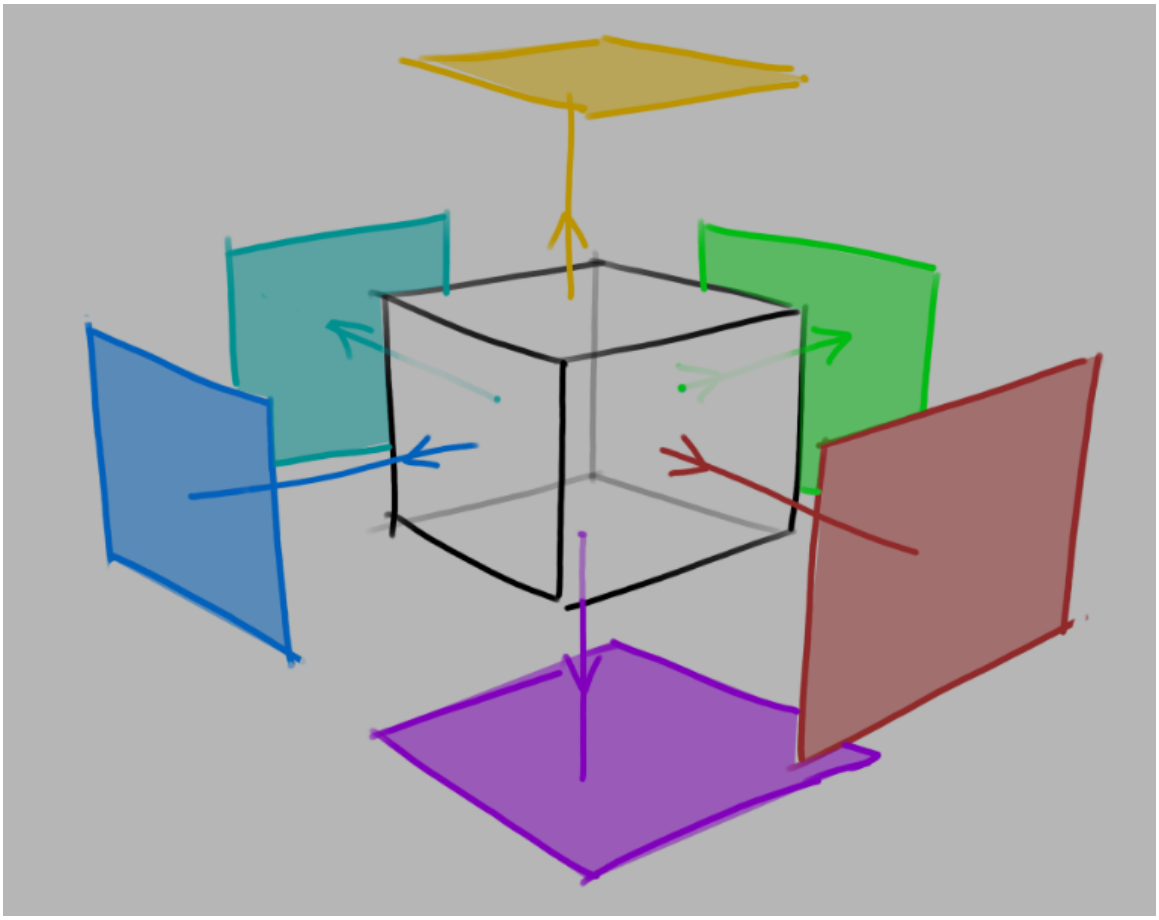
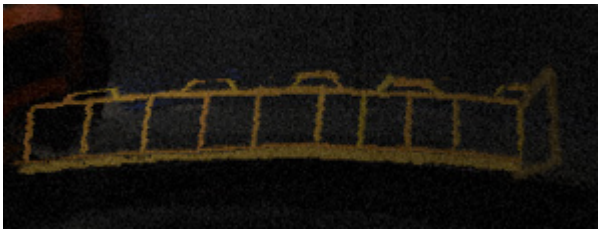
c. 

