Milestone 1

*Due 2/15*

* Figure out issues with waves not being highly detailed
  + Lack of detail in waves was due to lighting issues as well as a lack of a normal map.
  + Choppiness is not a boolean but instead a float
  + Lighting from the sun needs to be implemented not just ambient plus skybox
  + ‘A’ constant value is global wave amplitude
  + Want to investigate scrolling normal
  + No directional light in current iteration
* Figure out issue with sky box ceiling oriented wrong
  + Fixed this with some adjustments to rotating and selecting sides with different world basis
* Create profiling tools for different portions of the algorithms
  + Created a ProfileTimer.hpp and .cpp to start and stop a timer around a chunk of code

Milestone 2

*Due 3/1*

* iWave method for variable depth ocean floor functionality
* Ensure iWave method working correctly for wakes and bouncing off objects
* Improve iWave method detection of objects in water
* Use more complex objects to have on the ocean’s surface
* (NEW) Add scrolling normals to ocean surface to remove obvious repetition
* (NEW) Implement Directional light in shader for the sun
* (NEW) Continue to investigate how to create foam caps on waves

Milestone 3

*Due 3/15*

* Thread FFT process
  + Attempted in Milestone 1 but is less performant as is
* Use DirectX11 FFT function to calculate FFT
* Toggle between all 3 methods to allow for profiling

Milestone 4

*Due 3/29*

* Visual pass on ocean surface. Ensure that reflections and aesthetics look good to the user
* Visual pass on in-water objects to ensure that they look like what they are supposed to be

Milestone 5

*Due 4/12*

* Collect profiling data for different wave configurations
* Ensure that the UI is intuitive and straight forward
* Save off interesting wave configurations for quick access

Milestone 6

*Due 4/26*

* Final pass on everything to ensure quality is satisfactory and everything is presentable
* Finish TDD