

Email

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Description:

E-mail service Application offer a big number of features such as sending and receiving mails, deleting and drafting mails, viewing contacts, adding and deleting contacts, sending attachments and a lot of other features.

Features:

- sending, deleting, drafting mails
- viewing inbox, sent, draft and trash folders
- adding, deleting, and viewing contacts
- sending and receiving attachments
- sorting mails by data, read and unread, level of importance
- searching of mails by any keyword in the mail
- folder of important messages

Design Pattern Used:

- façade design pattern: where there is the UserService class that simplifies access to many other classes such as: Mail, User, ConcreteAccountManipulation, AttachmentsManipulation
- Singleton design pattern: we applied singleton design pattern on UserService class where there should be only one service object that supports the backend

- Template method design pattern: we applied this pattern on AbstractAccountManipulation and ConcreteAccountManipulation classes, where the template method (accountExists()) is defined in the abstract class to be used by any potential subclasses such as in ConcreteAccountManipulation class
- Interface design pattern: is a basic design pattern that is used to define an interface to UserService class
- Delegation design pattern: is a basic design pattern that is used inside Façade design pattern, where the use of many classes such as Mail, User is delegated to the UserService class
- Factory design pattern: is a basic design pattern that is used to make a copy of the message in draft to continue sending your message.

Technology Used:

Angular for front end.

Spring boot for back end.

A full list of the steps required to run Application:

This Application require angular and spring boot installation

Install the Angular CLI

```
npm install -g @angular/cli
```

```
npm install file-saver
```

Create a workspace and initial application

```
ng new my-app
```

Run the application

```
cd my-app
```

```
ng serve --open
```

spring boot installation

Follow This link:

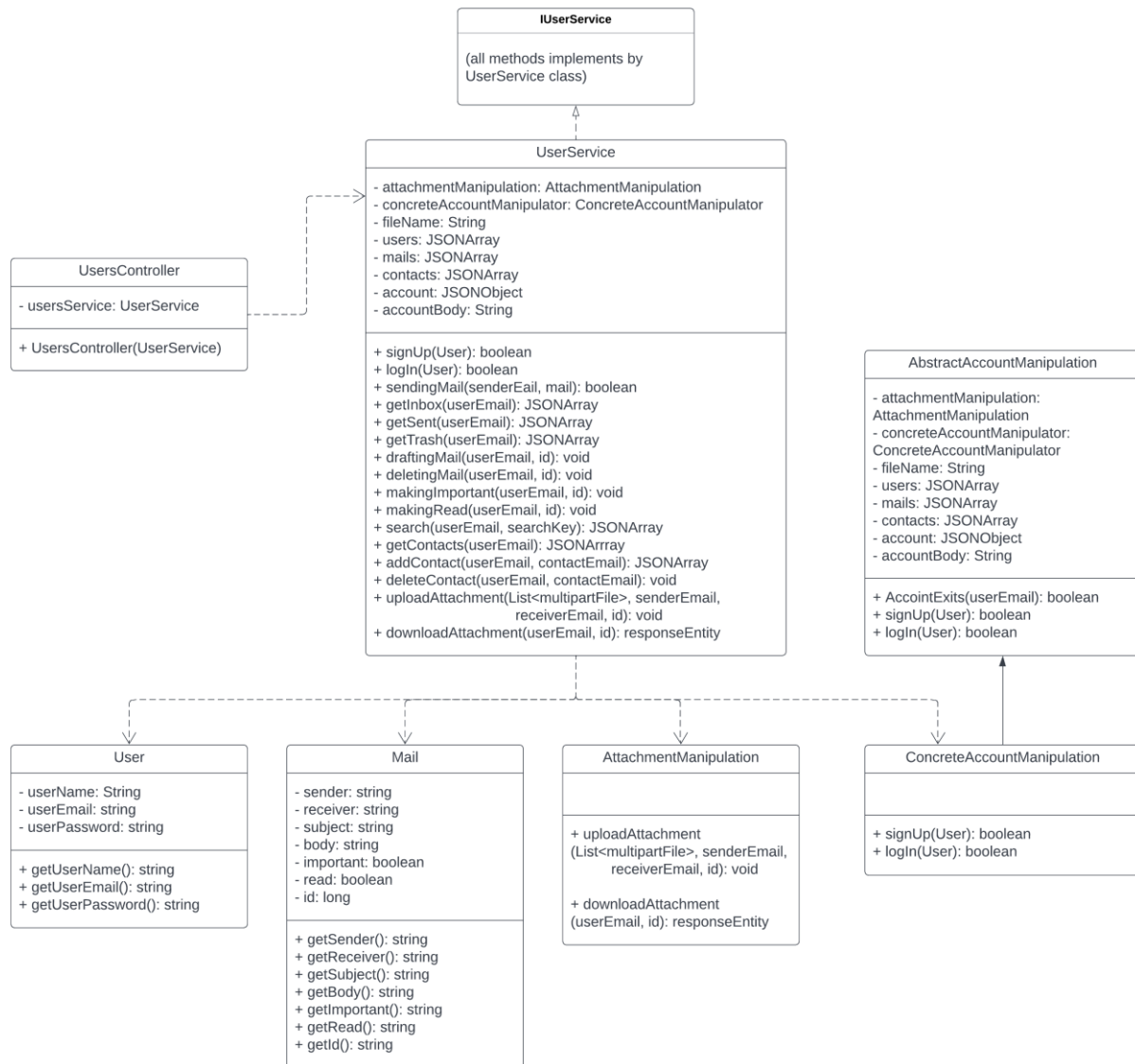
[<https://spring.io/guides/gs/spring-boot/>]

run server of spring boot


Then in command line type:

ng serve --open

UML Class diagram:



