Manual

Battleship Game

FH JOANNEUM

Informationsmanagement:

3. Semester

SWENGB

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Inhalt

1 GENERAL INFORMATION

This manual is a documented form of how to use/deal with the application "battleShip". It is a step-by-step guide for how to play a game and deal with the basic functionalities of this application.

How to read this manual:

- references to chapters in this manual are either provided in the listings of the buttons which are written in bold, or with an endorsement (underline) provided in the explanation of a button.
- this manual goes through all the important menus and gives explanation to it. Moreover, buttons are explained.
- Buttons are generally marked with a quotation sign ("") or written in bold when they are mentioned in listings.
- special care has been given to starting a singleplayer/multiplayer game and singleplayer/multiplayer gameflow.
- for the save and load functionality there are own chapters which are referenced when needed.

The creation of this manual has been done with the following tools:
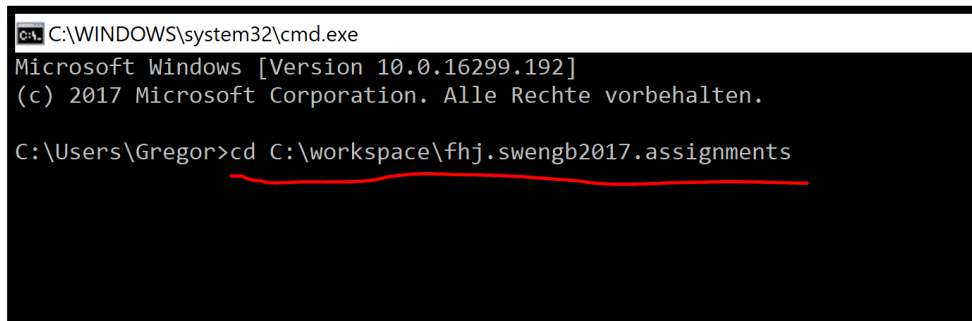
- Microsoft Word
- Paint 3D

2 LAUNCH THE APPLICATION

To launch the application with SBT you have to use the Windows Command Prompt. To launch the Windows Command Prompt (CMD) press "Windows-Button" + "R" and type cmd in the dialogue that pops up. Then just click on "OK" and the CMD will launch.

In the Command Prompt you have to navigate to the destination where the application is stored. To do this you have to you use the "cd" command.

Hint: With the tab-button you can auto-select paths. Just type in the first letters of the directory/sub-directory and click the tab-button.
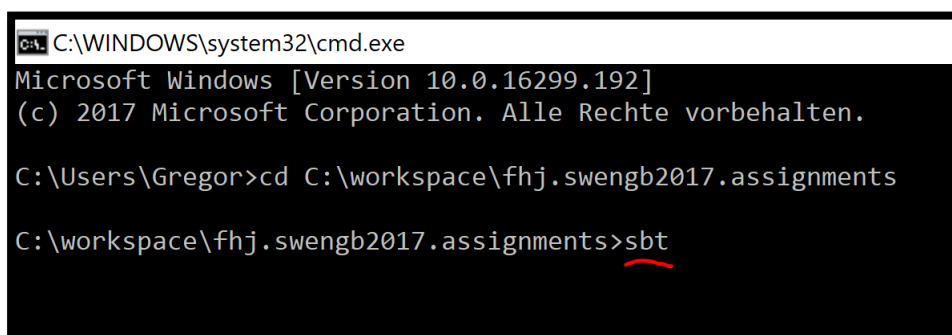

Figure 1: Navigate in CMD

If you have selected the right path press Enter.

In the next step you have to start SBT which is done by typing "sbt" and pressing Enter.

Figure 2: Start SBT

Afterwards you select the correct project. In our case this is battleShipFx. You do this by typing in "project battleShipFx".

Figure 3: select the right project

Lastly, to launch the application you have to insert "run" and press Enter.

Figure 4: launch the application

When you went through the steps correctly you will see the splash screen.

This screen is displayed at the launch of the application while it is loading.

Figure 5: Splash screen

3 MAIN MENU

The main menu is displayed after the application launched correctly.
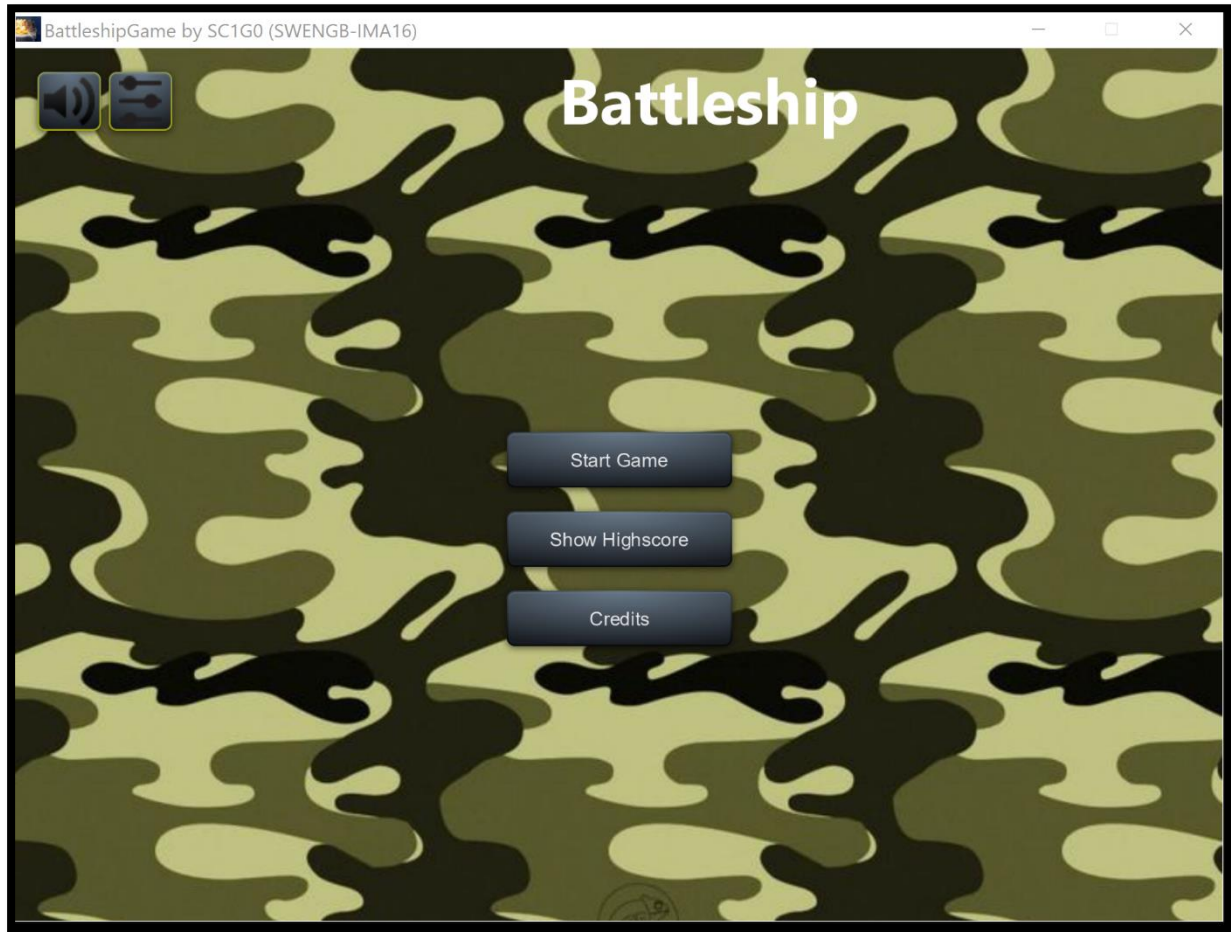
Figure 6: Main Menu

Here you have the following 5 buttons:

- **Start Game**: If you click this button you will be directed to the Start Game Menu where you can choose between a Singleplayer or Multiplayer Game.
- **Show Highscore**: The High Score Button takes you to the High score Menu.
- **Credits**: The Credits Button takes you to the Credits Menu.
- **Sound-Button**: If you click on this button you can either turn off or turn on the sounds.

