The goal of the tutorial was to create a functional and fun VR game that could be replicated or added upon by future students. In order to have a successful project I needed to be able to efficiently use my time and effectively communicate with my co-projector. Direction on basic game creation within Unreal and project specifics were included in the form of a paper - [here](https://docs.google.com/document/d/1BqfwqX2mGP01TgjM5_Sp6rfHOF7Mpd2HLlPtnlWBtxE/edit?usp=sharing). Unreal Documentation, discussion forums, Git, and various videos on YouTube provided useful were invaluable resources throughout the duration of the project. Over the course of the project I learned…

* How to use the class system within unreal to easily and randomly generate schools of fish
* How to enable and control automated movement for AICharacters
* Basic game settings
  + Creating game instance for global variables
  + Adjust level rendering settings to allow for visual effects
  + Adjust project input settings to allow for personalized in-game controls (i.e. pawn movement via controller)
  + How gravity and collision is handled to constrain pawn movement to terrain
* Landscapes
  + How to create and edit landscapes
  + How polygons are
* Creation of particle emitters for fog - didn’t make in final design as created nausea
* Post-Process Effects (i.e. Scene Tinting, Bloom, Light Flare, etc.)
* Materials
  + Create dynamic 3d surface movement
  + Adjust tiling to reduce material stretching and easily adjust pattern density
  + Adjusting material domain to allow for cool in-game effects (i.e. Blue, Water Caustics, etc.)
* Audio
  + Create ambient sounds and adjust fade volume depending on location within world (i.e. slime bubbling, bat noise, underwater ocean)
  + Create sounds triggered by events or certain types of movement (i.e. shark swim)
* Mesh
  + Differences between skeletal and static meshes
  + How to create animations (i.e. shark swim, eel movement, etc.)

Things I accomplished:

* Levels Worked On: Cave, Nothingness, Ocean
  + Learned basics of level creation during the Nothingness level and later edited to accommodate gravity pawn (Nothingness was the collaborative level)
* Mechanics: Pawn movement via controller, Recursive level loading
* Majority of write-up
* Maybe better at communicating
* learned how to VR!