

Lab 10: 3D Primitive Objects of Texture

This lab lets you make use of the following listed 3D primitive object classes provided by openFrameworks (OF) library to create a 2x2 grid of 3D objects (4 objects) with texture.

The 3D primitive object classes list is:

- (a) [ofBoxPrimitive](#)
- (b) [ofConePrimitive](#)
- (c) [ofCylinderPrimitive](#)
- (d) [ofSpherePrimitive](#)

They are all subclasses of a super class: [of3dPrimitive](#)

1. Use Inheritance and Polymorphism skills to create a 2D array to store the 4 primitive objects. (Create a 2D array of super class of3dPrimitive pointers, then dynamically created 4 difference subclass objects.)
2. Each object should have its own different texture.
3. When the mouse entering one grid, the corresponding object will start rotate in one random direction.

Grading Rubric:

1. Use Inheritance and Polymorphism skills to create a 2D array to store the 4 primitive objects: 30 pts.
2. Each object should have its own different texture: 30 pts.
3. Mouse Entering rotation feature: 10 pts.
4. Proper memory management: 10 pts.
5. No compiling errors: 10 pts.
6. Good Submission: 10 pts.