**Pixel TD (Tower Defence) – Requirements Specification**

* Four Interfaces – Main Menu, Options Screen, Game Window and Round Window.
* Custom Randomly Generated Tracks, dependant on map selected and difficulty.
* Different styled towers each with their own unique abilities.
* Sorting Algorithms, such as Bubble Sort and Quick Sort to organise collected tower pieces during play.
* Place towers in user defined positions within the map.
* Use path finding algorithms to get from the MOB Spawn point to your tower that you are defending.
* Collection Tower used to collect any drops made by the MOBs as they travel.
* Event Based and Threading within Python to allow for multiple processes.
* Store data on each tower within an SQLite3 database.
* Store settings, and wave data within specific files using pickle so as to keep the datatype that is being used.
* Audio to be played in the background along with sound effects for when an enemy is defeated, a button is pressed, the system/window closes.
* Have custom tower, mobs, barricades, as well as entrance and exit towers.
* Health and Money taken into consideration and sorted based on quantity of round and sorted on the Round Window.