

# Projektdokumentation BattleShipGame

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# **1 Project structure**

## **1.1 Project Team**

Each project member is mainly responsible for a specific category and therefor has his role. This means, that the person is responsible for the fulfilment of this task, however this does not mean that they are the only person working on this work package.

<b>Team Member</b>	<b>Responsible Role</b>
Fernbach Gregor	Head of Documentation and project management
Hödl Alexander	Head of development
Qerimi Ardian	Head of Design and Layout
Weiland Sebastian	Head of Testing and Quality management

The project team is called SC!GO.

## **1.2 Project methodology**

We use an agile approach as project management methodology and split the project according the assignment deadlines into iterations.

- Srint1: 2018-01-14
- Sprint2: 2018-01-23
- Sprint3: 2018-01-25

Further details(effort, planned responsible person) about the Sprints (backlog/ planned work) can be found in chapter 2 Planned work.

## **2 Planned work**

Following chapter describes the work packages of the different sprints. Planned responsible person is written in parentheses.

The content of each sprint might vary, important (deadline relevant) tasks (bold) have priority in each sprint

The estimated effort has to be understood as guideline for the real effort. The Responsible Person is not the sole Person working on the working package but it has to be understood as the Person who is taking care of the completion of the work package.

Details of real required effort is documented in file "timesheet-battleship.adoc" in root directory of repository.

## 2.1 Sprint1 (2018-01-14)

This sprint contains the following Work Packages

WP-Nr	WP-name	Description	Resp. Person	Estimated Effort
1.1	<b>Documentation</b>	Project Planning including time & effort estimation, cost estimation and creating the documentation	Fernbach	6
1.2	<b>Mock Up Design</b>	Creating Mock Ups and design look and feel of the game	Qerimi	6
1.3	<b>Creating Scenes (fxml)</b>	Design the different scenes along the stages. according to the mock-ups.	Weiland	5
1.4	<b>Scene-Switching</b>	Implementing functionality to switch between the main scenes (Highscore, Credits, New Game)	Hödl	5
1.5	<b>Credit Dialogue</b>	Implement the first draft of credits in HTML and display them.	Hödl	2

## 2.2 Sprint2 (2018-01-23)

This sprint contains the following Work Packages

WP-Nr	WP-name	Description	Resp. Person	Estimated Effort
2.1	<b>User Manual Part 1: starting application</b>	Creating 1st part of the User Manual which includes: Short explanation of the game, Starting the Application, Main Menu explained	Fernbach	2
2.2	<b>User Manual Part 2: game flow</b>	Creating 2 <sup>nd</sup> part of the user manual: explaining the game flow (single/ multi player, load, save)	Weiland	4
2.3	<b>User Manual Part 3: features</b>	Creating 3 <sup>rd</sup> part of the user manual: Explaining the features (highscore, credits, sound effects)	Qerimi	2
2.4	<b>Designing</b>	Doing fine grained design work (splash screen picture, buttons, background images, etc.)	Qerimi	3
2.5	<b>Splash Screen</b>	Implement Splash Screen Functionality	Weiland	6
2.6	<b>Game Start</b>	Implement handling to start single and multiplayer games, including feature "Naming of game"	Qerimi	6

2.7	<b>Game Save/Load:</b>	Implement Functionality to save and load a game (single/multi player)	Fernbach	4
2.8	<b>Game Multiplayer Functionality</b>	Implement Game Flow for Multiplayer Game e.g. switch between scenes, game over handling, etc.	Hödl	8
2.9	<b>Display Status</b>	Show Ship Statistic during game	Weiland	2
2.10	<b>High score Display and Persistence</b>	Implement Functionality to display High score, including Persistence	Fernbach	8
2.11	<b>High score Replay</b>	Implement Functionality to replay a game from High score	Hödl	6
2.12	<b>Edit Mode (Multiplayer)</b>	Placing Ships on Battlefield in Multiplayer Game	Hödl	10

## 2.3 Sprint3 (2018-01-25)

WP-Nr	WP-name	Description	Resp. Person	Estimated Effort
3.1	<b>Testing</b>	Testing Application and functionality	Weiland	4
3.2	<b>Creating Slides</b>	Creating the slides for the presentation	Fernbach	3
3.3	<b>Prepare Application</b>	Cleanup Application and Prepare Presentation Data	Hödl	2
3.4	<b>Prepare Presentation</b>	Who talks about what, clarify what to present	Qerimi	3



### **3 Time estimation**

According the chapter 2 Planned work following effort is required to fulfil the work packages of the sprints:

- Sprint1: 24
- Sprint2: 61
- Srpint3: 12

To fulfil the whole project requirement the calculation result estimates 97 h.

