

CS148 Final Project Report

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Project Requirements

- Main geometry from scratch
Here is a list of the main geometry in our scene. We created the first 8 of them from scratch. For the remaining 6 of them, we imported from online resources and cite them in the next section of this report.
 1. Christmas tree and ornaments on it
 2. Christmas stockings
 3. gift boxes on the floor
 4. glass vases
 5. flowers
 6. fire
 7. window
 8. room structure with wall, floor, and counter
 9. teddy bear
 10. rocking chair
 11. pine chain on the wall
 12. gift boxes on the counter
 13. wood logs in fire
 14. shelf
- UV mapping and texturing from scratch
 - We UV unwrap the Christmas tree holder and gift boxes.
 - We created texture for the Christmas tree ornaments (adding noise with Voronoi texture) with Blender's material nodes. For the wall, floor, counter top and gift boxes, we manually set up the material nodes ourselves using the downloaded texture images.
- Blender/Cycles feature
 - Volumetric Emission: we created the fire simulation using Blender's quick smoke effect.
 - Particle system: white and red fur on the stockings.
- Cite resources
 - Online resources we used are cited in the following sections.

Assets Downloaded From Online

models:

teddy bear https://3dsky.org/3dmodels/show/pliushievyi_miedvied

rocking chair

<https://www.turbosquid.com/3d-models/old-rocking-chair-3d-model-1194691>

pine chain on the wall

<https://www.cgtrader.com/3d-models/interior/other/christmas-garland-09cadf8e-16c5-44ab-ae9d-a0571451607c>

gift boxes on the counter

<https://www.turbosquid.com/3d-models/free-3ds-model-gift-box-red/450470>

wood logs in fire: https://3dsky.org/3dmodels/show/3d_silva_log_realflame

shelf:

https://3dsky.org/3dmodels/show/om_dekorativnyi_element_orac_decor_d400

Textures:

tree bark texture <https://ambientcg.com/view?id=Bark001>

fabric texture <https://ambientcg.com/view?id=Fabric054>

tree holder texture <https://ambientcg.com/view?id=Carpet013>

brick wall texture https://polyhaven.com/a/concrete_brick_wall_001

wooden counter https://polyhaven.com/a/wood_table_worn

fireplace https://polyhaven.com/a/weathered_planks

floor

<https://www.poliigon.com/texture/wood-flooring-merbau-brick-bond-natural-001/4204>

Assets Created Ourselves and Reference Tutorials

Christmas tree and ornaments on it (Tutorial:

<https://youtube.com/playlist?list=PLsGI9GczcgBvYOAEE30pfCwKqzzAcSluh>)

Christmas stockings (Tutorial: <https://youtu.be/qF-62Sx8b6g>)

gift boxes on the floor (Tutorial: <https://youtu.be/GsKEC3LXBtM>,

<https://youtu.be/o4qQjB9UV8c>, https://youtu.be/4uEVE_e7Y-U)

glass vases (Tutorial: <https://youtu.be/jCVEtLjpeB8>)

flower (Tutorial: <https://youtu.be/wRcL0CPIjMA>)

fire (Tutorial: <https://youtu.be/3RBcOM13dkc>, <https://youtu.be/rzATaYyCf9Q>)

window (Tutorial: <https://youtu.be/g5msW52JAPw>)

room, Walls, and Counter: mesh created without tutorials

Contribution

- Yixin: worked on the object of Christmas tree and ornaments on it, room and window, rocking chair, pine chain on the wall, fire simulation, and also the environment settings.
- Bihan: worked on Christmas stockings with particle system, flower vase with water material, gift boxes, teddy bear, wood logs in fire, shelf.
- Together: We worked together on lighting and final aesthetic.