

# **BattleShip:** Requirements Document (version 1.0)

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Project: BattleShip  
Date(s): February 1, 2016 - March 11, 2016  
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Document status: \_\_ Draft \_\_/\_\_ Proposed \_\_ Validated \_\_ Approved

## **1. Introduction**

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This document contains the system requirements for **BattleShip**.

### **1.1 Purpose of This Document**

This document is intended to guide development of **BattleShip**. It will go through several stages during the course of the project:

1. **Draft:** The first version, or draft version, is compiled after requirements have been discovered, recorded, classified, and prioritized.
2. **Proposed:** The draft document is then proposed as a potential requirements specification for the project. The proposed document should be reviewed by several parties, who may comment on any requirements and any priorities, either to agree, to disagree, or to identify missing requirements. Readers include end-users, developers, project managers, and any other stakeholders. The document may be amended and repropose several times before moving to the next stage.
3. **Validated:** Once the various stakeholders have agreed to the requirements in the document, it is considered validated.
4. **Approved:** The validated document is accepted by representatives of each party of stakeholders as an appropriate statement of requirements for the project. The developers then use the requirements document as a guide to implementation and to check the progress of the project as it develops.

### **1.2 How to Use This Document**

We expect that this document will be used by people with different skill sets. This section explains which parts of this document should be reviewed by various types of readers.

#### **Types of Reader**

This document is tailored to readers with some programming knowledge but may not be necessary to understand most of the document.

#### **Technical Background Required**

To understand or gain the most from this document the reader should be familiar with the knowledge of server-client relations and the fact that HTML, Javascript, and CSS exist. Though, again, such is not necessary for most of the document.

#### **Overview Sections**

Overview Sections include:

- 1.3
- 1.4
- 1.5
- 2

#### **Reader-Specific Sections**

For convenience for Dr. Chappell, the Requirements are listed in section 1.5 below.

### 1.3 Scope of the Product

The BattleShip project is limited to the scope of a simple battleship game played with two players over a web connection. Two users enter a URL into their browser, login, then have the ability to choose their partner, and a game of battleship starts (with a GUI interface for user convenience).

### 1.4 Business Case for the Product

This product is for our CS372 class. It is to test our ability and provide a learning-by-doing structure.

### 1.5 Overview of the Requirements Document

- Game needs to have at least one human player.
- Software needs to be able to connect players online.
- Software needs to have a straight forward interface so a user can easily understand what to do.
- The game needs to be able to be played over a server so one user can wait/pause for the other, and send information about scores and ship bombings back and forth.
- Need a sort of display/GUI.
- Need two grids.
- Need battleship images/sprites.
- Buttons will also be needed or at least clickable objects that are fast to program.
- Ability to remember login names and passwords.
- We need a webspace to put our code on and for users to access (URL).

## 2. General Description

This section will give the reader an overview of the project, including why it was conceived, what it will do when complete, and the types of people we expect will use it. We also list constraints that were faced during development and assumptions we made about how we would proceed.

BattleShip, the project, is designed to be a two person game accessible over the web. It was conceived as an assignment and is straightforward to what it does. The two players will play a traditional game of battleship against one another, meaning one will win and one will lose as expected.

### 2.1 Product Perspective

This product serves the purpose of providing the contributors a grade. The developers include Laurin Fisher and Jason Warta. The stakeholder is Glenn Chappell.

### 2.2 Product Functions

Our product is designed to play the traditional game of battleship. However, we wanted our users to be able to access it from their own computer, not seating the game is not as rewarding. Thus our users can play it from anywhere with an internet connection. We also wanted a easy to use interface right off the bat. We created two grids, a box for selecting named ships, etc. We hope to make the game rely mostly on the mouse to make it not have any learning curve whatsoever.

### 2.3 User Characteristics

We expect anyone on the web who can operate a mouse, wants to play battleship, and can speak English (or guess the ship names and/or click randomly) to use our finished product.

### 2.4 General Constraints

We had to work with several constraints that Meteor gave us. We had to place our code in certain functions to keep it secure (understandable). As well as have a certain format for using the testing framework jasmine. Currently our product is developed to run in Chrome due to some other internal Meteor dependencies, however other browsers may work, but it is not guaranteed.

## 2.5 Assumptions and Dependencies

Our finished product relies on the Meteor databasing code and the hosting server to work together for basic user login and network connection services. We assume these will work as expected and as easily as possible for our convenience.

