

Building Procedures

o General

- Disable Shift lock
- Do not build whole maps in blender. Small 3d assets are fine.

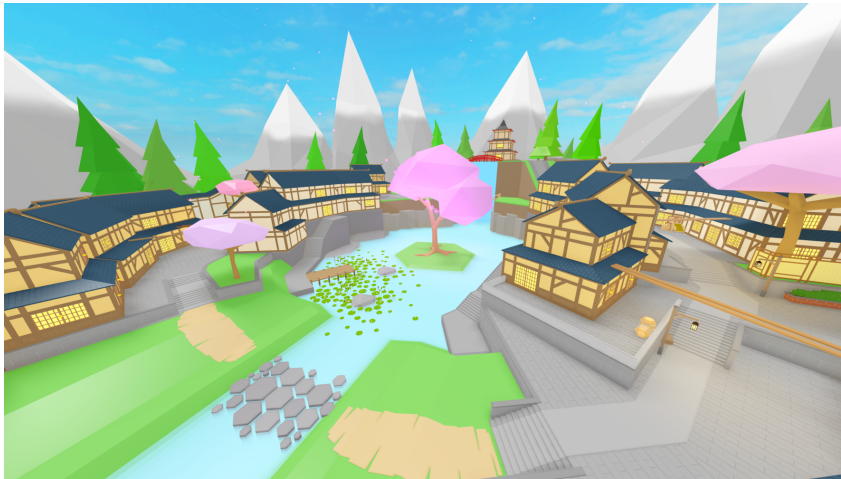
o Organization

- Group assets and parts together in folders. Attempt to group them at the smallest, yet reasonable level possible (A folder for a room is good. An individual folder for every part in a room is not).
- In general, group interior builds (ex. inside a house, spaceship) according to rooms; group exterior builds (islands, villages, parks) according to distinctive areas of the map.
- + There should be 4 categories for each map
 - Environment: contains static assets that DO NOT CHANGE in game Ex. trees, stones, or beds that do not change or move
 - Land formation
 - Vegetation
 - Building or Structure
 - Scriptable (gameplay): contains anything players can interact with or could require coding. Ex. doors, teleporters, togglable lights, vehicles, etc.
- + More organizational tips (Please ask if unsure)
 - Grouping of scriptable objects can be similar to the grouping of environmental objects
 - When using a similar model various times, it is best to create a template for that model and use cloned copies of it in the map. This will allow for quick changes for all the copies simply by altering the original template. Imagine changing the color of the original door and then those changes are immediately replicated across all doors.
 - When using a similar model various times (example: doors), organize them into a separate folder and add a collection tag to it.
 - Significant shared features of the map that are scripted can be grouped together. Ex. if in an interior build, the doors are part of every room, and all of these doors need scripting, then group them together. If a door in such map is not intractable, put it in the environment folder of the room.

❖ Example:



❖ Map (All indents represent one folder or child under parent)



❖ Environment (Entire Map, organized based on location)

- Areas: Divide the map into large areas. For instance, the above map can be divided to Hill, Left Slope, Right Slope, Central Pool, Rock Path.
 - Subarea: Add if applicable. Used for dividing significant features within an area. For instance, the “houses” should be separated out from “Right Slope”
 - Specific Area: Used for further separating smaller group units. Use numbers where appropriate. For instance, each house will have their own “House” folder, such as “House1”
 - Specific Thing: Used as the group for parts. Use numbers where appropriate. For instance, parts for a bookcase will be put under “bookcase1”

❖ Scriptable (Gameplay, organized based on features):

- Features: Divide the map’s features that use scripts into different groups. For instance, Teleporters, Doors, etc.

- Feature Areas: Add if applicable. Used to divide similar features that appear through the map into areas of significance. For instance, the “Doors” will be divided into “Left Slope”
 - Specific features: Used for further dividing scripted features into individualized groups. For instance, “House 1, 2, 3”

o Building Principles

- ❖ Do not use walls, ceilings, and floors thinner than 2 studs
- ❖ Make sure players’ head can not clip into walls, ceilings, floors, or objects
- ❖ Use high ceilings (high enough that players’ head cannot really hit it when jumping). Exceptions given to areas designed to be small, such as air vents or tiny tunnels.
- ❖ Make players cannot zoom out and see behind map, breaking their immersion
- ❖ No Z Fighting
- ❖ No Gaps in Builds
- ❖ Always use gridlock

o Color palette, lighting, and environment (Ask if unsure)

- ❖ Building style: Low poly, cartoony, saturated bright and cheerful
- ❖ In 99% of cases, use smooth plastic material
- ❖ NEVER USE TERRAIN
- ❖ Disable Part.CastShadow (unless explicitly appropriate)
- ❖ Use Voxel technology for lighting (unless stated otherwise)
- ❖ Do not let lighting/lack of lighting affect the dynamicism of parts

o Required plugins for ease of building

Building tools

- ❖ <https://www.roblox.com/library/3617323299/Studio-Essentials>
- ❖ <https://www.roblox.com/library/166951203/Stravant-MaterialFlip>
- ❖ <https://www.roblox.com/library/217792838/Stravant-Model-Reflect>
- ❖ <https://www.roblox.com/library/165687726/Stravant-GapFill-Extrude-Fixed>
- ❖ <https://www.roblox.com/library/165534573/Stravant-ResizeAlign-Fixed>
- ❖ <https://www.roblox.com/library/143152131/Brick-Cutter>
- ❖ <https://www.roblox.com/library/2666837095/PartPicker>
- ❖ <https://www.roblox.com/library/2268520847/Brushtool-2-1>
- ❖ <https://www.roblox.com/library/142509225/oozledraw-toolbar-draw-curve-rope>

Color

- ❖ <https://www.roblox.com/catalog/3704545736/Paint-on-click>
- ❖ <https://www.roblox.com/library/4519120204/Color-Adjust>

Part Counter

- ❖ <https://www.roblox.com/library/208249680/Part-Counter>

Import Local file

- ❖ <https://www.roblox.com/library/3469049880/Local-File-Importer-Plugin>

Lighting tools

- ❖ <https://www.roblox.com/library/163874890/Camera-Light>
- ❖ <https://www.roblox.com/library/1223999426/Light-Editor>
- ❖ <https://www.roblox.com/library/418947836/Light-Editor>
- ❖ <https://www.roblox.com/library/948084095/Tag-Editor>

Quality setting

- ❖ <https://www.roblox.com/library/393398335/Render-Settings-Plugin>

Import Catalog items

- ❖ <https://www.roblox.com/library/866972013/Load-Catalog-Items>

Show Collision

- ❖ <https://www.roblox.com/library/414923656/Show-Decomposition-Geometry>

Anti Virus

- ❖ <https://www.roblox.com/catalog/4919389349/Anti-Virus-1M-SALES>

Import Character

- ❖ <https://www.roblox.com/catalog/5239706631/Load-Character-Pro>

Collection Tag Editor

- ❖ <https://devforum.roblox.com/t/tag-editor-plugin/101465>

- o Before Publishing

- ❖ Make sure to Anchor EVERYTHING
- ❖ Make sure to Playtest EVERYTHING