# Project 4 - Textures

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# **Project Screenshots:**







# Videos



#### **Implemented Features:**

- Diffuse texture is created by parsing mtl file using LodePNG library.
- Object file can be specified as the first command line argument.
- Texture co-ordinates are stored as different buffer object.
- Specular texture is included as per mil file.

### **Development Environment:**

OS: OS X 12.01 IDE: XCode 13.2.1 Compiler: clang++

### **External Libraries and Dependencies:**

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

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 textures/main.cpp
textures/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 XCode and running on Rosetta.