## 3. Specific Requirements

This section of the document lists specific requirements for BattleShip. Requirements are divided into the following sections:

1. User requirements. These are requirements written from the point of view of end users, usually expressed in narrative form.
2. System requirements. These are detailed specifications describing the functions the system must be capable of doing.
3. Interface requirements. These are requirements about the user interface, which may be expressed as a list, as a narrative, or as images of screen mock-ups.

### 3.1 User Requirements

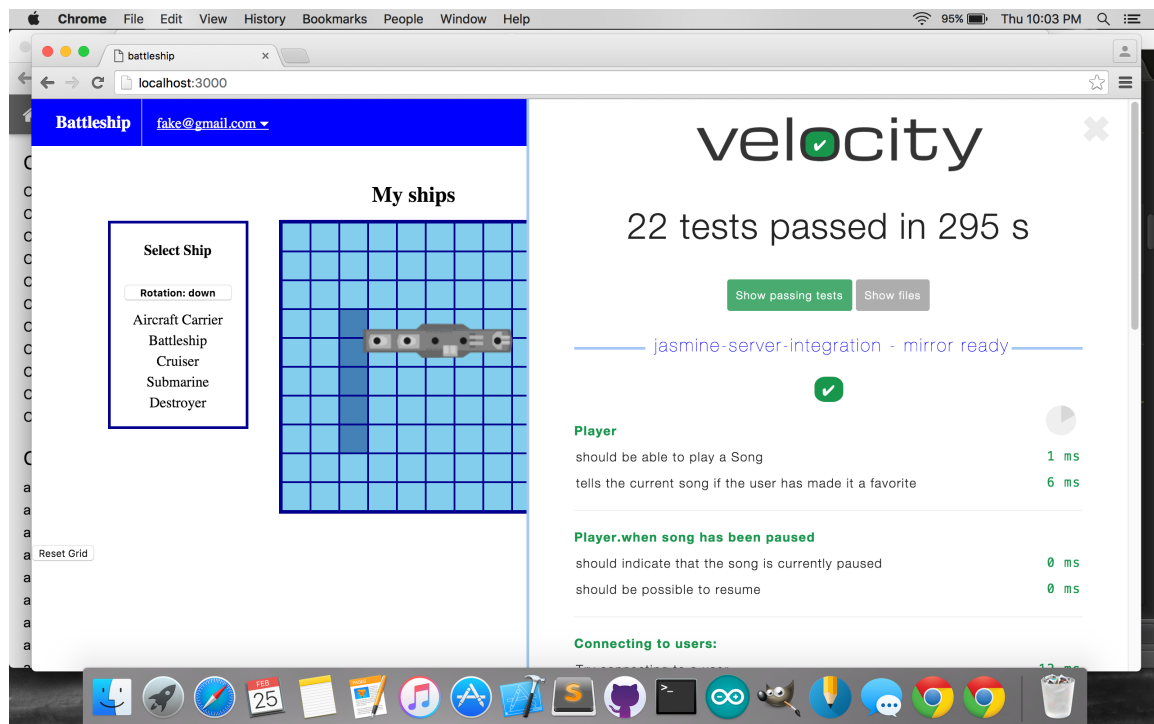
The battleship game must be easy to learn, easy to use, and work as any other battleship game in the eyes of the player. To do otherwise is unreasonable.

### 3.2 System Requirements

Support for the newest version of Chrome is all that is required to play.

### 3.3 Interface Requirements

The interface is to consist of two grids, one for the user's guesses and one for their ships. The interface, as below, is to be as user friendly and out-of-the-box as possible. The ships will be placed, opponents chosen, and shots fired all with the click of the mouse.



## 4. Appendices

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Further Deliverables to be found in directory:

- Our **Repository** can be found at: [https://github.com/jasonwarta/cs372\\_battleship.git](https://github.com/jasonwarta/cs372_battleship.git)
- Our **Diaries** can be found also at said repository. Aka: **Laurin's Log** and **jason's\_diary**.
- Design.pdf, our **design document**, can also be found on the repository.
- Our **User Documentation** is also included.
- And as expected, our **source** and **testing code** is on the repo in the battleship folder.

## 6. References

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Template for this document was found at: [http://www.cdl.edu/cdl\\_resources/writing-requirements](http://www.cdl.edu/cdl_resources/writing-requirements)