## Demo One

1. Scene with a modifiable plane
2. Spike: move individual vertices of the plane
3. Simulate waves through the plane
4. Simulate an object dropped onto the plane
5. Ability to simulate waves / drop objects on the fly

## Demo Two

1. Spike: rendering technique
2. Spike: physics implementation
3. Spike: constraints on particles that don’t interfere with the simulation (invisible walls)
4. Particles flow like a fluid
5. Particles are rendered to look like a fluid
6. Particles are trapped in an invisible container
7. Scene renders at 60 fps and looks good

## Demo Three

1. Spike: physics implementation
2. Everything from demo two but with the new version of the physics
3. Particles interact with an arbitrary, visible barrier in a realistic manner (some sort of 3D collision mesh)

# Engine

1. Using QObject for RendererManager is restrictive, use a Q