- **Sound-Settings-Button**: If you click on this button the sound-settings-dialogue opens up. Here you can choose to disable/enable both the Background music and the Sound effects.
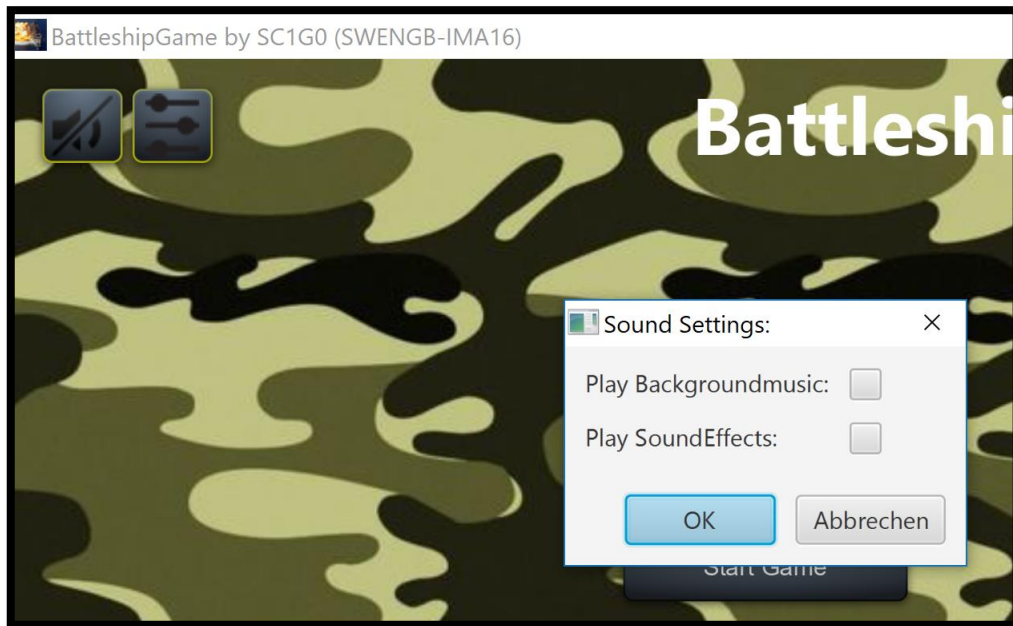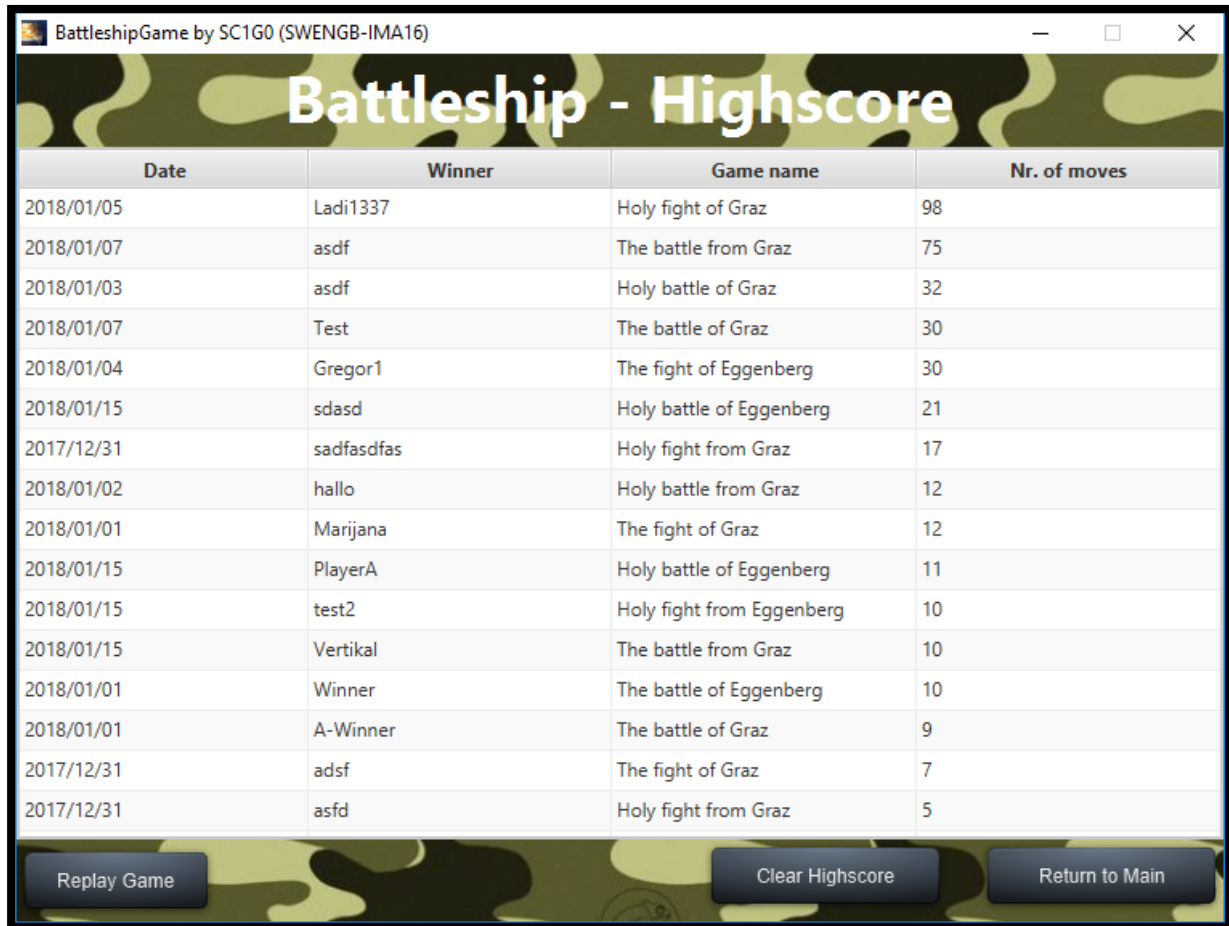
Figure 7: Sound settings dialogue

4 HIGH SCORE MENU

Figure 8: High score menu

This menu opens up if you clicked on "Show Highscore" in the main menu. It shows the High score of finished games which are sorted by the number of clicks. It contains the following buttons :

- The **Replay Game**-button enables you to review an already played game. To do this you have to select a game and click on "Replay Game". Then you are taken to the game screen which displays you the slider, one or two battlefields (depends if the game was a single or multiplayer Game), your player name and the battle title. You can use the slider to take you to the game Round you want to review. Figure 9 shows how a review of an singleplayer game looks like whereas figure 10 shows a review of a multiplayer game.
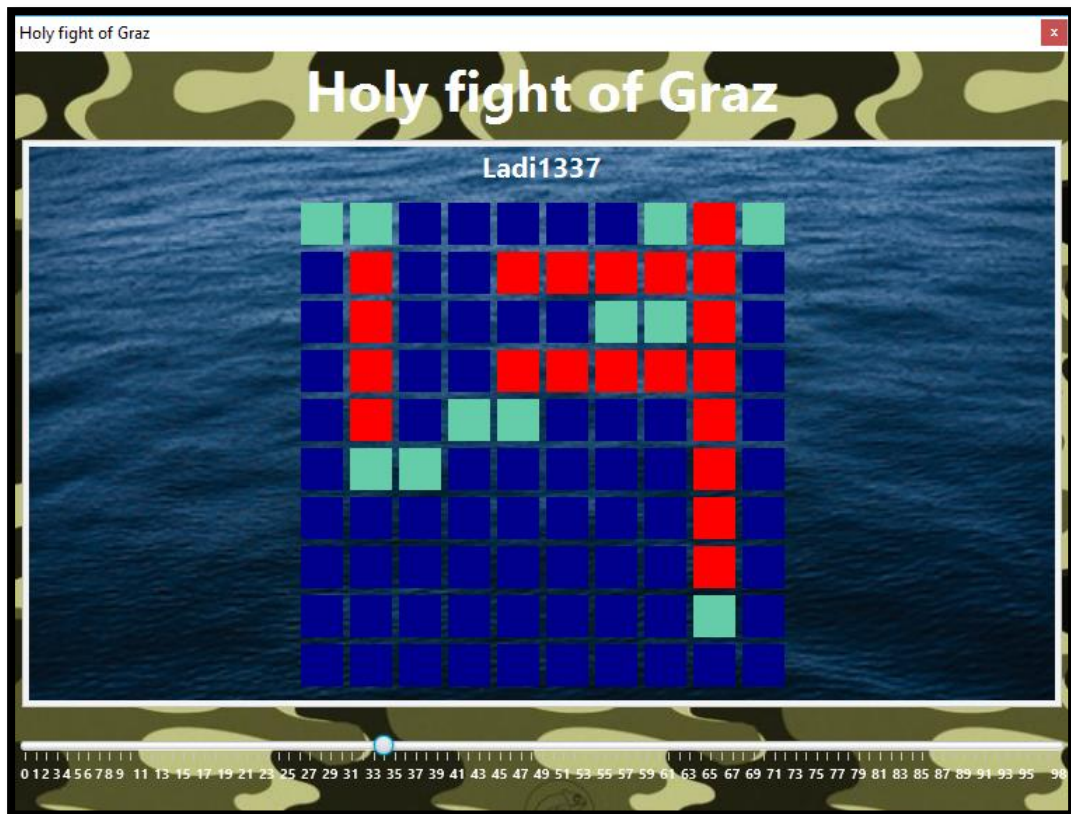
Figure 9: Review Singleplayer Game

