CS7GV03 - Assignment 2

Transmitance Effects

28 January 2020

Assessment Details

- This Lab is worth 15% of the mark for the module
- You must demo the lab next week Tuesday**, 4st February 2020**
- Submit:
  - A short (less than 5 minutes) video of your demo
  - Source code and shader code for your program (Source code only do not include executable)
  - A short description of your scene and mention any external libraries, 3rd party source code you may have used (max 1 paragraph)
- You should work on your own. You may use and refer to external code but should reference it (see above) and in code comments
- You must use GLSL

Goals

- **Implement a shader for an object that is both transmissive and reflective**
  - Transmission may entail any of the effects discussed in the last lecture but most likely refraction
  - You must include a Fresnel component in your shader
  - You should also include the chromatic dispersion effect
  - You should also include an environment texture , cube map or sphere map in your scene which affects the appearance of your object
- **SECONDARY OBJECTIVES**
  - Implement a scene with some rotating objects using the above shaders
    - Try to make the scene it as photorealistic as possible
    - Try to add some variation in models, scene, shader to make your demo slightly unique

Assignment 2

Total	**15%**
Reflection	20%
Refraction	20%
Fresnel (for ratio of reflectance to transmittance)	20%
Chromatic Dispersion	20%
Environment texture or cube map	20%

Exampel https://www.youtube.com/watch?v=d0ZBMl4hhpw