**COMP10050 – Assignment 2**

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**Github Repository:**

https://github.com/marksands97/software-project

**How the work was divided:**

After setting up the git repository and reading through the questions, we both decided that I would handle the slots, attacking, and moving mechanics of the assignment while Mark would set up the struct arrays, the main function, and the data associated with each of the players (i.e. names, classes, abilities’ etc.). We also of course helped each other out through the assignment (i.e. Figuring out how to distribute the abilities of each player according to the criteria in question B). So, to conclude: I tackled question C&D, Mark did question B, and we both collaborated on question A.

**Design Choices:**

-One design decision we agreed upon was to remove as much of the code from main.c as possible and essentially have it be the area where all the other functions are called.

-As you can see in main.c and slots.c, we initially create each respective struct array as just containing one element (see line 30 in the operations.h file), but we dynamically allocate more memory for more elements, according to the number, which the users inputs.

-List of functions and their purpose:

Slotsfunction = Creates a certain number of slots, and then assigns a slot type and player to each slot

Printboard = Prints a visual showing the location of each player on the board

Attack = Calculates the new life values for each player based on the criteria outline in QD

Move = Asks the player what there next move is (i.e. go left, right or attack a player) and then carries out that move, printing the result in the way described in Question A.

Abilities: Assign each player with their capabilities as outlined in Question C.

Operations: Contains the function prototypes and the global struct arrays (players & slot).