Figure 10: Review multi player Game

- The **Clear Highscore**-button deletes all saved High scores. If you click this button a dialogue will pop up which asks you if you really want to do this. You can either agree by pressing "OK" or abort it by pressing "Abbrechen".
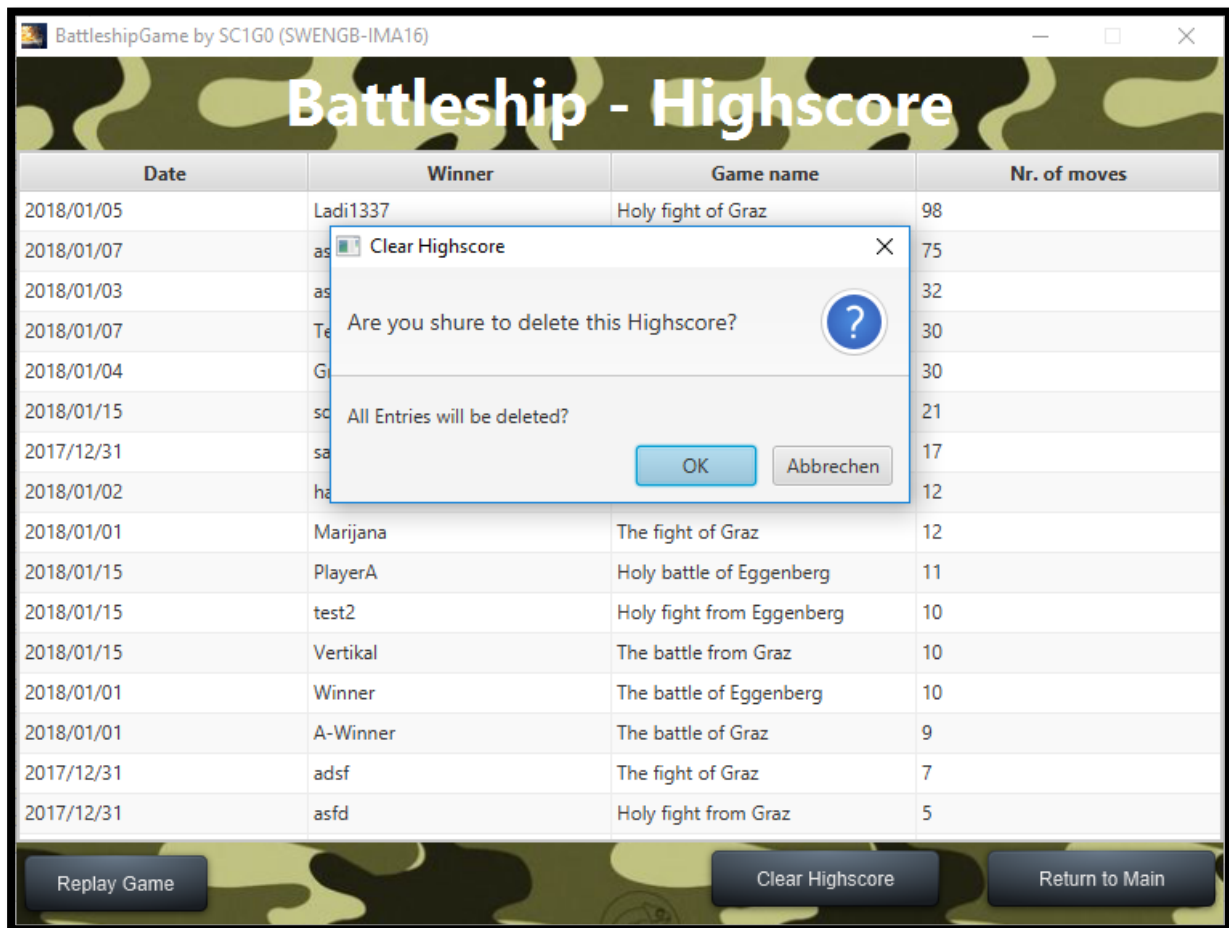
Figure 11: Clear high score dialogue

- The "**Return to Main Menu**"-button leads you back to the welcome screen.

5 CREDITS MENU

Figure 12: The credits menu

This Screen appears when you click on "Credits" in the main menu and displays the Credits of the game. There is only one button called "Return to Main Menu" which takes you back to the main menu.

The credits text describes the project background, the people involved in the project, the used resources and the licences.

6 START GAME MENU

This menu appears if you clicked on the "Start Game" button in the main menu after you launched the application. After you loaded/started a game it will not be displayed anymore.

It contains 4 buttons.

- **New Game**: If you click this button you start a new game.
- **Load Game**: If you click this button you can load a saved game state.
- **Save Game**: In this context this button is disabled.
- **Return to Main Menu:** This button takes you back to the main menu.
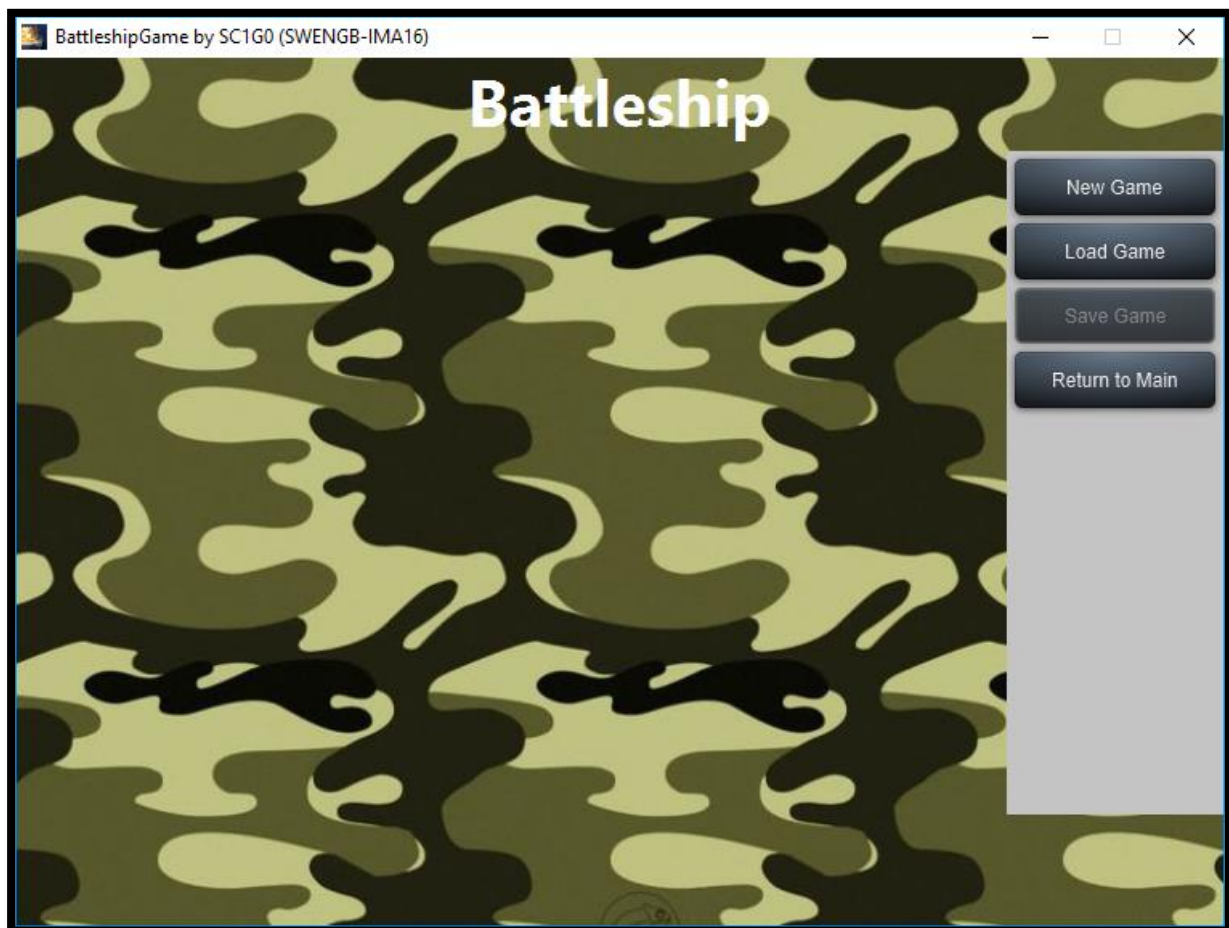
Figure 13: Start Game Menu

