

# Week of Monday Feb 8<sup>th</sup>

## Monday (02/08/2016)

Created a git repository available at <https://github.com/Arsh25/Battleship> Emailed link to Dr. Chappell. Created 3 user stories in class.

## Tuesday (02/09/2016)

This was the first day we did out of class work on the project. Met up with Tristan at 5 ni the CS lab and planned further action. We decided that we would go ahead and write the project in c++ and use c++11 features when needed. Also decided to use OpenGL for graphics. I do not have any OpenGL, so Tristan will be working on graphics.

Decided that I would be the lead speaker for our first presentation on Friday.

## Wednesday (02/10/2016)

Learned about unit testing in class. Introduced to the Catch unit testing framework for C++. Seems pretty simple to use.

## Friday (02/12/2016)

Presentation 1 given in class. I was the lead speaker. Informed our peers that we were using C++ with the usual class layouts following SRP. Also let them know we plan to use OpenGL for graphics and the Catch testing framework.

No further work on the weekend.

# Week Of Monday Feb 15<sup>th</sup>

## Monday (02/15/2016)

Did not work on this project today.

## Wednesday (02/17/2016)

First pair programming session in class. Got the Catch unit test framework working. Implemented a rough board and some unit test for it. Unit tests are not passing yet. No graphics yet.

## Friday (02/19/2016)

No further progress. Tristan got the graphics working

## Saturday (02/20)

Cannot build the code on Ubuntu. Tristan asked Dr. Chappell who confirmed he could build on Mint. Will work on it Monday with Tristan.

# Week of Monday Feb 22<sup>nd</sup>

## Monday (02/22/2016)

No further progress. Learned make in class, this seems interesting.

Got the program to compile on my Ubuntu machine. Was not telling g++ to use lthreads.

## Tuesday (02/23/2016)

We have our first board. Added design requirements into our design document.

## Wednesday (02/24/2016)

Added 4 more requirements to the requirements document.

Pair programming: Fixed GUI issues. Decided on a rough design to implement cells.

Added makefile, to build test do **make test**. have another presentation this Friday, will use my laptop to present.

Lots of software changes. Implemented more board functionality, new class cell that performs actions on individual cells of the board.

Cells now keep track of their own bounds, whether they are occupied and whether they contain ship's head. Also know if the mouse is over them.

Tristan is working on the bug where the mouse accuracy worsens as it goes down the board. he believes this is because his math for screen coordinates and cell positions does not take the width of the dividing lines into account.

## Thursday (02/25/2016)

Formatted this Diary. Installed and generated documentation using doxygen. This has potential, if we learn to use it. Worked on describing interactions between board and cell in the design documentation.

## Friday (02/26/2015)

Discovered UML diagrams. Created a UML diagram for classes board and cell. Updated design document with this diagram. Used [www.draw.io](http://www.draw.io).

Presented for presentation 3.

# Week of Monday March 7<sup>th</sup>

## Monday (03/07/2016)

Got the project to not segfault on my machine. Nvidia drivers were responsible. Implemented a skeletal ship class. Lots of work to be done on this class.

## Wednesday (03/09/2016)

Talked to Trista during class and decided it would be easier and more straightforward to use the Board class to keep track of ships instead of having a dedicated ship class and passing the board around. Setup a meeting for tomorrow to finalize our deliverables.

## Thursday (03/10/2016)

Have a working game as of last night. Was testing the game and found a bug where the player could keep attacking until they hit "Finished", this means that player 1 could attack the entire board in 1 turn and win the game. Texted tristan and he fixed it.

Did a bunch of stuff during our meeting. Added USer documentation, found and fixed some edge case bugs, checked through all files and updated or added author details and other start of file stuff.

## Friday (03/11/2016)

Added the infla binary to git. Merged the "GUI\_Update" branch into master. Finished up this Diary. Will be presenting on our project during class today.