### **4 Project costs calculation**

The cost for one working hour is estimated with 20€ and the project requires 97 hours to be accomplished.

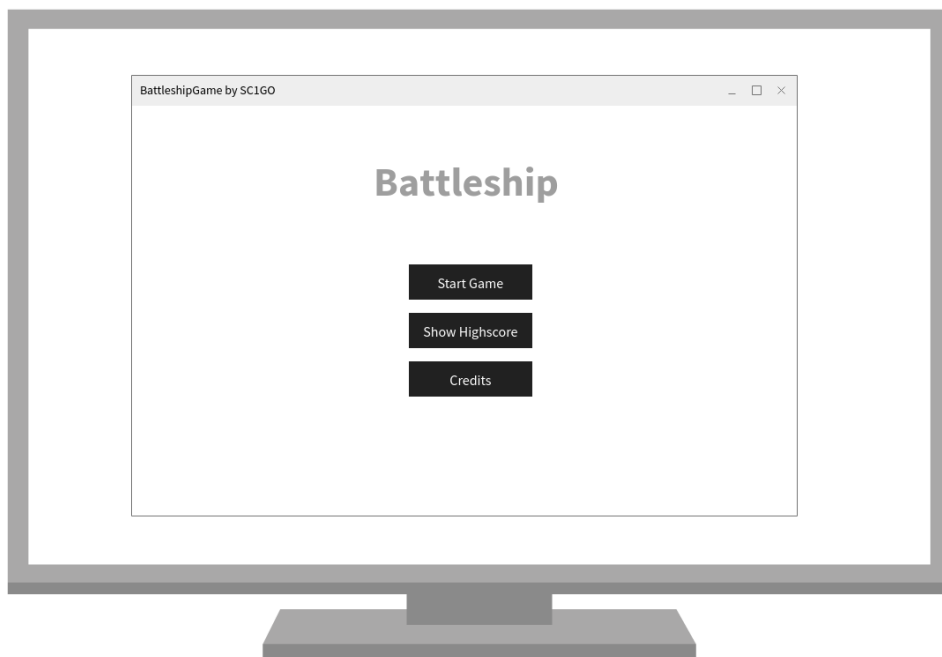
Based on this calculation the project budget is estimated with 1940 €.

## 5 Mockups

The mock ups have been created with the tool “mockflow”. When you start up the application the splash screen is shown while loading. The splash screen shows an image. After that the welcome screen appears.

### 5.1 Welcome screen

The welcome screen is as already mentioned the first menu that appears. It contains the buttons “Start Game”, “Show Highscore” and “Credits”. The “Start Game” button starts a new game where you will be able to select between a single player and multiplayer game. The “Show Highscore”-button leads you to the High score screen . The “Credits”-button leads you to the Credit Screen.



*Mock-up 1: Welcome screen*

## 5.2 High score screen

This screen shows the High score of finished games which are sorted by the amount of clicks. It contains the buttons “Replay Game”, “Clear Highscore” and “Return to Main”.

