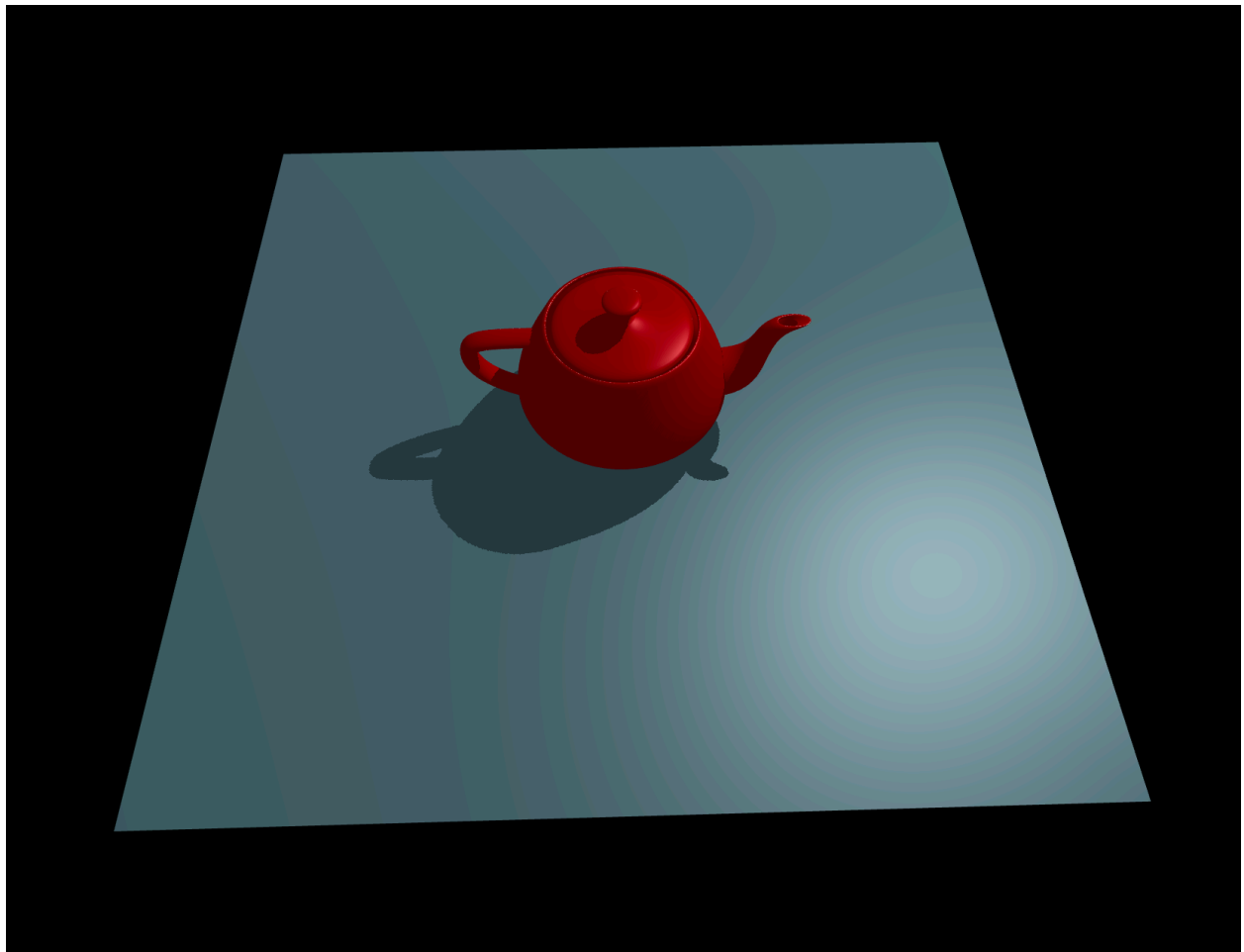
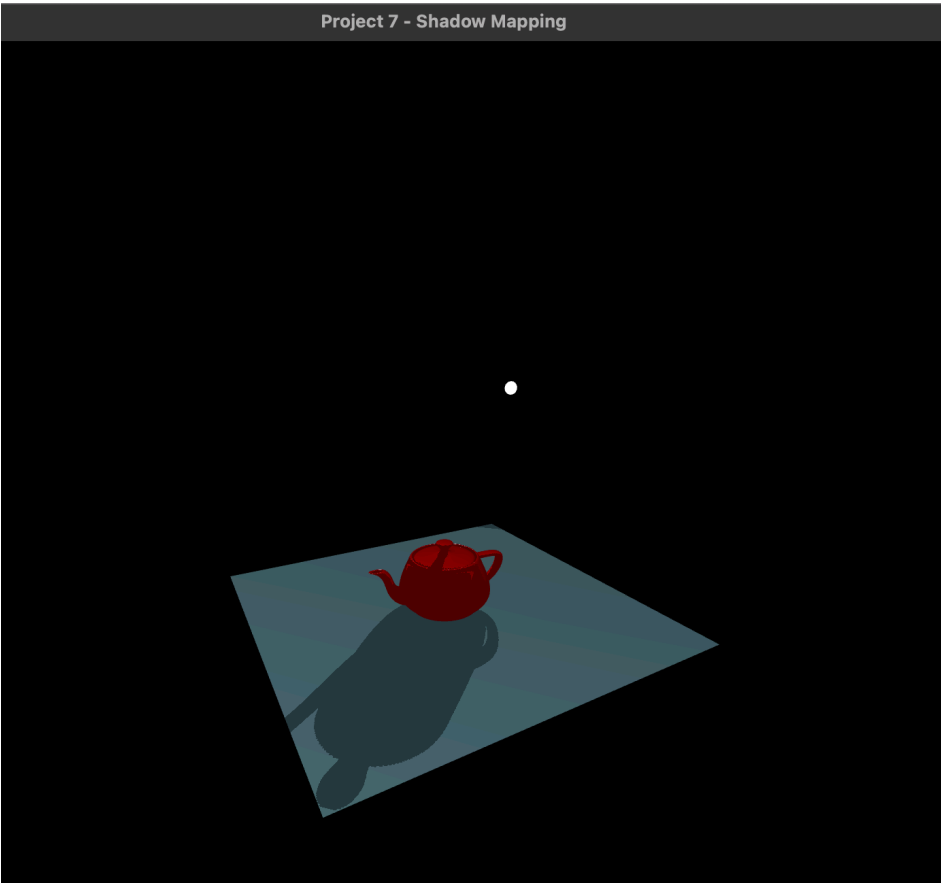