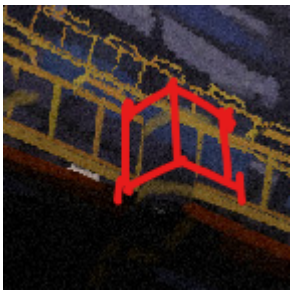
3D Asset List

Target Visuals:

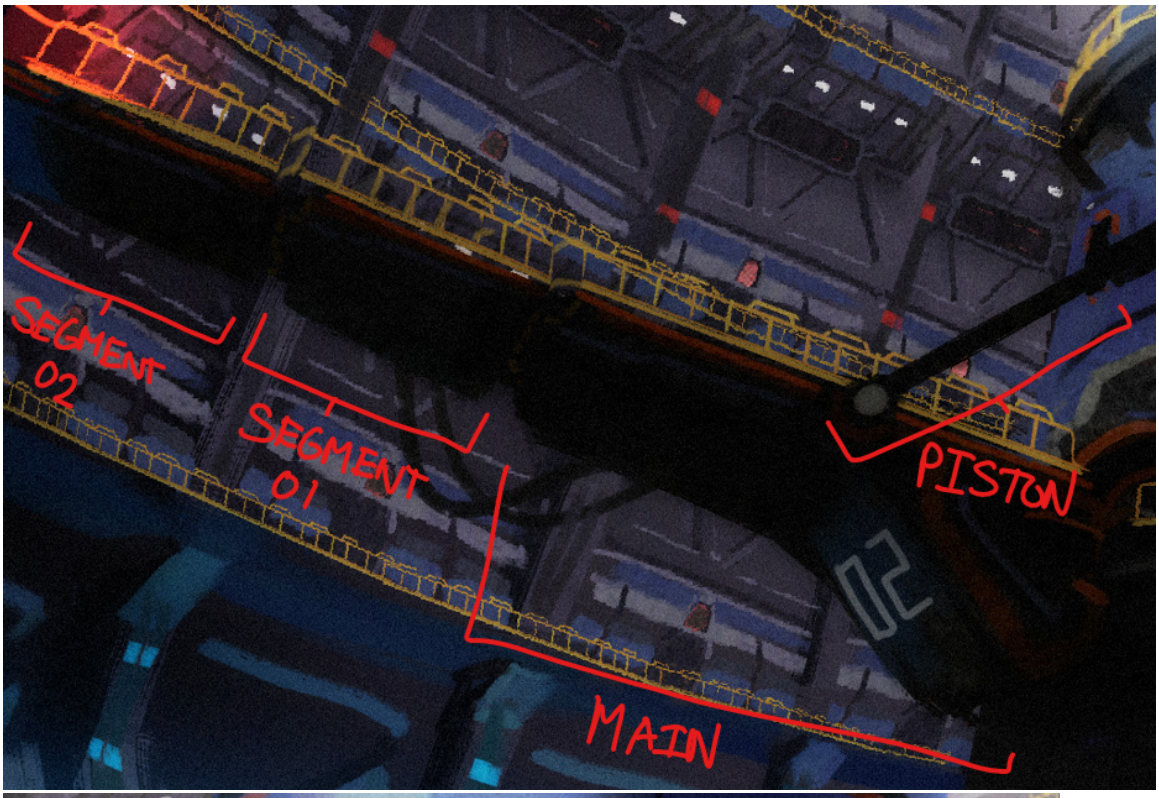
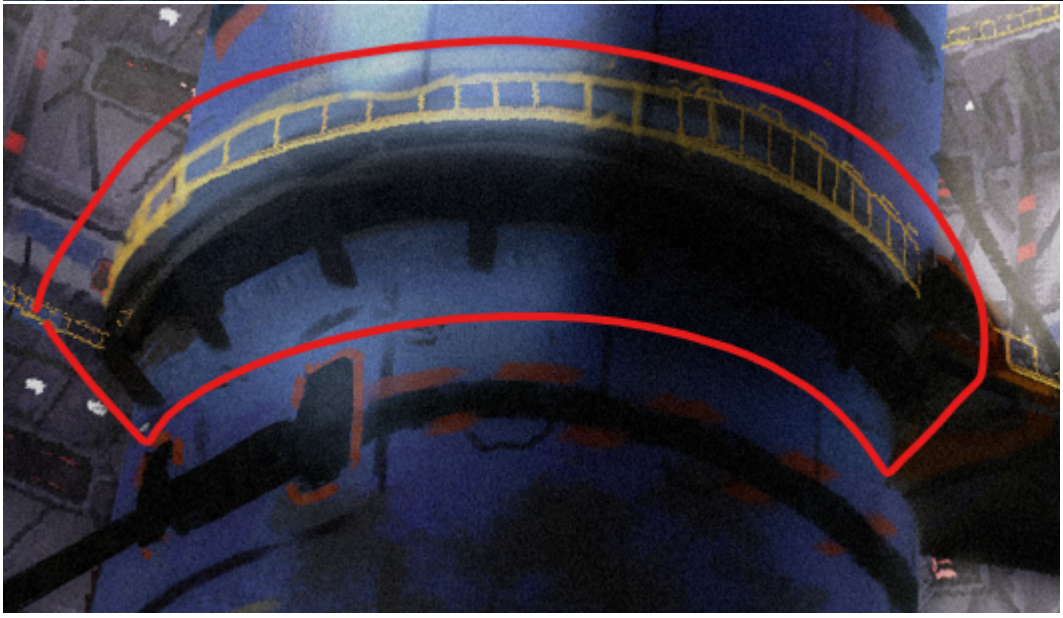


