Class Diagram (Meghana Muddireddy, Jacqueline Wen)

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| **Classname:** | PersonVsPerson | | |
| **Comments:** | This class will utilize an algorithm to play a player vs player game. | | |
| **Property** | **Public/Private** | **Type** | **Default** |
| person1 | private | char[][] | - |
| person2 | private | char[][] | - |
| turn | private | Boolean | false |
| **Method** | **Public/Private** | **Return Type** | **Argument Types** |
| chooseStartLocation | public | void | none |
| guessLocation | public | void | int, int |

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| **Classname:** | PersonVsComputer | | |
| **Comments:** | This class will utilize an algorithm to make a player vs computer game. | | |
| **Property** | **Public/Private** | **Type** | **Default** |
| person | private | char[][] | - |
| computer | private | char[][] | - |
| turn | private | Boolean | false |
| **Method** | **Public/Private** | **Return Type** | **Argument Types** |
| chooseStartLocation | public | void | none |
| guessLocation | public | void | int, int |
| computerGuessLocation | public | void | int, int |

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| **Classname:** | StartPage | | |
| **Comments:** | Houses the main function and this is where the program begins. | | |
| **Method** | **Public/Private** | **Return Type** | **Argument Types** |
| main | public | void | String[] |

The first class that we are using in this project is our PersonVsPerson class. In this class, we will take turns letting the players move. We plan on using 2D arrays to help store the status of each individual location and a boolean to document whose turn it is. Our second class is our PersonVsComputer class. We also used the same data structures as the previous class. Our final class was the StartPage class. This is the class that starts the program.

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| Data | Interface => Class |
| Matrix of the status of each location on map (whether it was hit) | List => char[][] |
| Boolean stating whose turn it is to move | Comparable => Boolean |