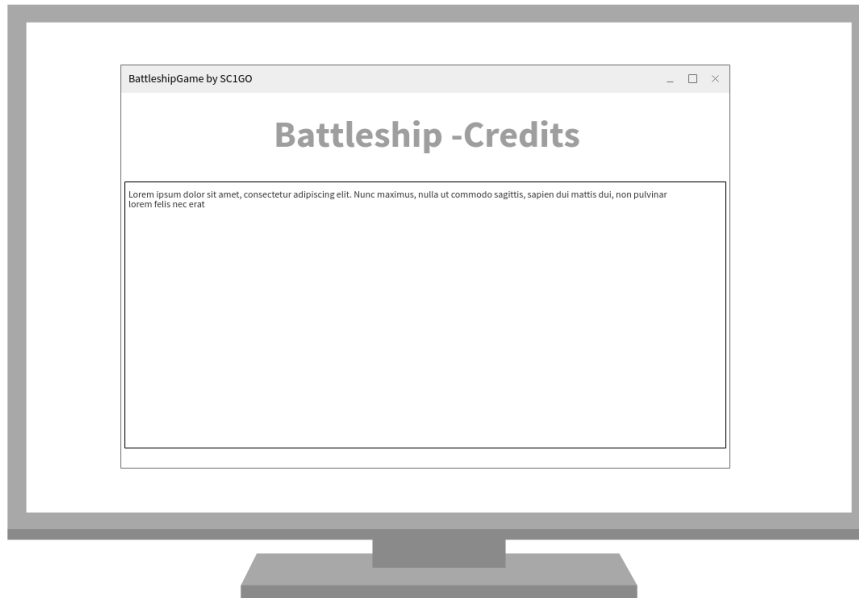
- The “Replay Game”-button enables you to replay a selected game.
- The “Clear Highscore”-button deletes all saved High scores.
- The “Return to Main”-button leads you back to the welcome screen.



Mock-up 1: High score screen

## 5.3 Credit Screen

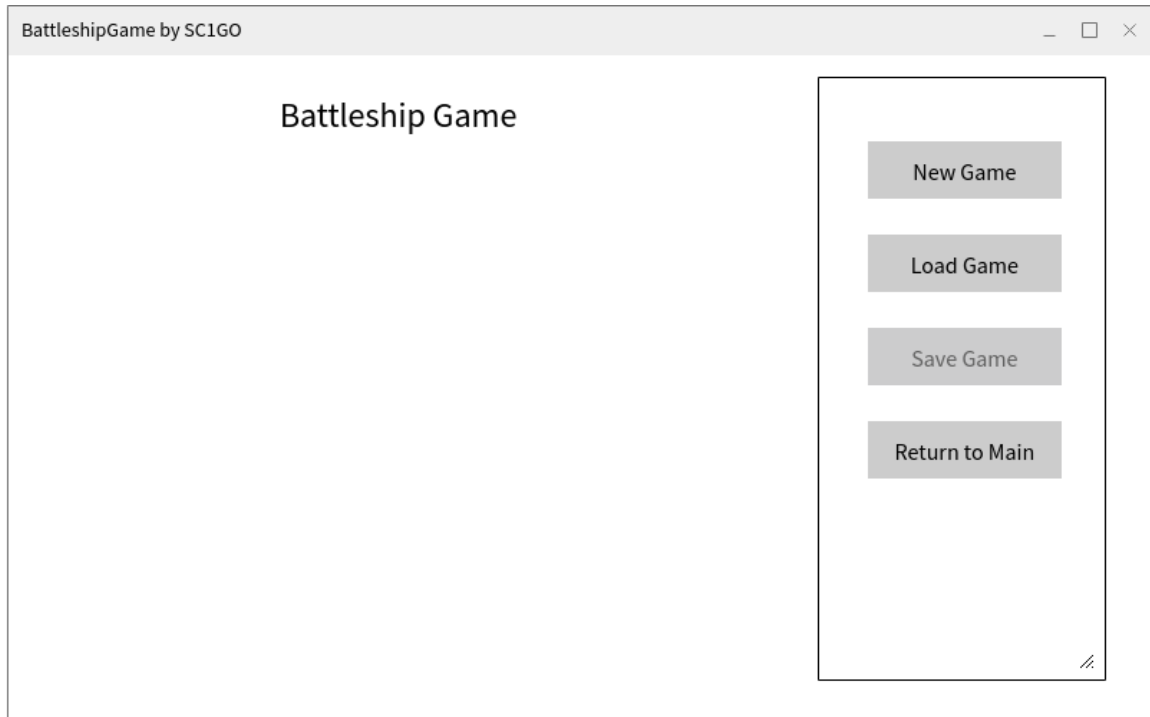
This Screen appears when you click on “Credits” in the main menu and displays the Credits of the game. In this mock-up a button is missing which leads you back to the welcome screen.



