

CSC-5 Winter 2022
Project 1
Kira Hollowed
3 February 2022

Introduction

Title: Battleship

This program runs a version of the game of battleship. This game is to be played with two players, and they are not allowed to see each other's inputs. The object of the game is to sink all 5 of the opponent's ships.

The game begins by outputting the game board, which has columns 0-14 and rows 0-19. Player 1 will place all their ships on the board by inputting the coordinates of each point of each ship. It will also ask whether the ship is facing horizontally or vertically. The ship cannot be placed diagonally, overlap another ship, or be placed off the board. Player 2 will then place their five ships, and the game will commence.

Once each players' ships are placed, the players will begin to try and sink each other's ships. Player 1 will begin by inputting a coordinate on the board in hopes that it is where their opponent's ship is placed. If they "hit" a part of their opponent's ship, the game will notify the player that they hit the ship with an X. If they miss and rather hit the water, a 'O' will appear instead. This will go back and forth between the players until one player sinks all five of the opponent's ships.

Once a player sinks all five of their opponent's ships, the screen will output a "Congratulations!" message to the player that they won the game.

File: main.cpp
Author: Kira Hollowed
Created on: February 2,
2022, 3:56 PM
Purpose: Project 1,
Battleship

System Libraries
iostream
cstdlib
ctime
cmath
fstream
string
iomanip

User Libraries
none

Global Constants
N/A

Function Prototypes:
Load
Reset
Draw
User Input Placement
User Input Attack
GameOver

main

A

A

Declare File and Game Variables
width= 15
height=10
type=5
water=247
hit=X
isship=S
miss=0
x //horizontal
y//vertical

Prompt: "instructions... Ship Type...
Place Ship"

Print Game Board

return 0;