

# Email Client

*assignment 4 programming*

## **Names:**

1- Fares Waheed Abd-Elhakim	18011224
2- Ali Ahmed Ibrahim	18011064
3- Ahmed Mohamed Abd-Elmonem	18010225
4- Mohamed Yasser Mohamed	18011648

## 1-How to run our code :

1.Open the "gmailBackend" folder using IntelliJ java IDE and Run "gmailBackend.java" to run the spring Boot.

2.Run the Vue.js Applications using VS codes:

\*open the "Mailfront" folder in VS codes.

\*Make sure you have the extension "Vuetify vs".

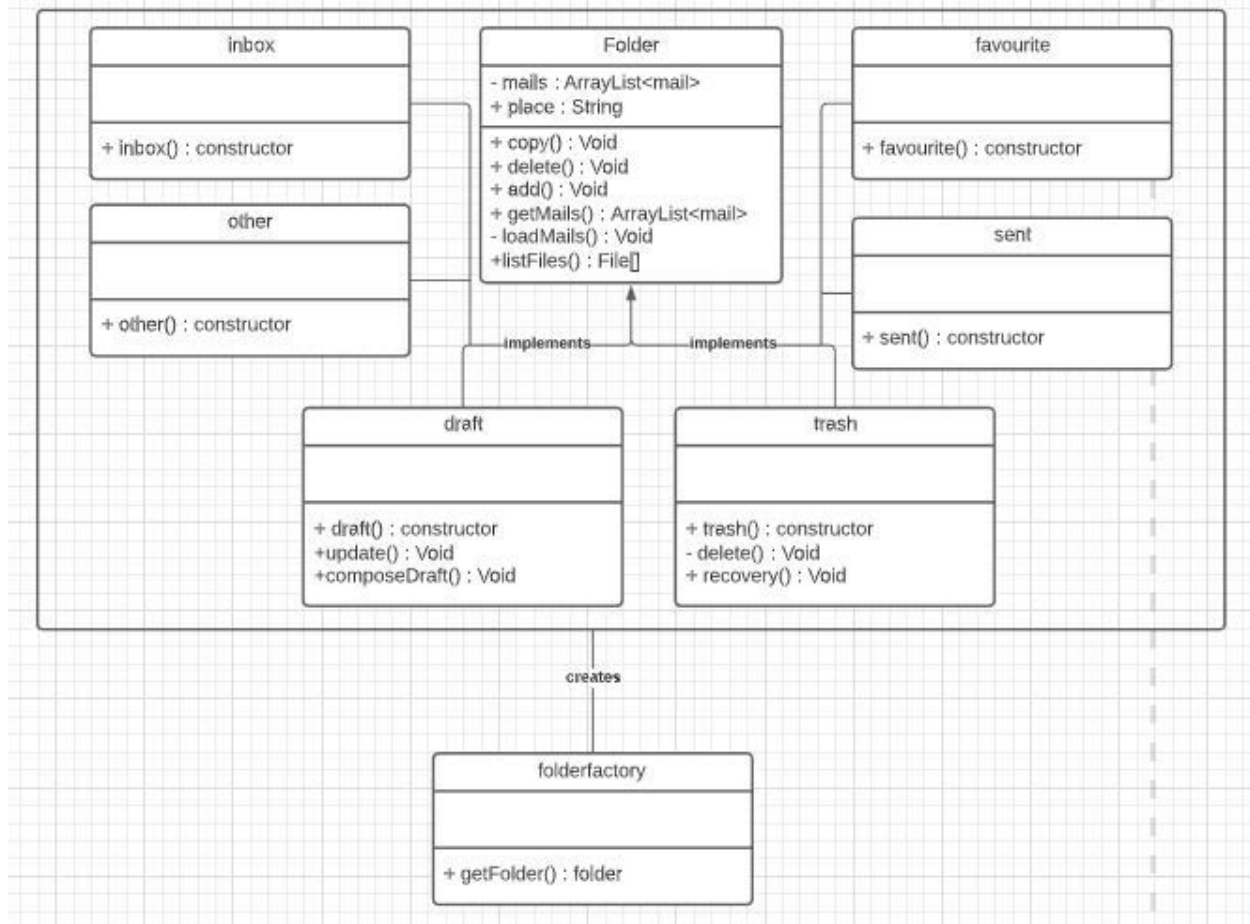
\*Write the command "yarn add axios" in the terminal of VS code.