*Mock-up 2: Credit screen*

## 5.4 Start-Game screen

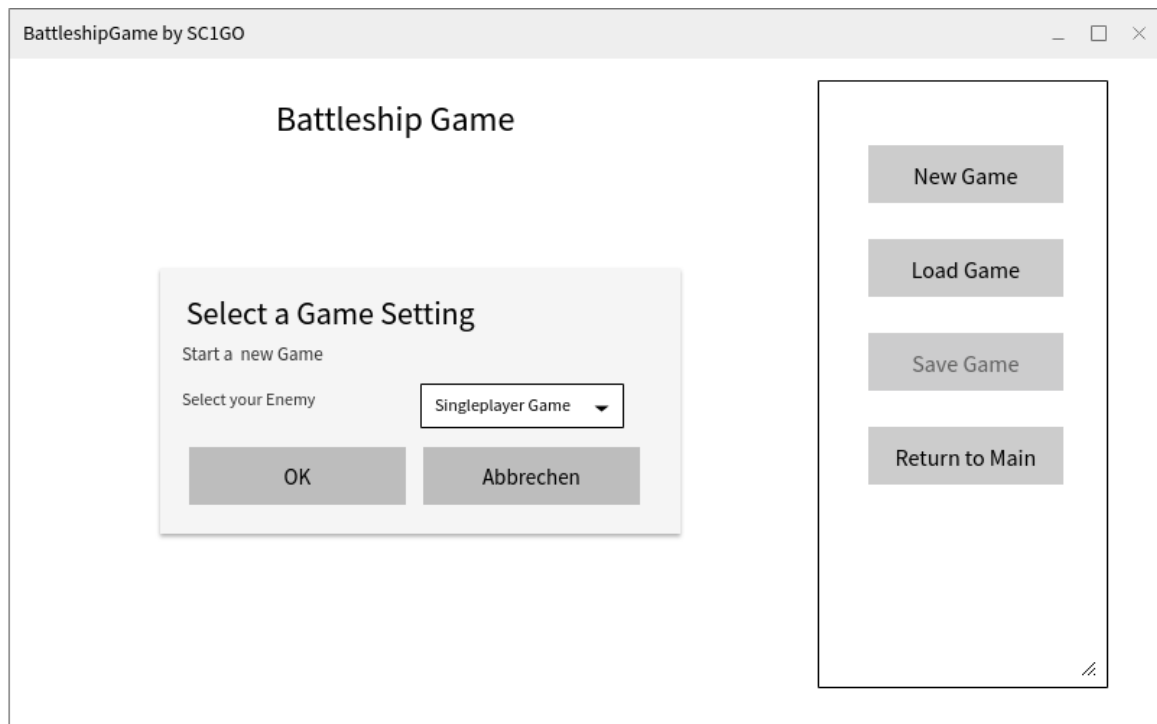
This screen appears if you click on the “Start Game” button in the welcome screen. In this screen you can start a new Game if you click on the “New Game” button, load a saved game if you click on the “Load Game” button or return to the welcome screen if you click on the “Return to Main” button.