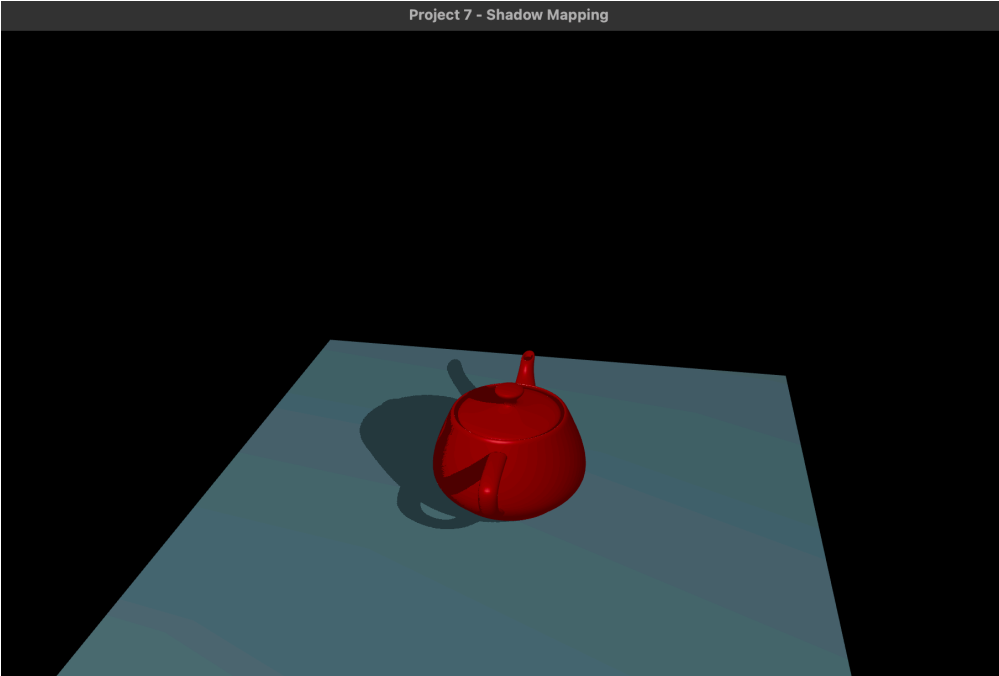


