**Skeleton Code – Battle Ships – Board Class**

**Important:** Throughout this document and the Python code, methods are referred to as private, protected and public. In this document, method names are written **without** leading underscores, whereas in the Python code, method names are written **with** leading underscores; a private method appears with a double underscore at the start and a protected method with a single underscore.

## **Class: Board**

| **Identifier / Data** | | **Description** |
| --- | --- | --- |
| <<constructor>> | | |
| **Parameters** | width, height, number | Defines the height and width of the board. Also defines the number of the plyer |
| **Return values** | n/a |
|  |  |
| Display | | |
| **Parameters** | number | Passing the number parameter in to check if the current player is the user or computer.  The method displays the board to the user. It decides whether to display the computers board or the users board. If it is the computers board it hides their ships not keep the game running correctly. |
| **Return values** |  |
|  |  |

|  |  |  |
| --- | --- | --- |
| Get Width | | |
| **Parameters** |  | This method creates access to access the width of the board and return it. |
| **Returns values** | \_\_columns |
|  | |

|  |  |  |
| --- | --- | --- |
| Get Height | | |
| **Parameters** |  | This method creates access to access the height of the board and return it. |
| **Returns values** | \_\_rows |
|  | |

|  |  |  |
| --- | --- | --- |
| Take Shot | | |
| **Parameters** | row, column | This method places a ship at the entered coordinates, row and column, are one of the ships. It checks if the coordinates exist. Then it asks for the orientation of the ship. It tries to check if the ship fits in the grid but it is not always correct. |
| **Returns values** |  |
|  | |

|  |  |  |
| --- | --- | --- |
| Place Ship | | |
| **Parameters** | Size, number, player | Gets the selected location and orientation of the ship to be placed then adds it to the grid |
| **Returns values** |  |
|  | |

|  |  |  |
| --- | --- | --- |
| Check Winner | | |
| **Parameters** |  | Checks for the winner if it has an S in the location it returns False else it returns true |
| **Returns values** | result |
|  | |