*Mock-up 3: Start-Game-screen*

## 5.5 New-Game screen

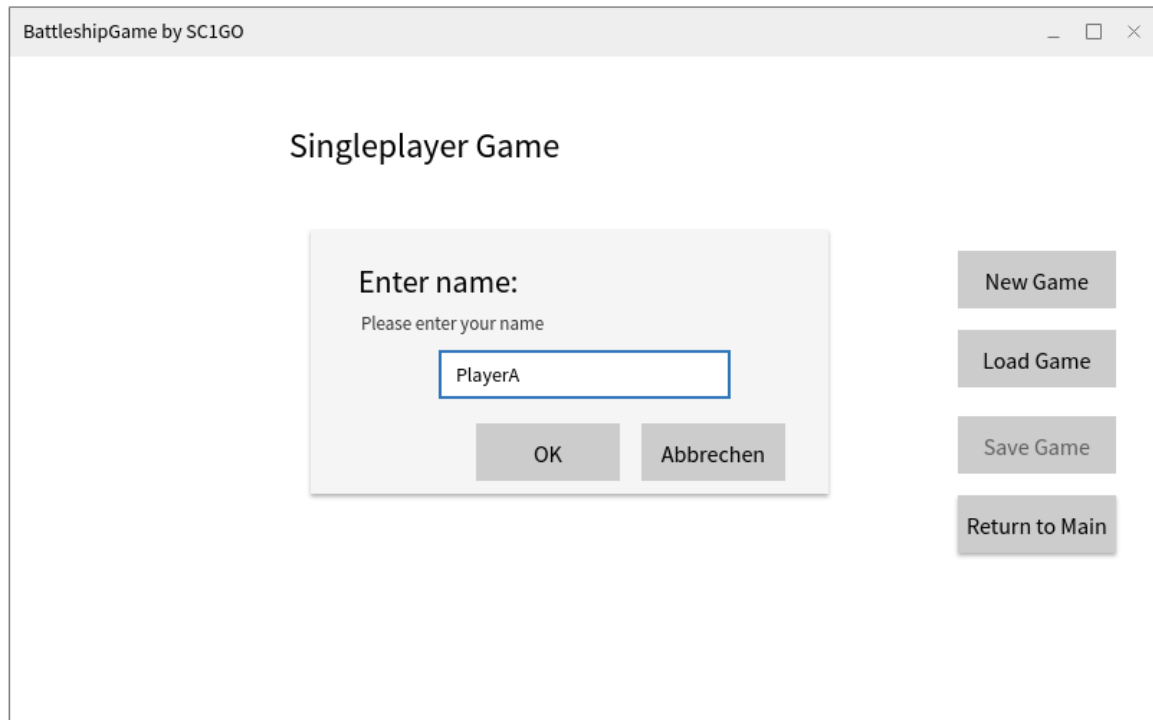
This screen appears if click on the “New Game” button in the Start-Game screen. Here a dialogue appears in which you can select between a Single player or Multiplayer Game. To Complete the selection you have to click on the “OK” button and to abort the selection you have to click the “Abbrechen” button.



Mock-up 4: New-Game screen

## 5.6 Single player Game: Enter-name screen

This screen appears if you decided to select a single player game in the select game type screen. Here a dialogue appears in which you can enter your name. Again you can agree or abort the decision.



The image shows a software window titled "BattleshipGame by SC1GO". Inside the window, the title "Singleplayer Game" is centered at the top. Below this, there is a central dialog box with the heading "Enter name:" and the instruction "Please enter your name". A text input field within this dialog contains the text "PlayerA". Below the input field are two buttons: "OK" and "Abbrechen". To the right of the central dialog, there is a vertical stack of four buttons: "New Game", "Load Game", "Save Game", and "Return to Main".

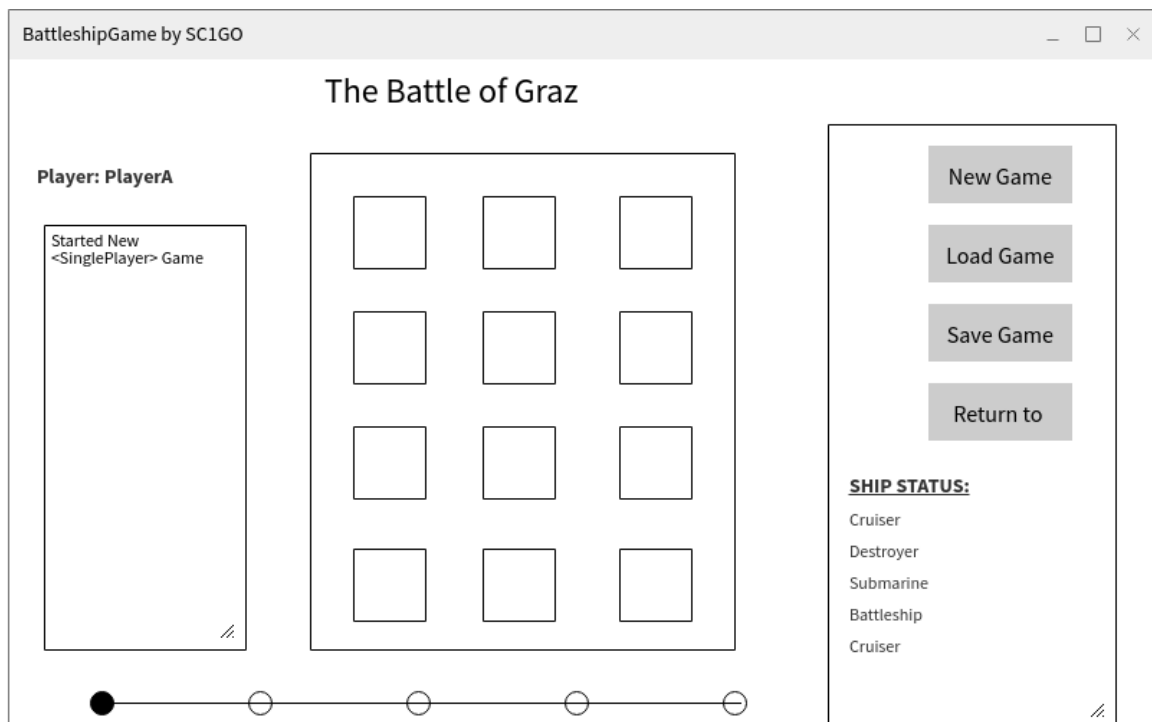
*Mock-up 5: Single player game: Enter-name screen*

