**BIT-2400, Assignment 4**

**Title**

Battleship

**Functional Requirements**

1. Build an abstract base class boat to hold the data needed for a boat.
2. Create 5 different ships that inherit from the Boat base class.
3. Create two Ascii drawn boards and display your ships on one and the enemies ship on the other.
4. Have users be able to play a two player game of battle ship either against another human or an AI.
5. When a ship is destroyed call a overridden method to output that I sunk your battleship

**Implementation Requirements**

* This is an individual assignment.
* Add a comment section at the top of the code for Documentation with following parts:

Title: Assignment-4

Author: [your name]

Objective: [very short 1-2 sentence description of goal as you understand]

**Submission Requirements**

Submit your cpp and header files on CuLearn. Do not submit the whole project.

**Evaluation**

* Abstract base class 20%
* 5 ship classes that inherit from the base class 20%
* Ascii drawn boats on a board 10%
* Virtual method for outputting the boat that sunk 10%
* Ability to play against a human or AI 20%
* Clean well-structured code 20%
* Bonus! above and beyond +5%

**Penalties**

Submission will get 0 if the code doesn’t compile or run, or if incorrect file is submitted. Late submission has 25% penalty per day (1 minute till 24 hours is considered 1 day).