

# Report



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## Introduction

Battleship (also Battleships or Sea Battle) is a guessing game for two players. It is known worldwide as a pencil and paper game which dates from World War I. It was published by various companies as a pad-and-pencil game in the 1930s, and was released as a plastic board game by Milton Bradley in 1967. The game is played on three mazes, one for each player. The mazes are square - usually 10×10 - and the target in the maze are identified by 2 number. On one maze the player can see his ships and on the other he can record the shots by the opponent and himself.

Before each game begins, each player secretly knows the position of ships on their primary maze. Each ship occupies a number of consecutive blocks on the maze, arranged either horizontally or vertically. The ships cannot overlap (i.e., only one ship can occupy any given block in the maze).

The game proceeds in a series of rounds. In each round, each player takes a turn to input a target square in the opponent's maze which is to be shot at. The Hit matrix shows whether or not the square is occupied by a ship, and if it is a "hit" the computer marks this on the maze with a specific color code. This helps in order to build up a picture of the opponent's fleet.

When all of the squares of a ship have been hit, the ship is sunk, and the Hit matrix shows the destroyed ship. If all of a player's ships have been sunk, the game is over and the opponent wins.

# Project Idea

We tried and aimed to make a working battleship game using c++ and implemented it using arrays and file handling, we also learnt many things on the way and felt the importance of planning.

# Limitation

We tried to implement multiplayer using google drive but that didnt work out due to latency problem so we have to stick to a homegroup network i.e via LAN and learnt a lot about file handling.

# Final Outcome

The final program could let two mode of playing single and multiple players ,in the single player the player is competing against the computer and in multiplayer mode we can play with more than 5 players connected trough wi-fi.