

AHOY!

G2T2

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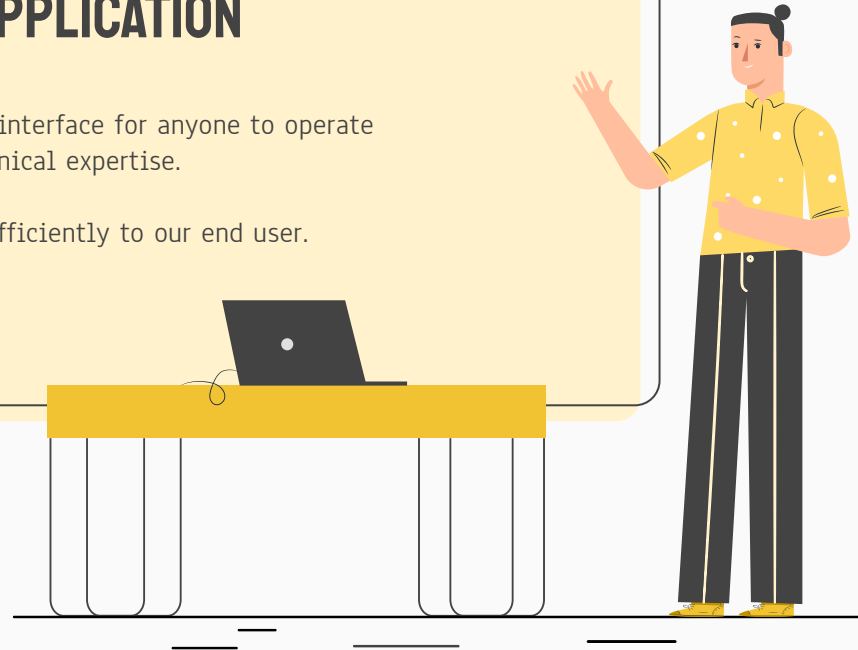
CS102 Project



AHOY APPLICATION

Clean and user-friendly front end interface for anyone to operate regardless of technical expertise.

Provide useful information efficiently to our end user.



TEAM LINEUP



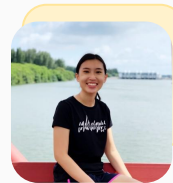
ARVIN

Tech Lead and Back End development



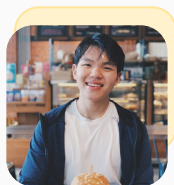
EAIN

Design and HTML elements



FAITH

Design and Front End integration



JONATHAN

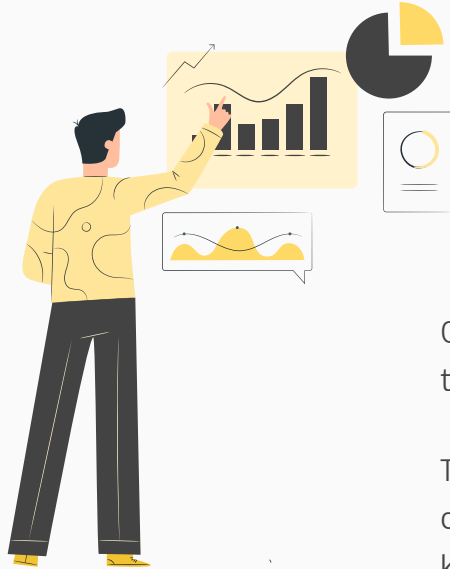
Email Functionality and Front End
integration



LIXIANG

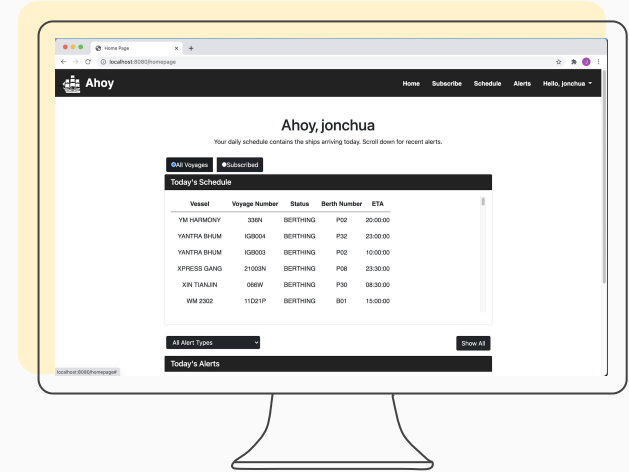
Connecting to APIs and Front End
integration

INTERACTION WITH OUR APPLICATION



Client interacts directly with the Front End interface.

This eliminates the need for the client to have specific technical knowledge to operate.