7 START SINGLEPLAYER GAME

If you clicked on "New Game" in the Start-Game-Menu a dialogue appears which asks you if you want to select a singleplayer or multiplayer game. You can start a new singleplayer game by selecting "Singleplayer" from the drop-down menu and clicking "OK". Alternatively, you could also abort your decision and click on "Abbrechen".
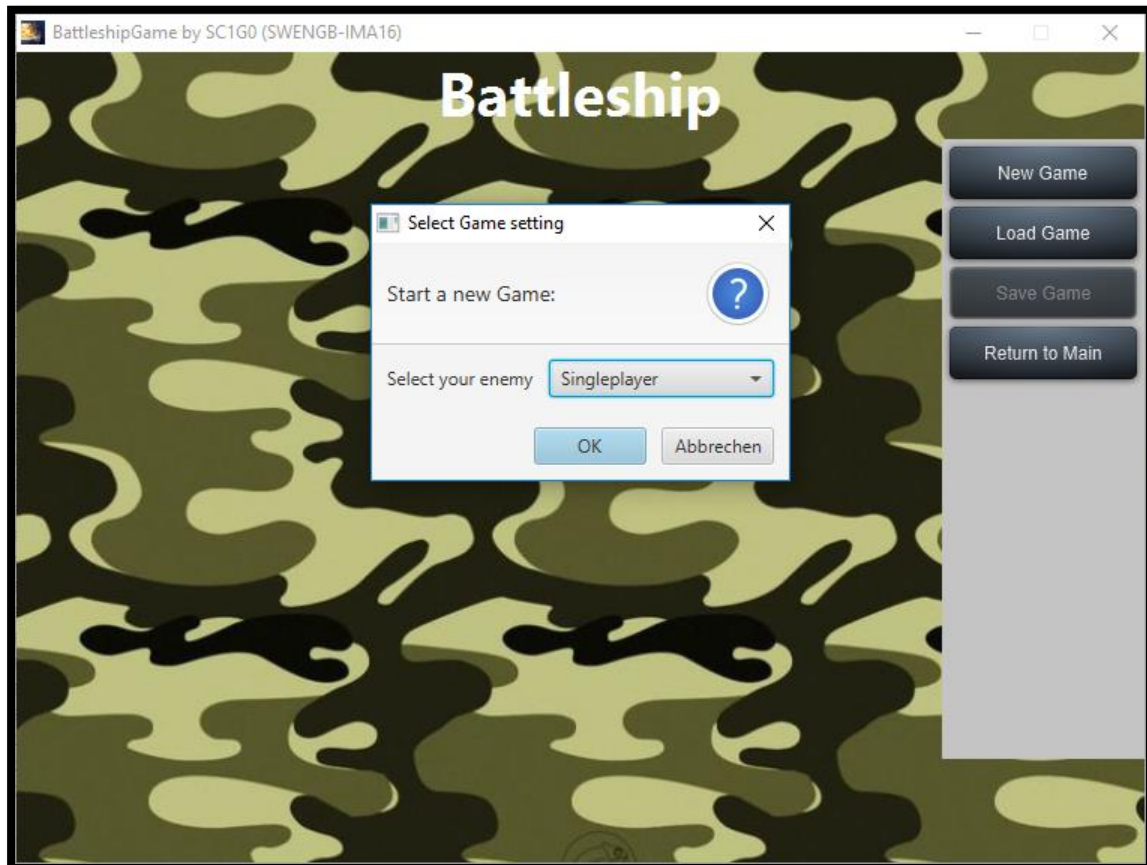
Figure 14: Select game-type dialogue

Afterwards you have to enter your name in the enter-name dialogue box and click "OK".
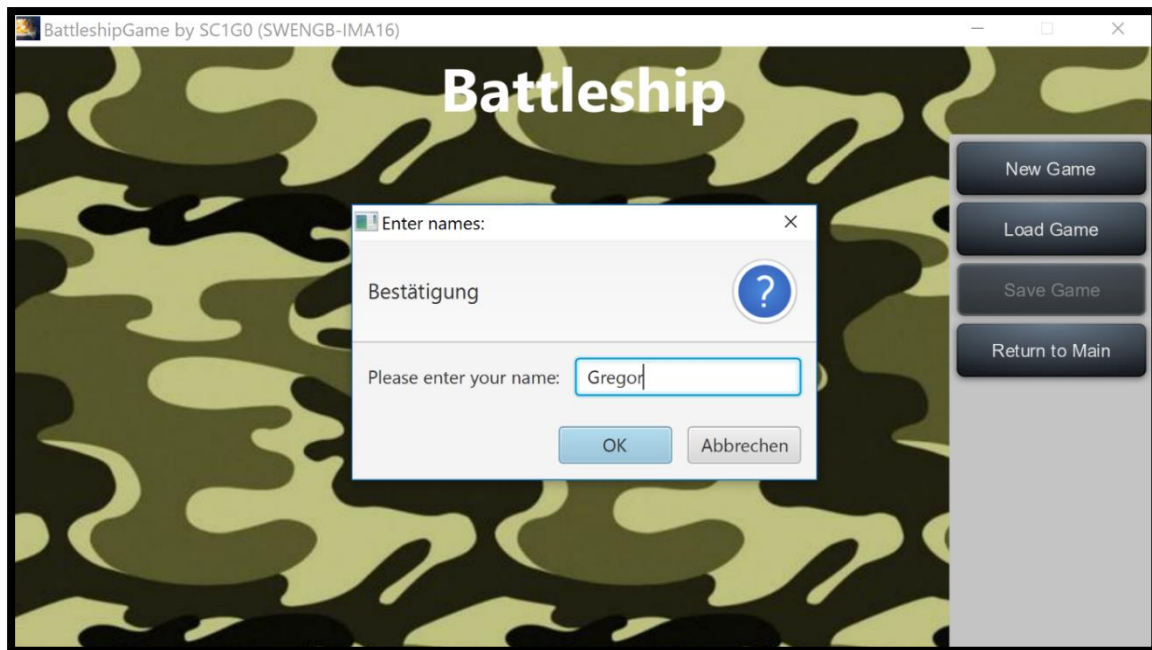
Figure 15: Enter name dialogue

Then a new singleplayer game starts in which the ships are already placed on the battlefield.

Figure 16: Singleplayer Game

At the bottom of the screen you have the slider which enables you to review already played game rounds. You can click on the little dots which take you back and forth in the game history. If you review recent game states with the slider you are in the history mode. While you are in history mode it is not possible to click positions. Furthermore, you can see a message appended to the battle title "(History)" and an entry in the log which says "(HISTORY VIEW ACTIVATED)". In order to play your current game on you have to click on the last dot (current game state) in the slider.

Figure 17: Slider(History mode)

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

At the top of the screen you see the randomly created battle title for you game round.

On the right handside below the buttons you see the status of your ships and above the status you have 4 buttons.

- **New Game**: If you click on this button you can start a new game.

- **Load Game**: If you click on this button you can load a saved Singleplayer Game.

- **Save Game**: If you click on this button you can save your current game state.

- **Return to Main Menu**: This button takes you back to the main menu.

8 START MULTIPLAYER GAME

If you clicked on "New Game"-button in the Start-Game-Menu a dialogue appears which asks you if you want to select a singleplayer or multi player Game. You can start a new multi player game by selecting "Multiplayer" from the drop-down menu and click on "OK".