Project 7 - Shadow Mapping

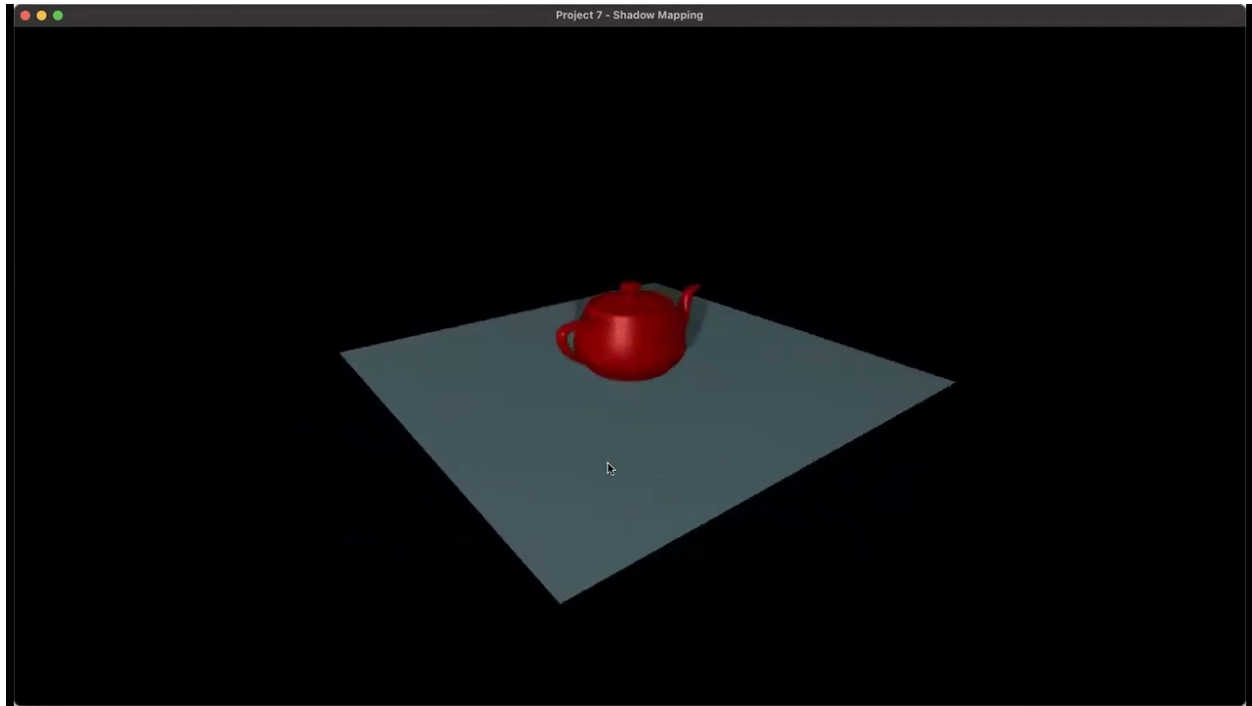
Name: Santhosh Natarajappa

Project Screenshots:





Video:



Implemented Features:

- The object and the plane underneath is displayed.
- The shadows are computed from a spot light onto the plane and the object.
- The object casts shadow onto itself.
- The light position is controlled independently.
- Light position is displayed.

Development Environment:

OS: OS X 12.01

IDE: XCode 13.2.1

Compiler: clang++

External Libraries and Dependencies:

- C++
- OpenGL
- glfw
- GLEW
- glm
- cyCodeBase

All the libraries and dependencies can be found in the include and lib folder inside the project directory.

Steps to Compile and Run the Project:

- Run the below command in the project directory (inside the Project1 folder).

```
clang++ -std=c++11 -stdlib=libc++ -arch x86_64 -o run shadowmapping/  
main.cpp shadowmapping/lodepng.cpp lib/libGLEW.2.2.0.dylib lib/  
libglfw.3.3.dylib -framework OpenGL -I include -L lib
```

```
./run teapot.obj
```

Run the below command to run the executable.

- Alternatively, the project can be open in X Code and running on Rosetta.