AHOY APPLICATION

Intuitive Front End gives control and functionality to user. Back End hidden away.

SOLUTION ARCHITECTURE

FRONT END

HTML web pages to facilitate user interaction connected by JQuery



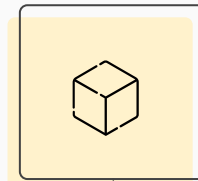
CONTROLLER

Controller layer handles Front End API calls



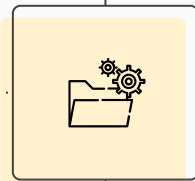
MODEL

Java objects that allow us to represent data and real life objects



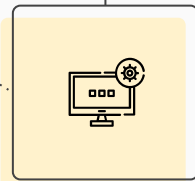
SERVICE

Service Layer contains the main functionality and logic of the application



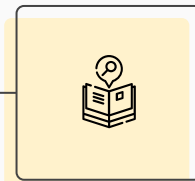
REPOSITORY

The Repository layer connects the database to our application allowing us to make queries and store data



DATABASE

MySQL to store all the data from user preferences to vessel and voyage data



SOLUTION ARCHITECTURE

com.ahoy.ahoy

alert

Alert
AlertPK
AlertRepository
AlertService

berth

Berth
BerthRepository
BerthService

user

AlertPreference
AlertPreferencePK
AlertPreferenceRepository
User
UserRepository
UserService
VesselPreference
VesselPreferencePK
VesselPreferenceRepository

voyage

Voyage
VoyageDetails
VoyageDetailsPK
VoyageDetailsRepository
VoyagePK
VoyageRepository
VoyageSecurity

websecurity

WebSecurityConfig

email

Email
EmailService

portnet

PortnetConnector
ScheduledFunctions

controllers

AjaxController
ViewController

AhoyApplication

main
method

SOLUTION ARCHITECTURE

java

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Back End

resources

static

html pages

application.properties

templates

javascript files
style sheets

DEPENDENCIES

- ☐ Spring Framework
- ☒ Spring Boot
- ☐ Javax Persistence
- ☒ Spring Data JPA
- ☐ GSON
- ☒ JavaMailSender
- ☐ Spring Web
- ☐ Spring Security
- ☐ Lombok
- ☐ Apache Tomcat
- ☐ ThymeLeaf
- ☐ Spring Configuration Processor
- ☐ MySql Connector Java
- ☒ JQuery
- ☐ Bootstrap



MAIN FEATURES

01 INTEGRATED WEB APPLICATION

We used Spring Boot to develop a lightweight and standalone web application. This allowed us to integrate a responsive Front End interface for the user powered by JQuery.

03 ALERT CONFIGURATION

Having account preferences tied to account, allows the user to set alerts for subscribed vessels. We used JavaMailSender to send scheduled email alerts to the user.

02 ACCOUNT MANAGEMENT

Dependencies like Spring Security allowed us to provide a seamless and secure account registration and login process.

04 INFORMATION RETRIEVAL

We used Spring Web and Data JPA to retrieve and store data from Portnet API allowing us to deliver useful and relevant information to the user through an responsive interface.

LEARNING POINTS!

SELF-LEARNING

This point can't be understated. We had to learn a lot of new things beyond the scope of what's taught in the classroom. We learnt that it is an invaluable skill to be independent in our own learning.

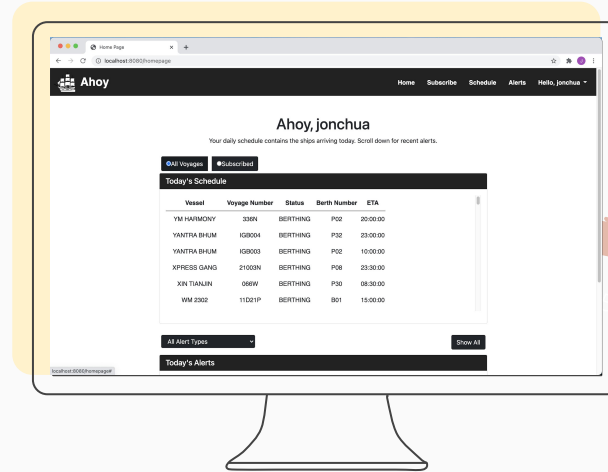
WORKING AS A TEAM

Another invaluable skill we learnt was to code and collaborate effectively through GitHub. (Especially after many frustrating moments of accidentally wiping out code)

APPLYING JAVA

This project also gave us a chance to apply what we learnt in class in a more realistic setting. We got to see our code actually work as part of a bigger application.

DEMONSTRATION



AHOY!



THANK YOU!
Q & A

"DAYLIGHT"