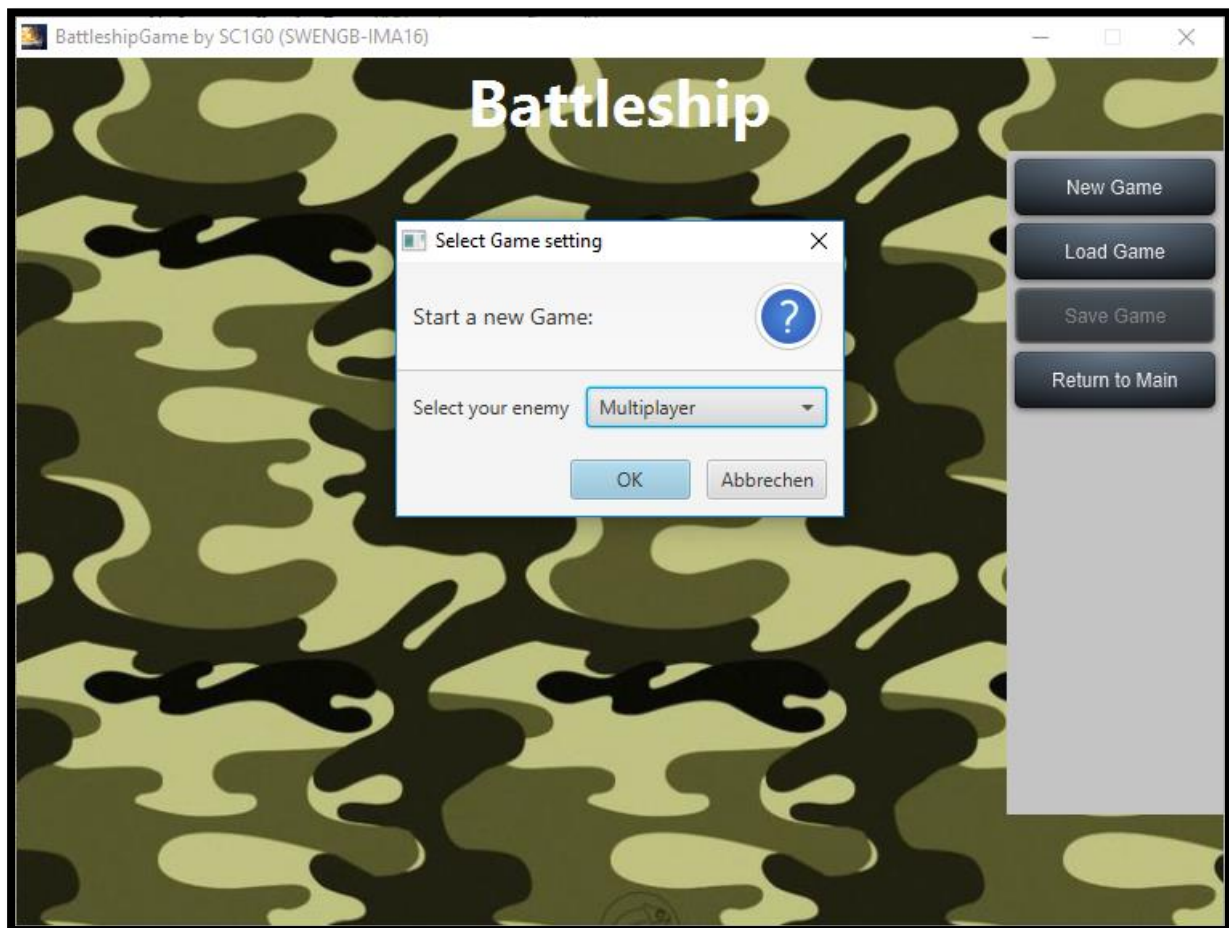*Figure 18: Select-Game-type-dialogue*

After you selected a multiplayer game the initialization screen for Player A appears. In this initialization screen you have to enter a name for Player A then confirm it by pressing enter.
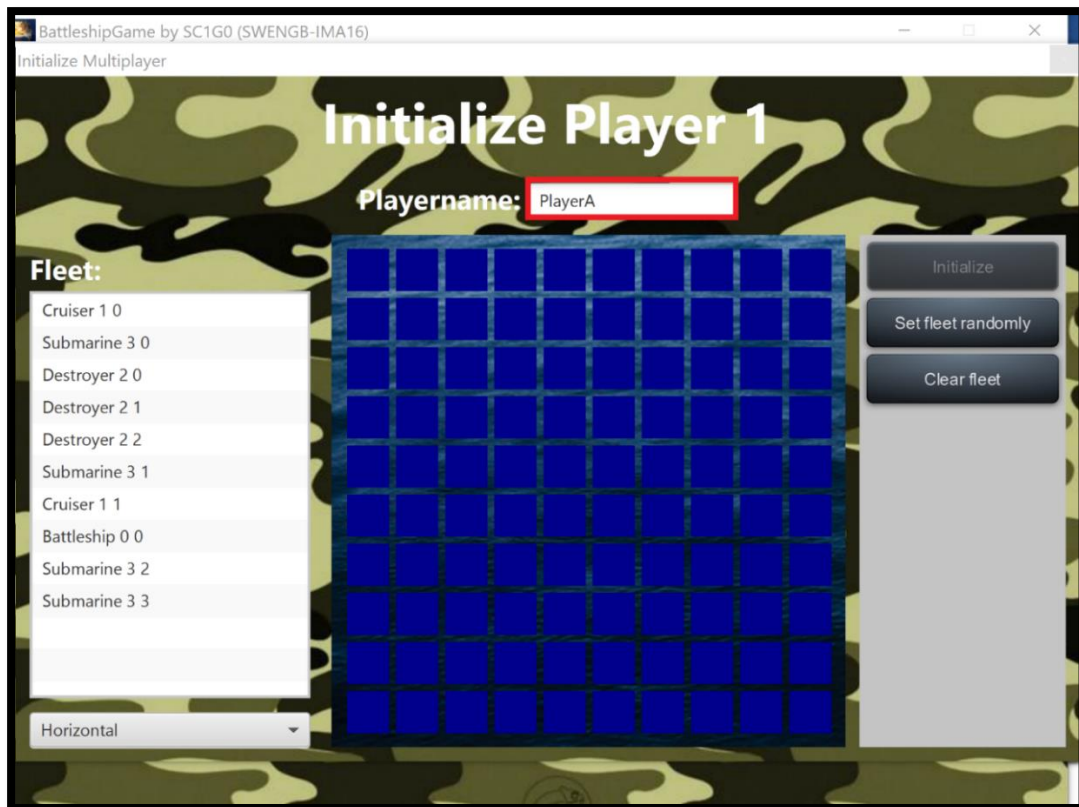
Figure 19: Enter Playername

Next comes the placement of the ships. This can be done by clicking on the button "Set fleet randomly".
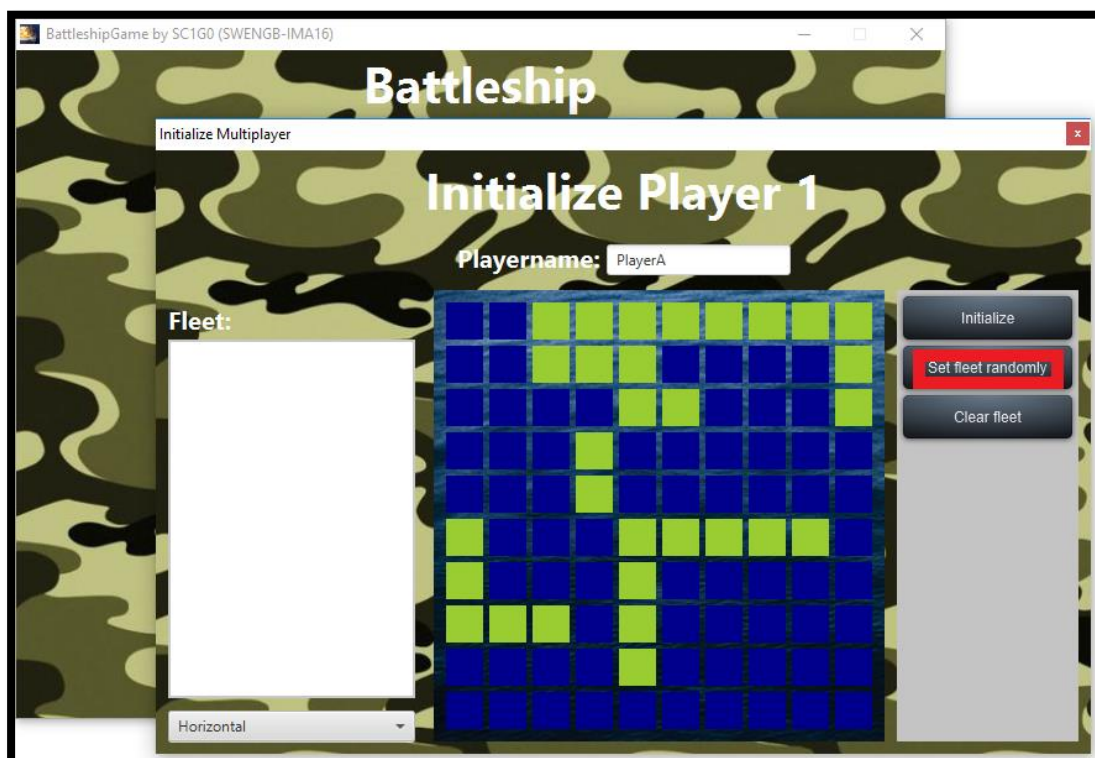

