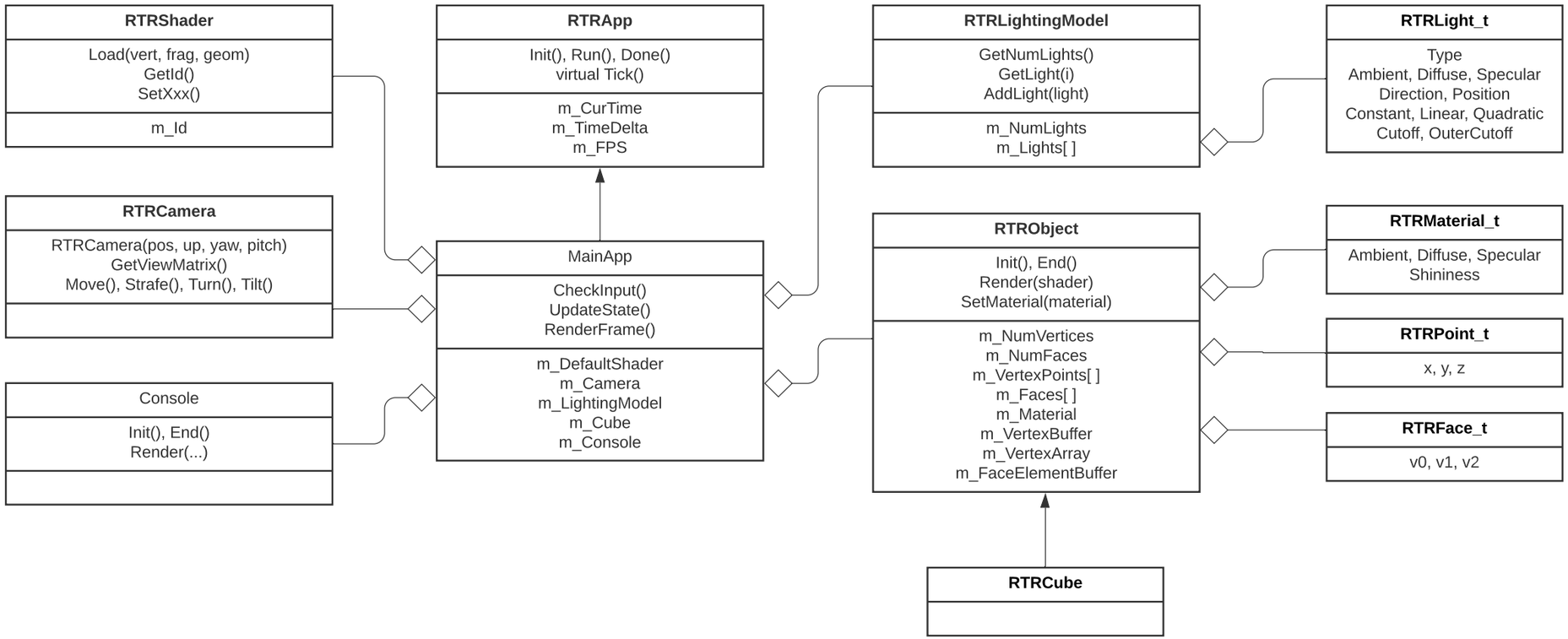
COSC1226 - Real Time Rendering - Assignment 2



WHAT TO ADD NEXT?
PA LEVEL

Drawing the table:
- Block object class
- Make Cube a specialisation
- Multiple Objects
- Keep coordinates in local object space
- Object Position
- Object Transform Matrix

Lights + Diffuse and Specular Maps
- Add some lights to the scene
- Extend Material class
- Texture Loading
- Extend Object class
- Texture the table

Sphere class for the Ball
- Which class will it inherit from?
- Draw a ball at its starting position.

SkyBox
- Find 6 image skybox that you like
- Create copies with numbers on each img
- Get it working then use numberless img

A simple "Level" or "World" class
- Move Objects[ ] out of MainApp
- Add light definitions to Level
- Move SkyBox setup/config into Level
- Add Level instance to MainApp
- Optional, load Level from file

Movement
- Differentiate between static and moving objects?
- Add Velocity support
- Press a key to give the ball some velocity and start animating it

Collisions
- Bounding Volume base class
- Subclasses
- Add to Object
- Simple naive collisions against all objects
- Collision response

*** You have a ball bouncing around the table ***

Add Pegs, Bumpers, Flippers

Play around with Velocity and Acceleration settings.

Add Uniform Grid support for Stationery objects.

Everything will be easy from this point onwards !!!!! really.

OTHER

Split UpdateState() up into separate class - RTRPhysicsEngine

Split RenderFrame() out into separate class - RTRRenderer.

Add instance of each to MainApp.

Instead of one or two concrete Shaders in MainApp, maintian a list of them in RTRRenderer.

Sort object render order by Shader.