## 5.7 Singleplayer Game: Play-Game screen

If you clicked on “OK” in the last screen you are playing a single player game. In this screen you can either start a new game by clicking on the “New Game” button, load a saved game by clicking on “Load Game”, save a current game by clicking on “Save Game” or return to the welcome screen by clicking on “Return to Main”.

At the bottom of the screen you have the sliders which enables you to view already played game rounds. You can click on the little dots which take you back and forth in the game history.

On the left handside you have the Game log which shows you what happened so far. Above it you see your selected player name.



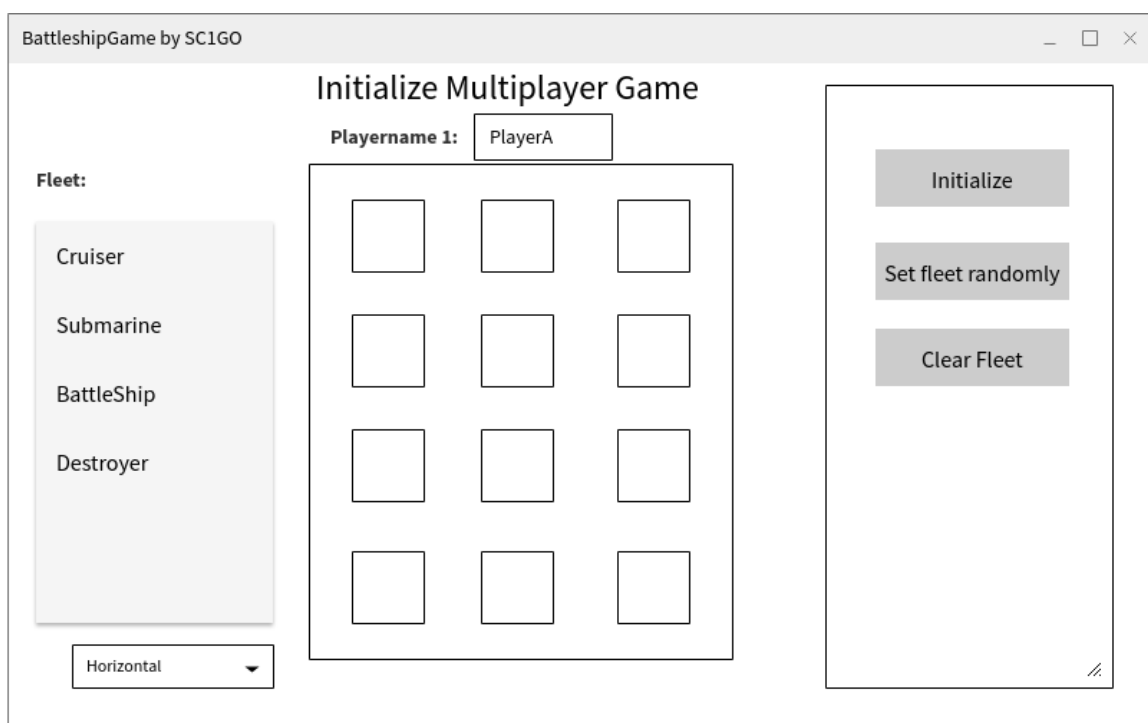
Mock-up 6: Single player game: Play-Game screen