Figure 20: Set fleet randomly

Alternatively, you could also place your ships manually on the battlefield. To do this you select a ship from the "Fleet" grid on the lefthandside on the screen and an orientation from the drop-down menu below the fleet-grid. Then click on a position on the battlefield you want the ship to be placed.
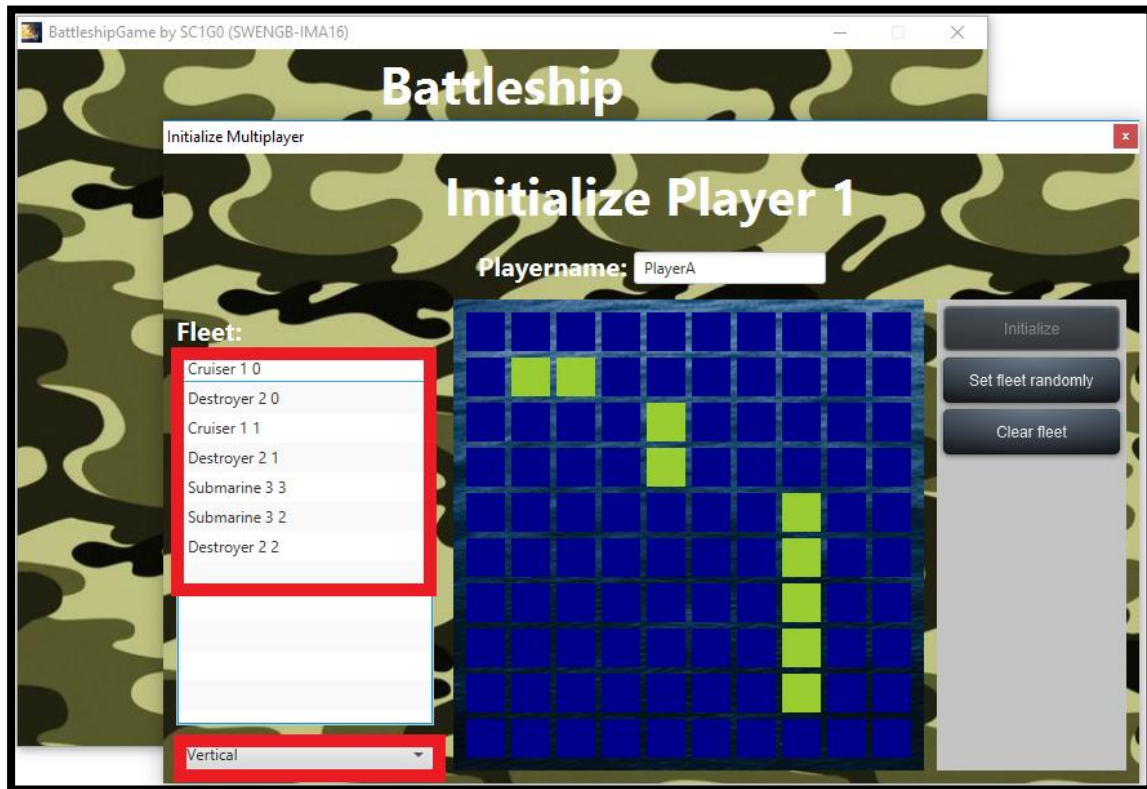

Figure 21: Place ships manually

Keep in mind that the position you click on is the start position of the ship. If the ship does not fit onto battlefield because there are not enough positions for the ship to be placed on, an error-dialogue will be displayed which tells you that you chose an illegal position for your ship.
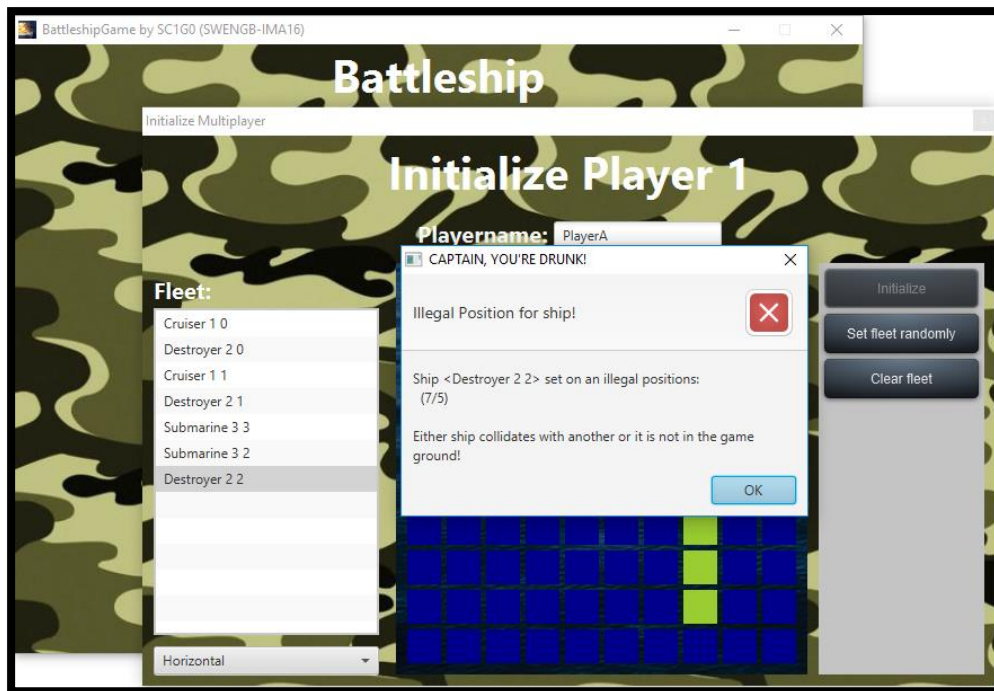
Figure 22: Illegal position

In order to further place your ships manually on the battlefield you have to click on "OK". This will undo the illegal placement and you have to place it again on a legal position.

If you put all your ships correctly on the battlefield then the "Initialize" button will be enabled and PlayerB is good to do his/her initialization.

Figure 23: Initialize Game

After PlayerB went through the same proccess and did the initilization, the multi player game starts.

9 MULTIPLAYER GAMEFLOW

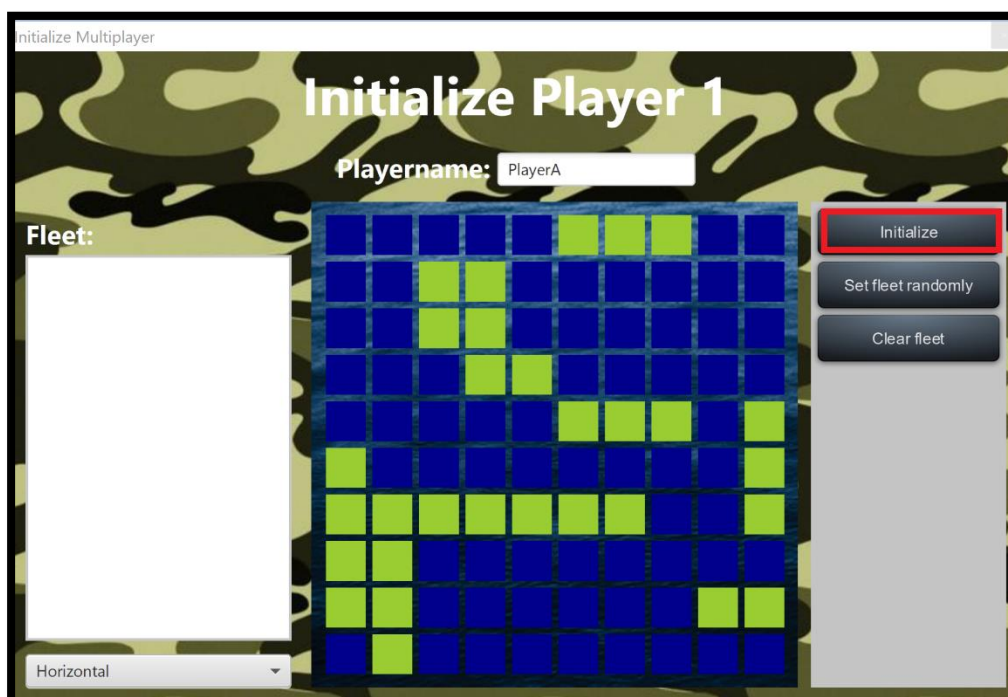After both players finished their initialization, the play-game-screen appears.