\*Run the application using the command "yarn run serve"\*

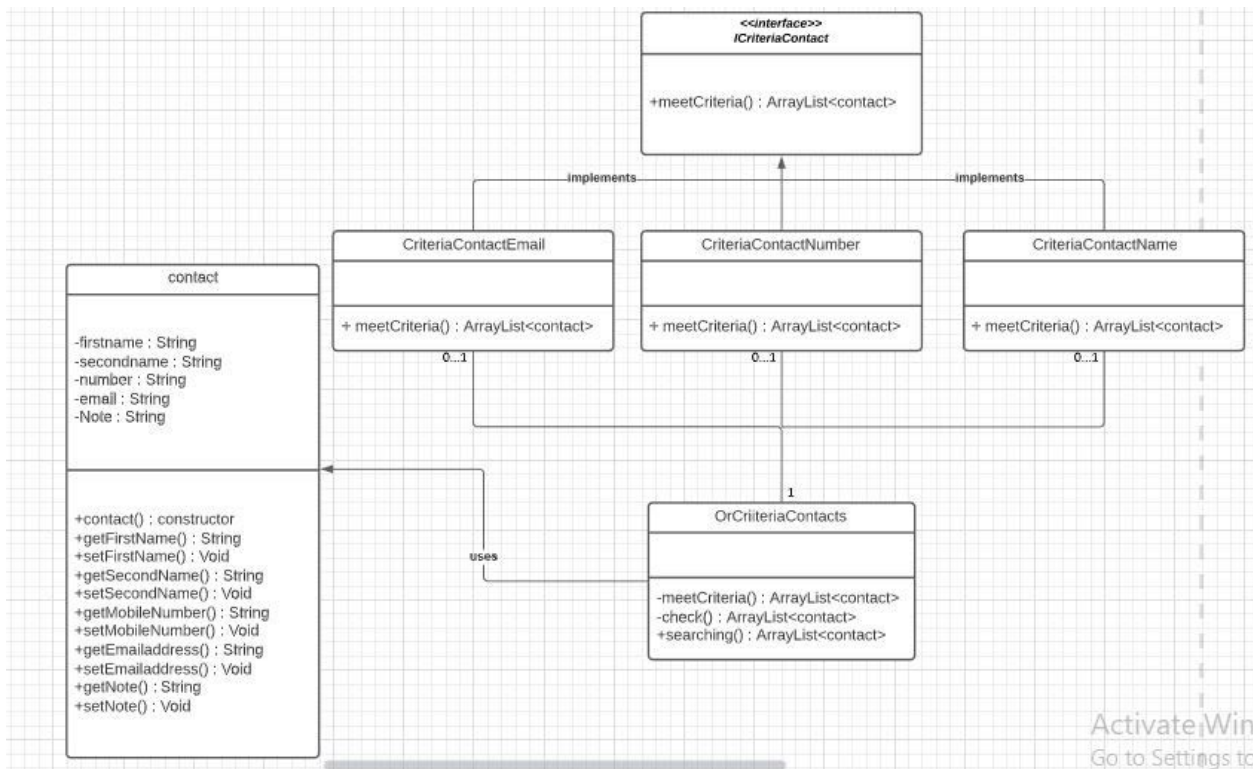
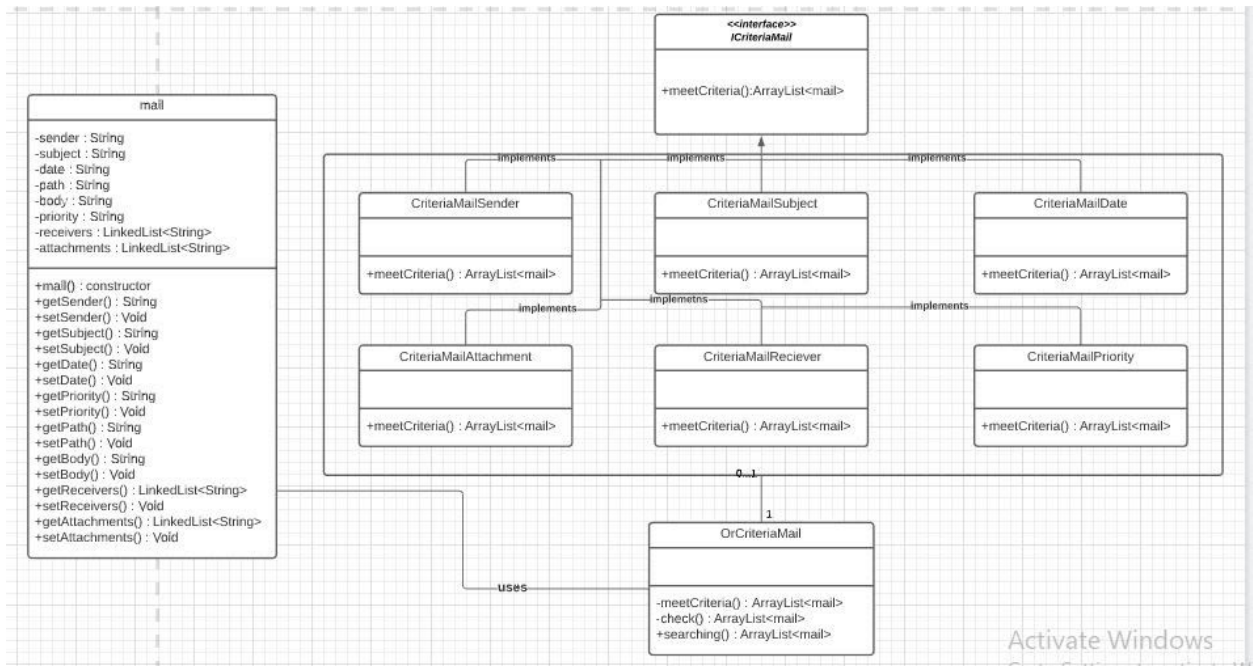
The program will run at : <http://localhost:8080/>