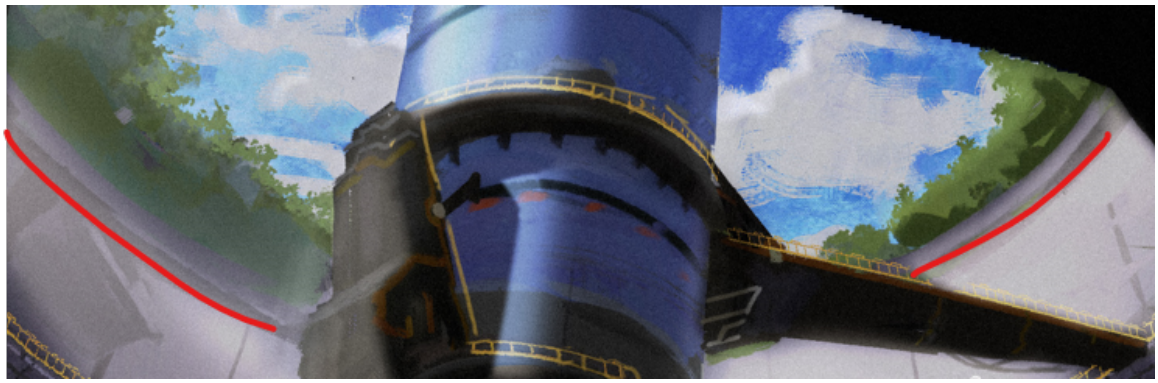
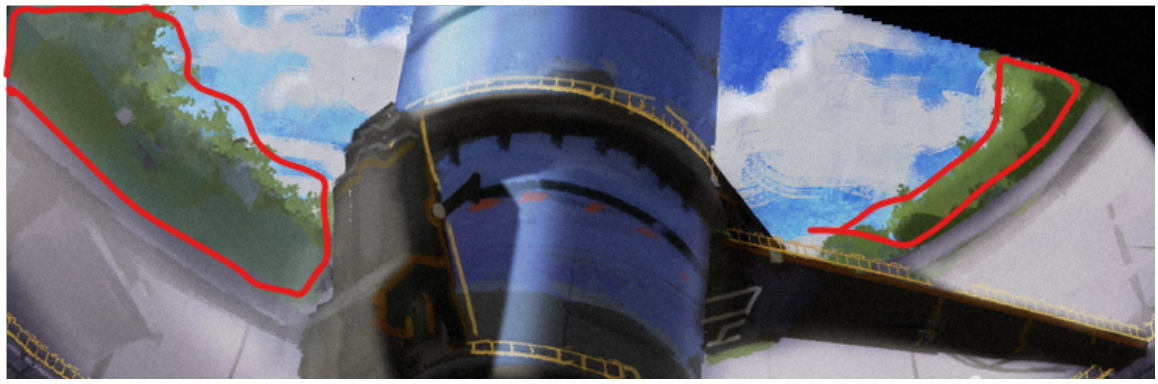
#	Asset Name	Asset Concept	Asset Descriptio
0	column_support_base		Used to transition the pillar from th connection t the ground /ceiling and pillar itself.
1	column_support_section		The repeata element to s on top of ea other to vary pillar their he
2	buildingBlock_floor		A tileable flo 1x1 game u
3	buildingBlock_flatWall		A tileable pla wall 1x1 gar unit.
4	buildingBlock_ceiling		A tileable pla ceiling 1x1 g unit with a texture of wi (May be unnecessary due to fog)

5	building Block _TBD		Free space
6	building Block _main		A cube whic faces are sourced fror following "buildingBlo variations th will match gameplay metrics and have differe uses per fac This is done we can have prefab flexib but also opti performance deleting chil objects that not visible ir world. We will assemble it within Unity prefab like tl Parent - Em Object • Child 0 building k_floor • Child 0 building k_flatW • Child 0 building k_ceilir • Child 0 building k_TBD • Child 0 building k_TBD • Child 0 building k_TBD
7	mainRoom_railing_segment		The repeata segment for yellow railing

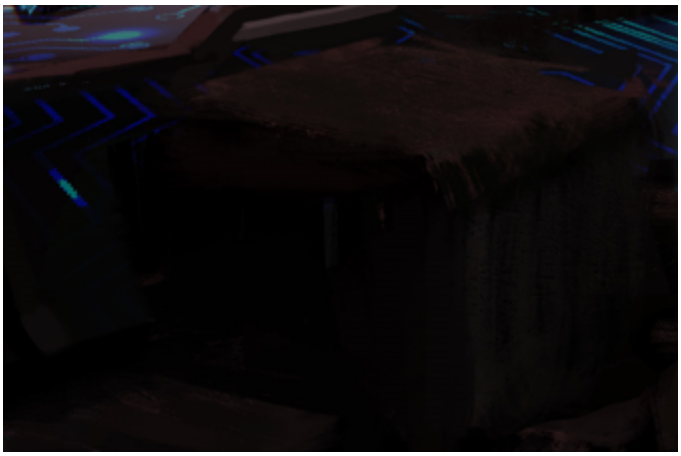
8	mainRoom_railing_elbow		The elbow connectors, with pipes in real world
9	mainRoom_railing_playerOpening		Like a metal fence gate t opens, large enough for industrial palettes and people to en and exit.
10	mainRoom_railing_broken_01		Used to indi damage to railings
11	mainRoom_centralColumn_base		The part of t column that connects to main platfor Floor 01

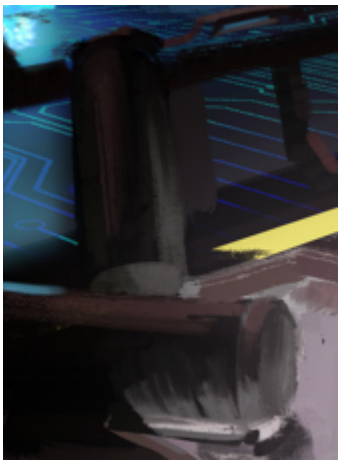
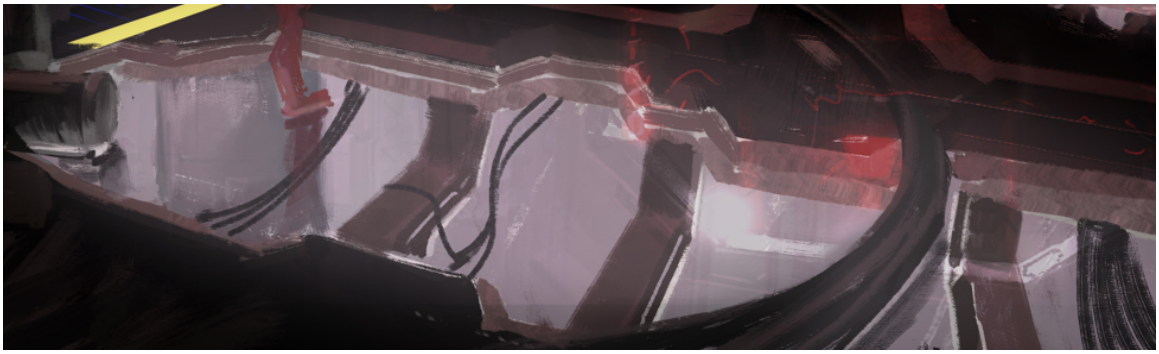
12	main Room _central Column _Tilable_01		Each needs have the indented po be a “rail” th the pistons travel along the bridge rotates. **Each floor a bridge ex the first on**
13	main Room _central Column _Tilable_01		This one connects to glass ceiling the main roo and is where the scientist lived.

14	main Room _bridge	 	The bridge needs to be to have a pis connected to and can be raised and lowered like draw bridge. It needs to a rotate aroun the central column (bric and circular connection t Therefore a is required v those consideratio mind.

16	mainRoom_glassCeiling		A one way g ceiling that i **ck** so nothin from above ground can through. Lik triple the CN tower's glas floor thickne
17	mainRoom_skybox		Relates to mainRoom_ Ceiling and should have clouds with peaceful sky instill a feeli hope.
18	mainRoom_skybox_trees		Trees prese catching ligh from the sur instill hope.
19	mainRoom_elevator		Must be LAR as industrial equipment a supplies we moved betw floors with it

20	main Room _wall		These segm will exist throughout a have an LED panel showi the room number. Only the puz rooms have them lit. The white lig at the top wi bright when those floors powered on.
21	main Room _base Wall		
22	main Room _baseSupport		These conn the entire structure to basement a has wires leading from main power source to all rooms.

23	mainRoom_pillarAndWire		These will change colo the facility g powered up more.
24	mainRoom_floor		This is circu and should reflective to show wetne and puddles
25	sefornalLogo		Attached to panel we ca remove and place in area @ Joshua will update t logo in the future.
26	prop_box		A simple bo set dressing

27	prop_cylinder		A simple cylinder for s dressing
28	floor_glass		A 1x1 unit “window” tha shows how l up they are Must be able connect to th other floor ti
29	pillar		These will b used in addi to the larger support pilla One use cas the support pillars to fra exits and entrances.
30	surge_emotion_angry		3D assets T Surge’s vers of the emoti VFX where l transforms i something th is symbolic o that emotion e.g. Flame
31	surge_emotion_sad		e.g. Cloud

32	surge_emotion_annoyed		e.g. Annoye Anime symb
33	surge_emotion_affection		e.g. Heart
34	surge_emotion_happy		e.g. Sun/flov
35	surge_dissolve_shader		Used when Surge transi between emotional st
36	Data'reimport		Separating h forearm ass and duplicat so it can be hidden wher using stretch arms
37	data_arm_VFX_rocket		Used when arm launche
38	data_arm_shader		Rendered o line rendere signify distar /length of th arms

39	shader_electricPanel_roots		To signify a landmark for players whe they need to reach.

Game Art Aesthetic

User Interface Art Aesthetic

Elements Art Aesthetic

Environment Art Aesthetic