Figure 24: turn of PlayerA

In this screen the current player is displayed on the left-upper corner. Below you will find the log-screen of the game which tells you what has happened so far.

In the upper screen in the center you see the battle title for your multiplayer game which is created randomly.

On the right handside in the lower half of the screen you can see the status of your ships.

And in the upper half you have 4 buttons.

- **New Game**: If you click this button you start a new game
- **Load Game**: If you click this button you can load a saved multiplayer game.
- **Save Game**: If you click this button you can save the current state of your multiplayer game.

- **Return to Main Menu**: This button takes you back to the main menu. After you clicked on a position on the battlefield a dialogue appears that tells you which Player will be next to shoot. You have to click on "OK" so that the next Player can take his/her turn.
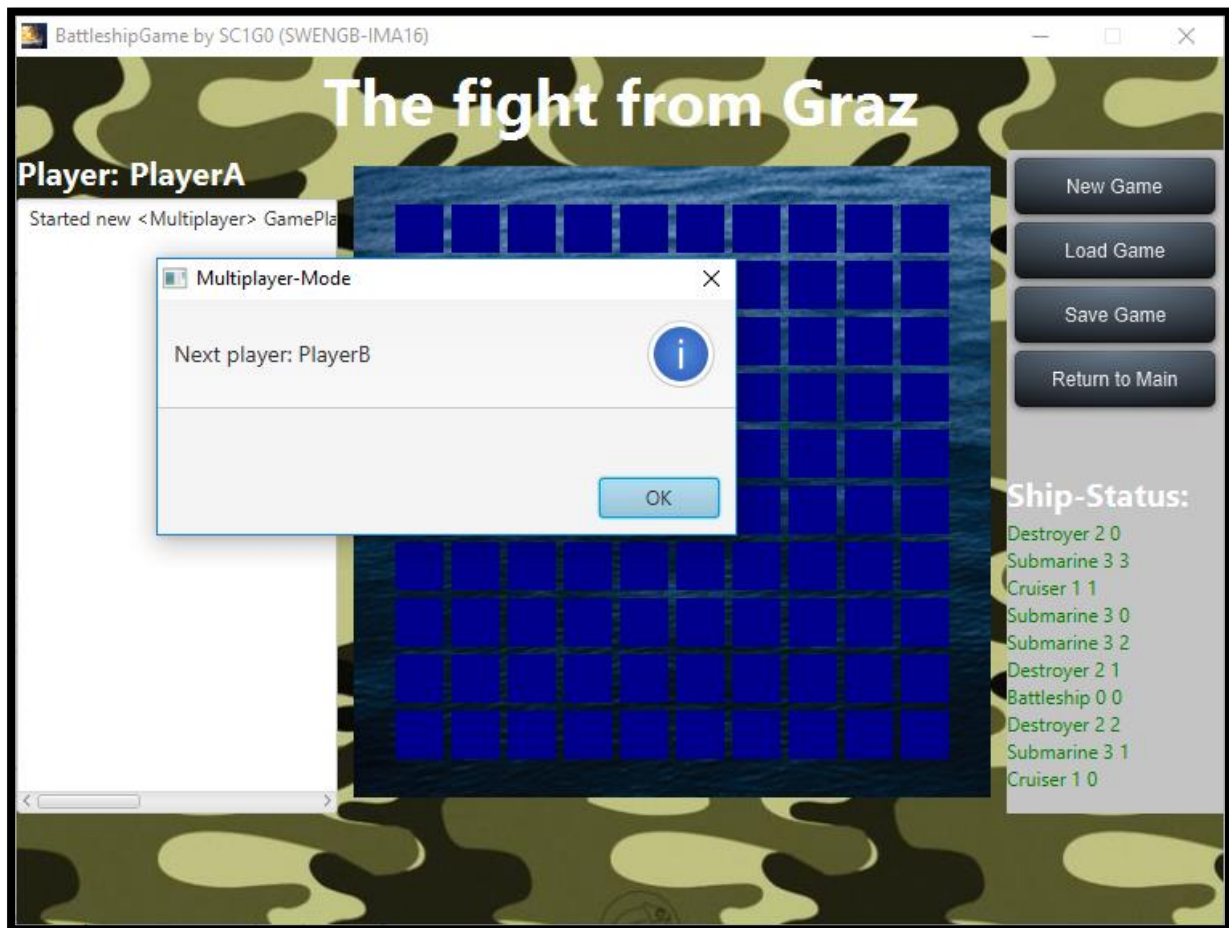

Figure 25: player switch dialogue

After that Player B has his/her turn. You can see in Figure 26 that both Players have unique colours for their battlefields. These are changed automatically when the other Player has his/her turn.

Figure 26: turn of PlayerB

If PlayerB clicks a position on the battlefield he/she has done his/her shot and the dialogue appears again that tells you who is next.
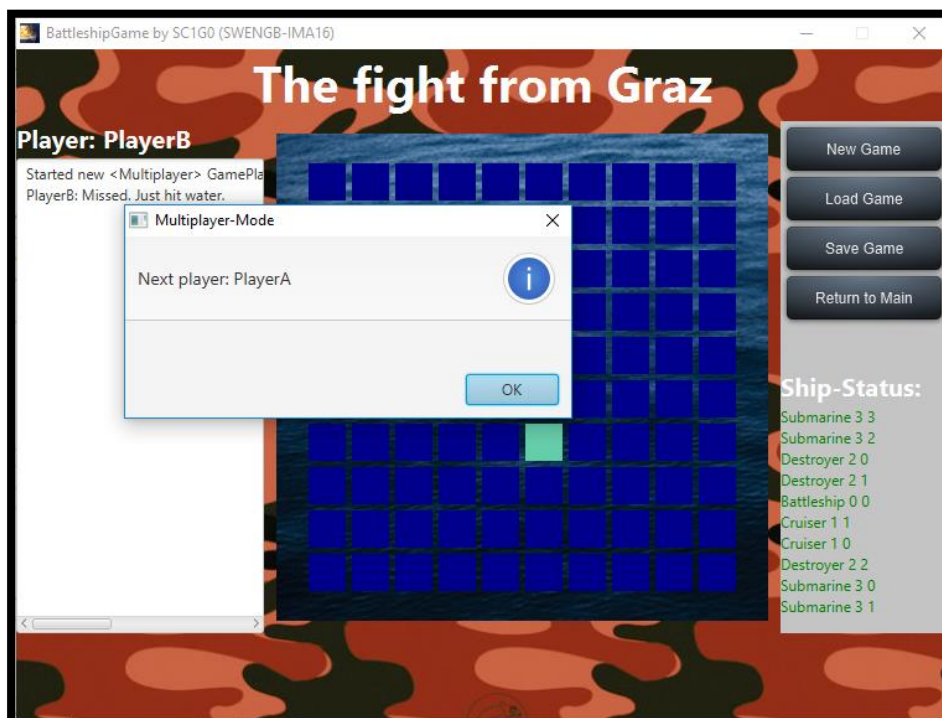

