

END ASSIGNMENT: DIORAMA

DESCRIPTION

You make a scene that suits one of the three storylines. It contains a groundplane, a house, two side buildings a vehicle, props, and vegetation.

Take your time to read the specific requirements below.

- Pick a location and find references according to that location.
- Pick one of the four stories (find a detailed explanation of them in the slides of week 2)
- Make sure that there is something to see or that there is something going on in your scene. Try to tell a story: What does this person like, how are they living, what happened... Think of several "scenes within your scene", corners to explore.

Season and time of day

You can choose any season except for a snow scene.

The scene is viewed by day, so NO night scene.

Type of Houses

You make one main house: this is a house where someone lives.

NO churches, temples, statues, offices, hotels.

There are two side buildings, they can be trailers, tents, sheds, plant nurseries, workplaces. You choose what fits your setting best.

More than 3 buildings are allowed, but we do NOT ask for it, this is just more work. We prefer you make those 3 buildings and accompanying props and vegetation, finished to perfection. Keep in mind that the scene is going to be only 15 to 20 metres wide.

Ground and streets

Take care of the roads, walking paths, stairs, yards ... Try to add variety and detail. Your scene will be more interesting if there is some height variation. Use block-outs to find an interesting composition.

Props

Make enough props (more than 5) so you can fill up scene. You can reuse the same prop by giving it different diffuse textures (e.g. red and blue scooter, same mesh, but two different textures).

There must be at least one vehicle present in your scene, a bicycle, boat, scooter, rickshaw ... (it doesn't have to be a car, but a skateboard is a too simple).

Vegetation

Your scene will look more vivid as you add plants, trees, shrubs, and/or flowers. Here too, you can reuse the meshes with different textures. There must be vegetation present in your scene.

Template files

Make use of the diorama template file from Leho to create your scene in. You can choose a pedestal from the template, stay between the minimum and maximum sizes.

Don't make everything in one file, use multiple .ma files and then merge them together.

Scale

Make sure the scale of your object and textures is correct, use several boxes with a height of 180 cm as a reference, these represent a human (delete them afterwards). Use it on all floors to check proportions.

Set the system units in cm, and this for your diorama as well as for your props. If you have scaled your object, apply 'freeze transformation'.

Texturing Style

We go for a realistic style, no stylizing. The objects in your scene have been used for some time, so they are not brand new. Through localization, you can add dirt and damage. Also, make sure that the surface is not just a solid color, but it also has some surface detail.

You can also use textures that you find online, but adjust them, do something with it, combine them with other textures, and build up in layers. Do not just use tiling unmodified textures or models from the internet, this is considered cheating. When in doubt, check with us.

You can also use photo's that you have made yourself.

Output: Sketchfab

We will mainly look at your scene in Sketchfab, but we also want to see a Maya file. In Sketchfab, **make sure you Allow Texture Inspection.**

To export your whole diorama scene you have to take care of your naming conventions and make sure all textures are no longer PSD. We also want renders of your scene as a backup. Note that Sketchfab has a limit of 100 textures and a maximum file size of 50mb.

GOAL AND EVALUATION CRITERIA

As usual, we work with a rubric. This way you can be self critical and check if you meet all the requirements for this assignment. You can find rubric on Leho.

Exam Rubric			
Criteria	Ratings		Pts
Modeling Proportions, shapes, complexity, amount of models, is everything there?	4.0 Pts Full marks	0.0 Pts No marks	4.0 pts
Modeling: Technical Optimization, n-gons, density, soft/hard surfaces applied correctly?	4.0 Pts Full marks	0.0 Pts No marks	4.0 pts
Sketchfab Is the model presented in sketchfab?	2.0 Pts Full marks	0.0 Pts No marks	2.0 pts
Folder structure, naming conventions Are the folders correct, is everything in there? Points will be deducted if files are missing or incorrect structure.	0.0 Pts Full marks	0.0 Pts No marks	0.0 pts
Unwrapping Are they packed closely together, are tileable textures used when needed?	3.0 Pts Full marks	0.0 Pts No marks	3.0 pts
Texturing Is dirt added, are there gradients, local color variations?	4.0 Pts Full marks	0.0 Pts No marks	4.0 pts
Story Is it one unified scene? Does the theme make sense? Overall look/feel	3.0 Pts Full marks	0.0 Pts No marks	3.0 pts
			Total points: 20.0

PART OF THE OVERALL SCORE THIS MODULE

The q-week counts for 20%, the final exam counts for 80%

DEADLINE / SUBMITTING / HANDING IN

You will submit your scene to Leho BEFORE the exam.

The upload and the Sketchfab are ready at the start of the exam (usually at 8:30 or 13:30). If they are not, you have missed the deadline.

Further instructions on how the exam will take place will follow. (as they are dependent on covid-19)

FOLDER STRUCTURE

The correct folder structure is used in the template. Make a root folder with your class group and name. Every prop and each house is in a separate folder.

/_MAIN (Your scene with all your props together. Your ground plane can be made in this scene as well, but be sure to make backups when working)

The MAIN folder contains the following:

1GGPxx_YourName_Diorama.000.ma

_MAIN/sourceimages (all your textures and your moodboard)

_MAIN/images (your renders)

Your sketchfab link (drag and drop from your browser)

workspace.mel

Also hand in your separate props and buildings in other folders:

/Building_Shed

/Building_House

/Vehicle_Boat

/Prop_TrafficSign

/Prop_Container

/Prop_Plants

/Prop_Tree

Each prop folder contains the following:

Prop_bench /sourceimages (your textures, ambient occlusion and unwraps, delete photoshop files before handing in)

Prop_bench /sourceimages/REF (the reference images used to create the prop)

1GGPxx_YourName_bench.000.ma

workspace.mel

-Set your render size to 1920x1080 px

In your main folder we're going to need some renders.

1: Render the front and the back of your scene. Zoom out so you can see the whole scene.

2: Additionally, you add some "beauty" renders you made yourself. Take some close renders from first-person view, as if you would walk by your scene or like you were making a tourist brochure for your town. Think about composition, make sure that there is something to see in your render where we need to focus on. Avoid large blank spots in your render.

EXTRA TIPS

Organize yourself from the start, work with layers and use a logical naming for everything (both your meshes and your materials). Give 3D objects a unique name. Give all your materials a unique name, so you don't get naming conflicts. Work correctly and perform 'set project' every time you start working on a prop or scene.

Don't postpone these things until the night before the exam, because this will take up a lot of time.

When you are done with a house/props, make the renders etc. and make sure the folder and files are done before you move on to the next one.

Check whether you have used game texture sizes (power of 2 512x512, 1024x1024). If it's too big for sketchfab, lower the texture sizes.

Your fbx file will be around 10MB. If it's a lot more, you may have gone overboard with the polycount (usually the trees).

Try uploading your unfinished diorama a couple of days before the deadline, see if you have any problems.

Be sure to make those renders, if you didn't get the sketchfab to work and you didn't get the correct folder structure, that we at least evaluate your scene by looking at the renders.

Lost? Take a look on sketchfab at some former student work.