## 2-UML :

### Factory design pattern



# Filter design pattern



### 3-Applied Design Patterns :

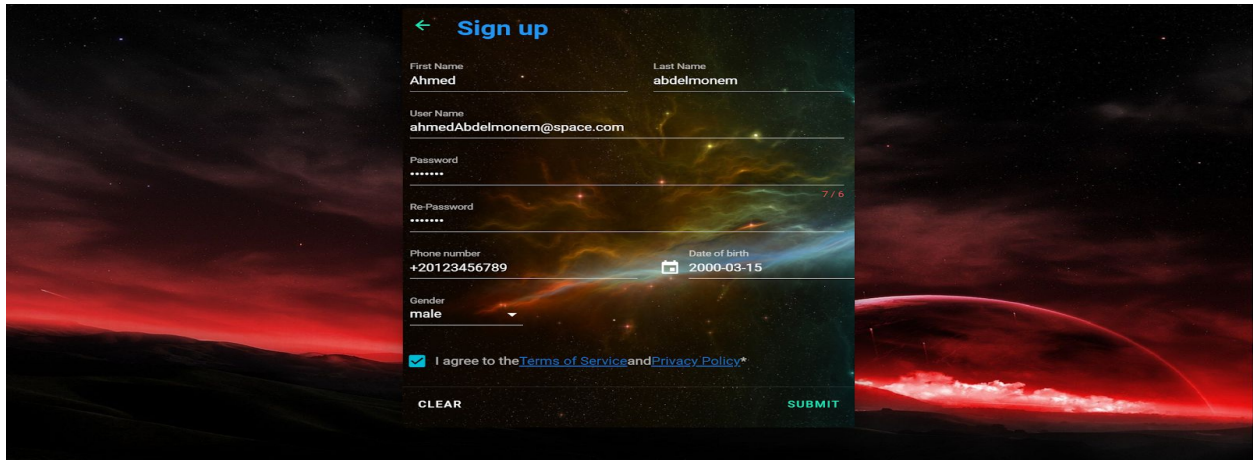
- **Filter design pattern** : we used filter design pattern for the search method , we made 6 different criterias in the search method in mail : CriteriaMailSubject ,CriteriaMailSender , CriteriaMailAttachment , CriteriaMailDate ,CriteriaMailSender ,CriteriaMailReceivers . and 3 criterias for contacts : CriteriaContactName , CriteriaContactNumber , CriteriaContactEmail . We also made an OrCriteria for searching by multiple attributes at the same time .
- **Factory design pattern** : we used it for the mails manipulation as there is a parent class : factory , and classes that inherit from it : draft, favourite,inbox, other , sent, trash . which has functions like delete ,recovery,update . And folderfactory is the factory class used to create without involving the client in the process.
- **Interface design pattern** : we used it to use a common interface for a lot of classes like ICriteriaContact and ICriteriaMail
- **Delegation design pattern** : this design pattern was used for dealing with the constructors of classes.

