## 2019 Screening Exam

Congratulations on making it through to this stage, we’ve broken the screening exam down into 2 parts, a back-end task and a front-end task.

Even if you aren’t able to get it working by the deadline, make sure you submit what you have done, even if it’s not working we still want to see your attempt.

Both parts will be needed by the 15th February with the Assessment Day shortly following after your submission!

Email a zip file of both parts completed to [kenneth.popay@wearenova.co.uk](mailto:kenneth.popay@wearenova.co.uk).

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## Part 1

**NovaDocks** is a small company that has a number of docks in the north of Liverpool. Alongside their thriving dock business, they have recently launched a startup with a shipping service.

The current system used by the company has multiple features such as adding/removing ships and updating their information at a particular dock. There is currently an upgrade to a section of the software being undertaken this sprint.

Unfortunately, due to unforeseen circumstances the main developer has gone on leave. As part of the development team you are required to complete the functionality for this section of the software.

The main developer has already started the functionality which will give you a head start. You will need to read through each of the classes to understand how the system works. The current system is written in Java.

To pass this sprint the NovaDocks.java class will need to run and pass all test cases. The system can be found in the Back\_End\_Task folder inside the NovaDocks\_Task folder.

The system should be able to:

1. Add a boat to the dock’s boat list
2. Remove a boat from the dock’s boat list
3. Get a boat given it’s Id
4. Update a boat’s information
5. Remove boat’s over a certain weight

**Hint:** The DockServiceImpl.java file is the class you will be working on. Pay close attention to the methods inside the Boat.java file and the Dock.java file.

## Part 2

**NovaDocks** has decided to improve the current front-end design for the system. This new prototype web app is going to require some updated designs. The initial pages include:

1. Login Page
2. Register Page
3. Forgot Password Page

The lead engineer has tasked you with creating one of the pages to help his workload. Pick one of the designs to create from the Designs folder inside “Front\_End\_Task”.

**Hint**: Creating the functionality for the website isn’t required, you are free to design the screens however you would like, try to make the code as efficient as possible.

Pick one design to create this sprint from the following:





