



# Functional Specification

Battleship

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Code 1122



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# 1. Introduction

## 1.1. Document Identifier

In this document will be described all functional requirements of this project. Please, read this document very carefully in order not to miss a thing.

## 1.2. Scope

Introduction section provides overview of the document content as well as the brief description of the project requirements. Section Definitions of Terms and Acronyms includes description of all the terms and acronyms used in the document. Section References has links to the documentation and sources used to build this document. Problem Statement Section briefly describes the requirements and purpose of the project. In the section Platform Requirements must be described on which platforms this project is working. In section Overview of Solution is described the architecture of the solution. Black-box Description section describes the functions that the user can perform with the project, explains the received results, without going deep into details. Use Cases Coverage section is for making sure that the functionality described in the above sections covers all the use cases of the project.

## 1.3. Definitions of Terms and Acronyms

There aren't any definitions or acronyms in this project.

## 1.4. References

There aren't any references in this project.

# 2. Problem Statement

This section should briefly describe the project and **functional requirements**. It is in fact the summarized version of the product requirement document.

It was required to make Battleship game in C++. The main functionalities should be:

- 1) Ability for player to input coordinates for ships
- 2) Ability to choose position of the ship: horizontal or vertical
- 3) Ability to shoot by the ships by typing coordinates in the console

# 3. Platform Requirements

- 4 GB RAM
- Pentium 4 2GHz CPU clock or equivalent
- 5 GB free HDD space
- Supported OS:
  - CentOS 6 (64-bit) or higher
  - Ubuntu 14.04 (64 bit) or higher

# 4. Overview of Solution

This game is played in console. For this game there wasn't any requirement for GUI. The 0

are the sea and 1 are the ships. At first program randomly generates coordinates for placing the ships, then will ask you to type coordinates for destroying the ships. The player will be asked to type the coordinates until all the ships are destroyed. Only after that game will end.

## **5. Black-box Description**

This game gives the player opportunity to enter coordinates for ships and also to decide how to put the ship(horizontal, vertical). If there are some incorrect coordinates the program will ask the player to enter them again. After placing the ships player will be asked to enter coordinates for shooting until all ships are destroyed. When there aren't any ships left the game will be over.

## **6. Use Cases Coverage**

The functionality described in the above sections covers all the use cases of the project. The use cases should be described in the Use Cases Document which is not required in this case.