Figure 27: switch-player dialogue

The first Player who destroys all of the enemy's battleships will see a dialogue which tells you that the game is over.
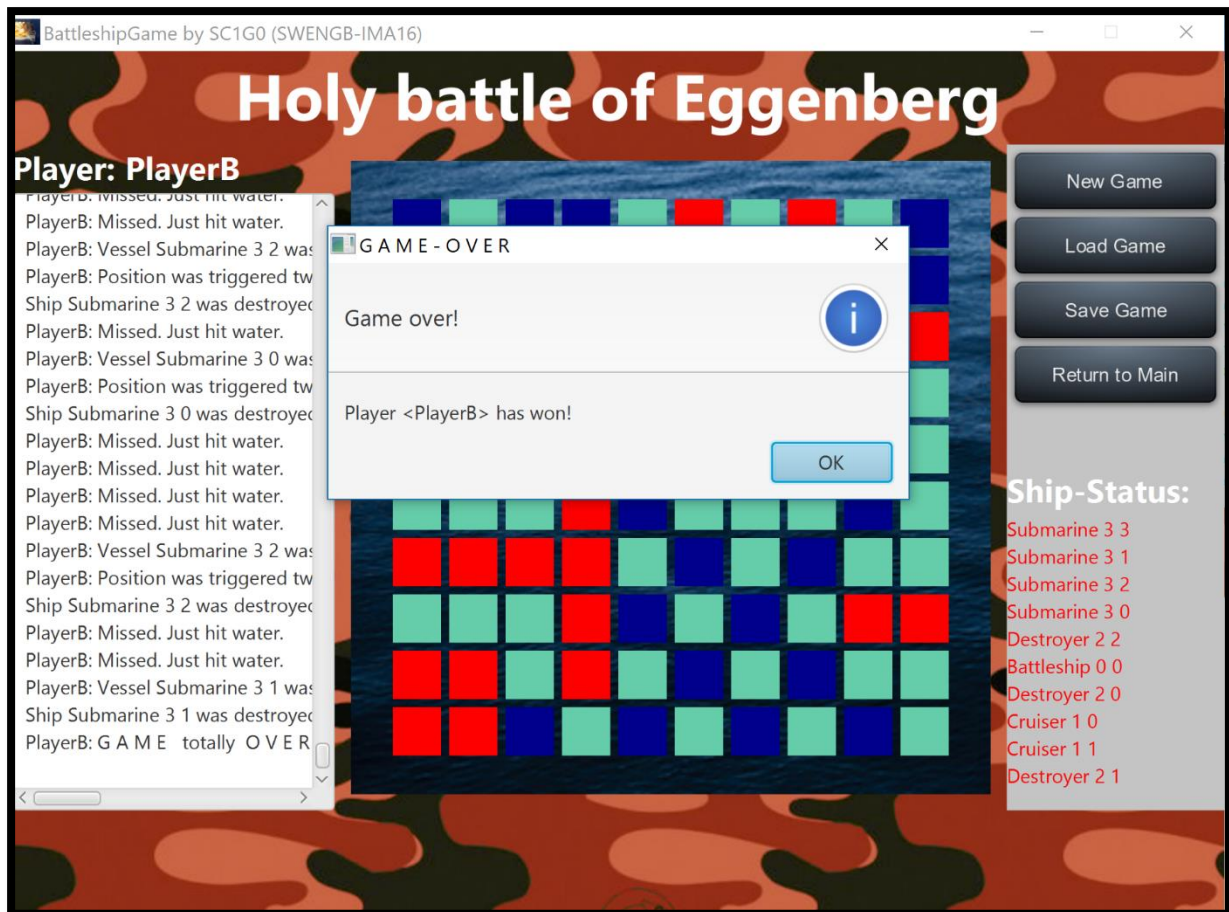
Figure 28: Game-over-dialogue

When you click on „OK" you can either start a new game, save you current game state or return to main.

10 SAVE GAME

While playing a singleplayer or multi player game you have the opportunity save a current game state. This is done by clicking on the button **Save Game**. If you click on this button a window appears which lets you choose a path where to save your current game-state to, how to name the file and in which format it should be saved. In our case this format is "Protobuf file". To finalize this process, you have to select a path, a name and then click on "OK" or abort your decision and click on "Abbrechen".
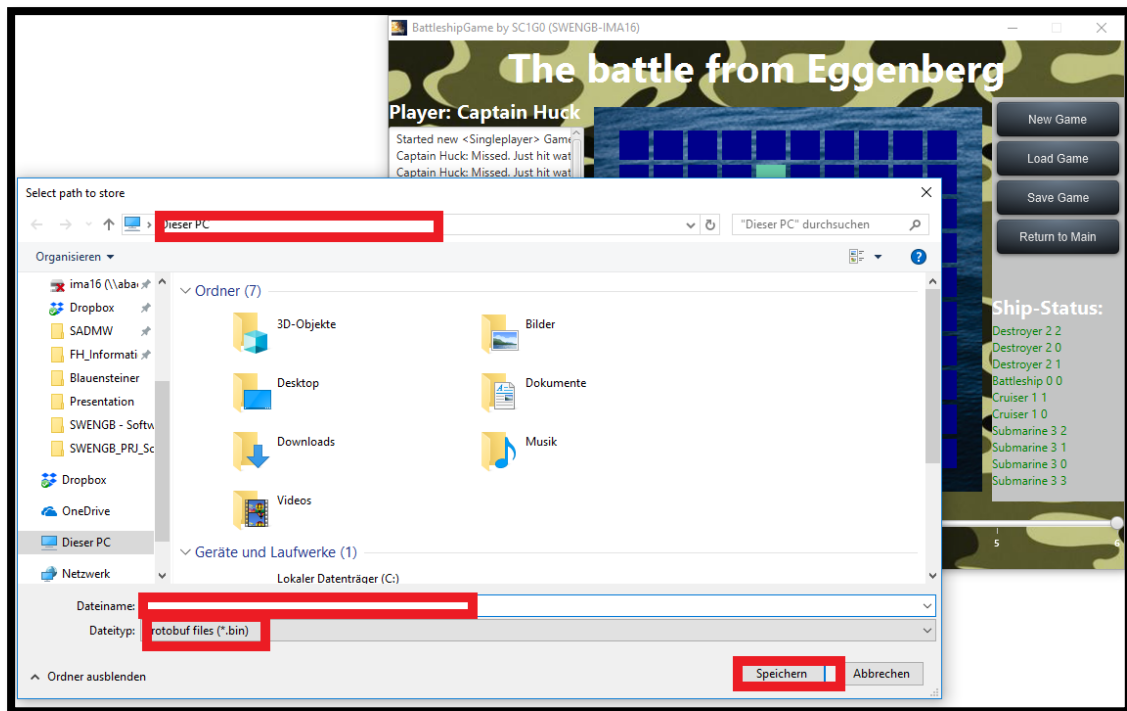

Figure 29: Save Game

Figure 30: Save-a-Game-Selection

11 LOAD GAME

While playing a singleplayer or multi player game you have the opportunity load a saved game state. This is done by clicking on the button **Load Game**. If you click on this button a window appears in which you can select the path to the saved game. To finalize this process you have to select the path and click on "Öffnen". Alternatively, you could also abort your decision and click on "Abbrechen".
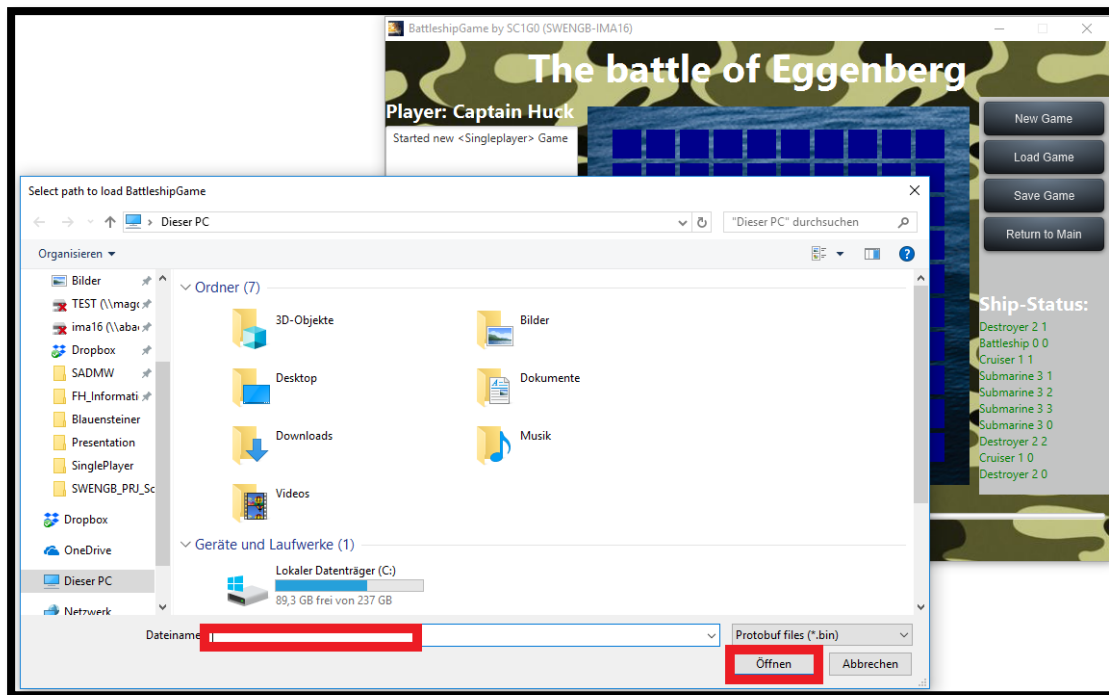

Figure 31: Load Game

Figure 32: Load-a-game-Selection