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
  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  

Assets Created Ourselves and Reference Tutorials
  Christmas tree and ornaments on it (Tutorial:  
https://youtube.com/playlist?list=PLsGl9GczcqBvYOAAE30pfCwKqzzAcSluh)
  Christmas stockings (Tutorial:  https://youtu.be/qF-62Sx8b6g)
  gift boxes on the floor (Tutorial:  https://youtu.be/GsKEC3LXBtM,  
  glass vases (Tutorial:  https://youtu.be/jCVEtLjpeB8)
  flower (Tutorial:  https://youtu.be/wRcL0CPjMA)
  window (Tutorial:  https://youtu.be/q5msW52JAPw)
  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.