## 4-How to use our application :

- To register press register button then fill your information then submit
- To sign in enter your username that you register with and the password
- After you log in you can send a new mail using new mail icon
- To add attachments they all should be in the same place and upload them all once "it can't be larger than 15MB"
- To make a new contact in a folder , press on the folder and then press new contact then enter the contact information.
- If you want to move some mails from a folder to another folder you select the mails and then press move to and then select the required folder .
- If you want to search you should type the word you want to search to in the search bar then enter , you can also select more than one category to search in using the arrow of the combo box
- If you want to search by date it should be written in this formula "December 26th 2020,7:00:13 pm"
- If you want to sort select the required category from the combo box and choose ascending or descending



## 5-SnapShots :



A screenshot of a 'Sign up' form overlaid on a cosmic background. The form includes fields for First Name (Ahmed), Last Name (abdelmonem), User Name (ahmedAbdelmonem@space.com), Password (masked with dots), Re-Password (masked with dots), Phone number (+20123456789), Date of birth (2000-03-15), and Gender (male). There is a checkbox for agreeing to terms and a 'SUBMIT' button.

**Sign up**

First Name: Ahmed

Last Name: abdelmonem

User Name: ahmedAbdelmonem@space.com

Password: \*\*\*\*\*

Re-Password: \*\*\*\*\*

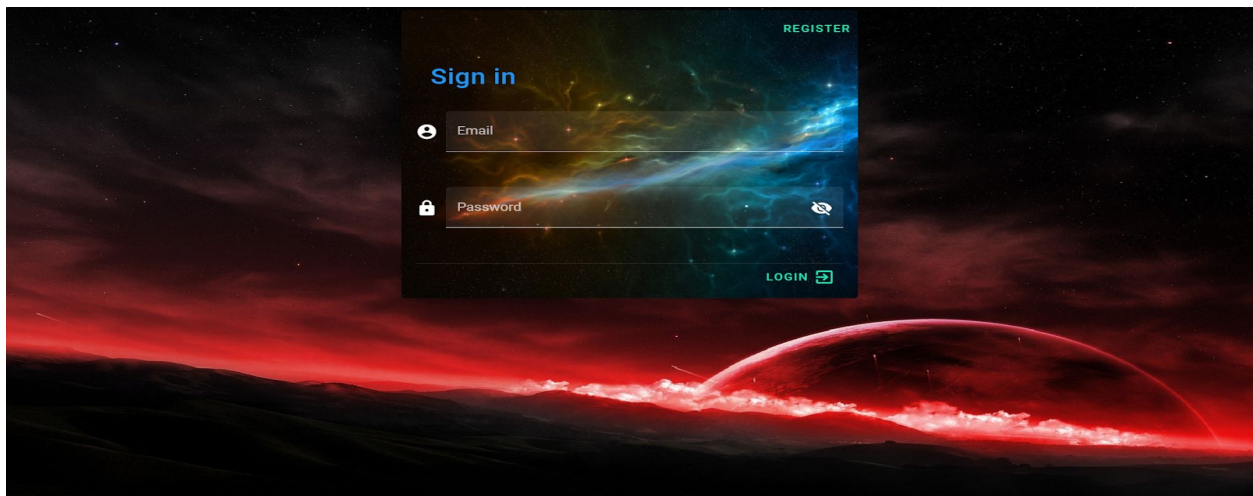
Phone number: +20123456789

Date of birth: 2000-03-15

Gender: male

☒ I agree to the [Terms of Service](#) and [Privacy Policy](#)\*

**CLEAR** **SUBMIT**



A screenshot of a 'Sign in' form overlaid on a cosmic background. The form includes fields for Email and Password (with a toggle for visibility). There is a 'REGISTER' link at the top right and a 'LOGIN' button at the bottom right.

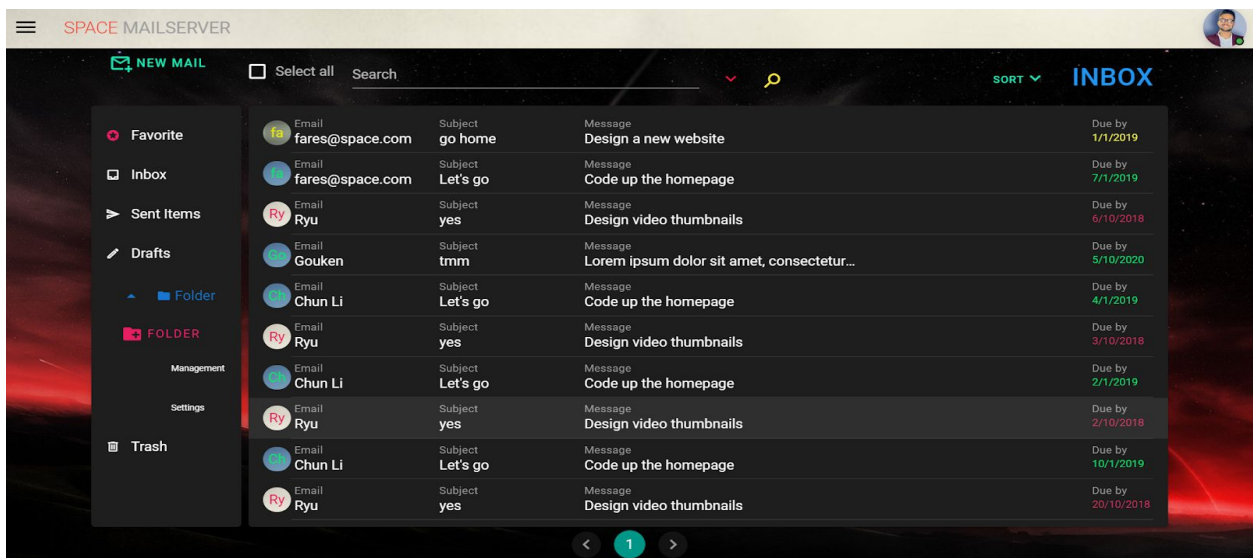
**Sign in**

REGISTER

Email

Password

**LOGIN**



A screenshot of an email client interface titled 'SPACE MAILSERVER'. It shows a sidebar with navigation options like Favorite, Inbox, Sent Items, Drafts, Folder, FOLDER, Management, Settings, and Trash. The main area displays a list of emails in the 'INBOX'.

Email	Subject	Message	Due by
fares@space.com	go home	Design a new website	1/1/2019
fares@space.com	Let's go	Code up the homepage	7/1/2019
Ryu	yes	Design video thumbnails	6/10/2018
Gouken	trmm	Lorem ipsum dolor sit amet, consectetur...	5/10/2020
Chun Li	Let's go	Code up the homepage	4/1/2019
Ryu	yes	Design video thumbnails	3/10/2018
Chun Li	Let's go	Code up the homepage	2/1/2019
Ryu	yes	Design video thumbnails	2/10/2018
Chun Li	Let's go	Code up the homepage	10/1/2019
Ryu	yes	Design video thumbnails	20/10/2018