## 5.8 Multiplayer Game: Initialize-Game screen

This screen shows the initiation of a multiplayer game and appears after you click on “Start Game” in the welcome screen and afterwards selected “Multiplayer” in the following dialogue. After this you can either place your fleet manually by selecting the shiptype and the direction of the ship from the list on the left handside and place it on the battlefield or you can click on “Set fleet randomly”. If you do not like your selection you could remove it by clicking on “Clear Fleet”.

If you like your selection click on “Initialize” to start a multiplayer game.



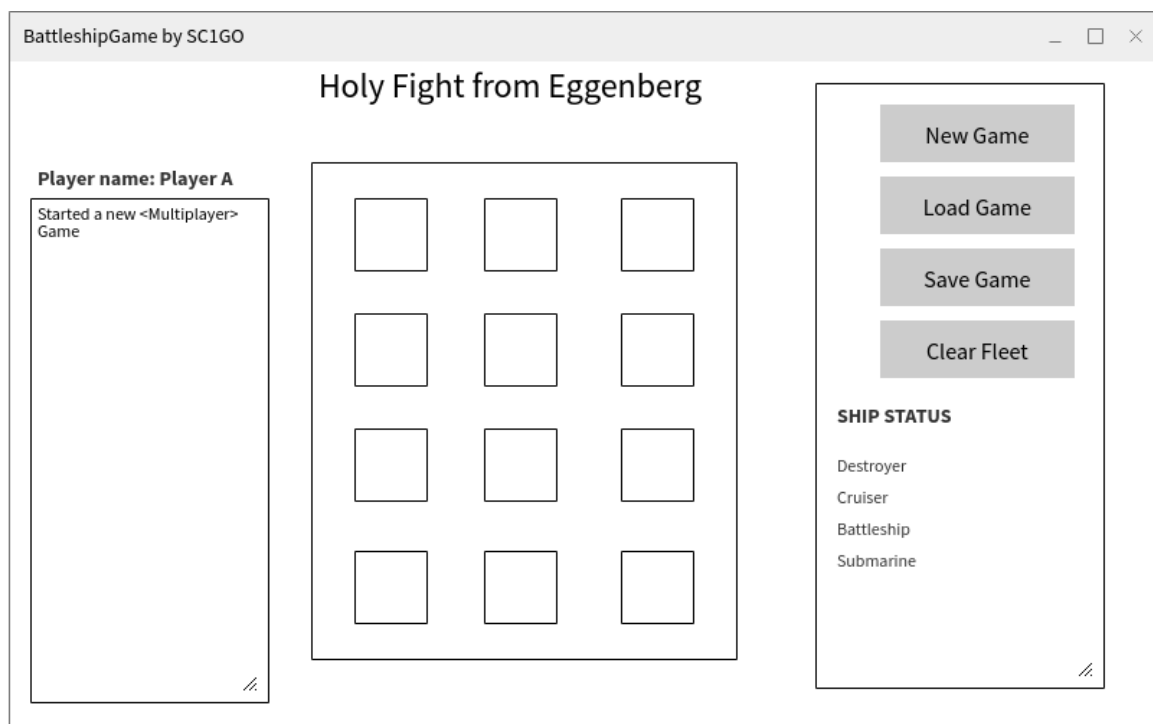
Mock-up 7: Multiplayer Game: Initiation-Game screen

## 5.9 Multiplayer Game: Play-Game screen

After both players went through the initializing phase you can play a multiplayer game. During this you can again either start a new game by clicking on “New Game”, load a game by clicking on “Load Game”, save a current game by clicking on “Save Game” or return to the welcome screen by clicking on the “Return to main” button.

On the left handside you have the log which shows you what happened so far during the game.

On the right handside you see the status of ships. This tells you which ships have already sunk and which ships are still in the game.



Mock-up 8: Multiplayer Game: Play-Game screen

## 6 Manual

The project manual is an own file (project-manual.pdf) due to its size.

It can be found in the Git repository.