Snapshots of the application:



Create your Google Account

First name
abdo


Last name
saad

Username
abdosaad

@gmail.com

You can use letters, numbers & periods
Password


Confirm




Use 8 or more characters with a mix of letters, numbers & symbols

[Sign in instead](#)

Next



One account. All of Google working for you.



Sign in

Continue to Gmail

Email or phone

Password

Login

Sign UP

localhost:4200 says

invalid email or password

OK



Sign in

Continue to Gmail

Email or phone

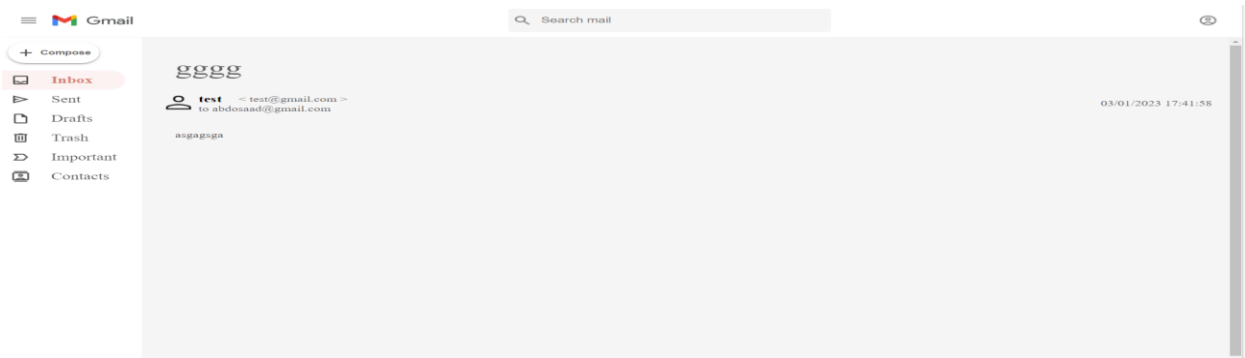
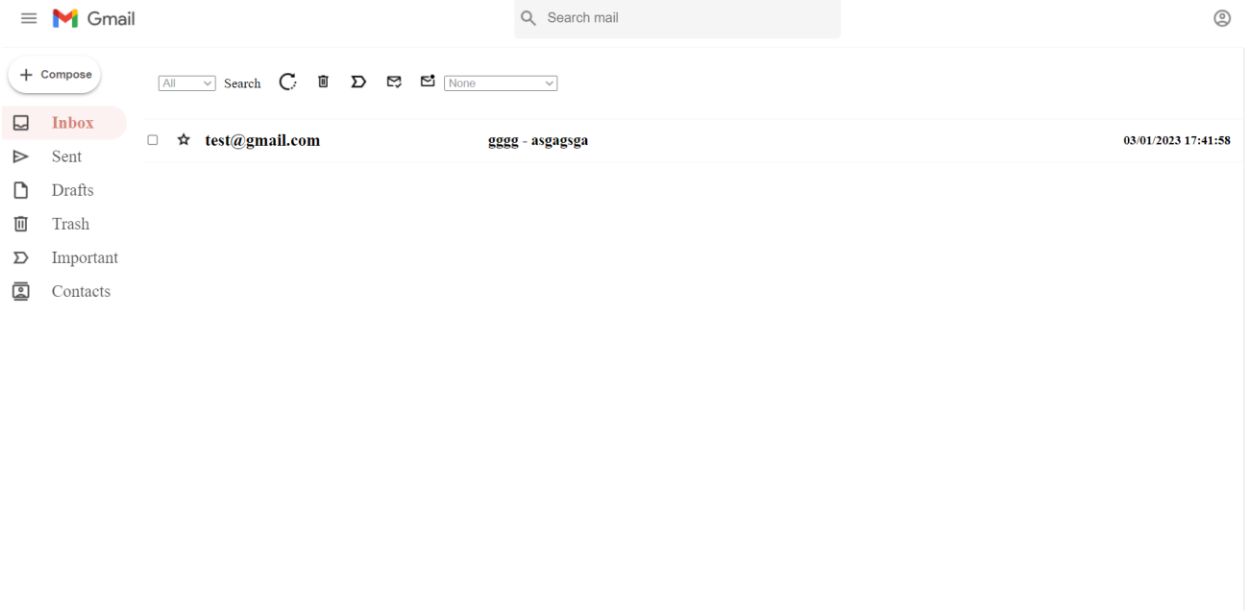
abdosaad

Password

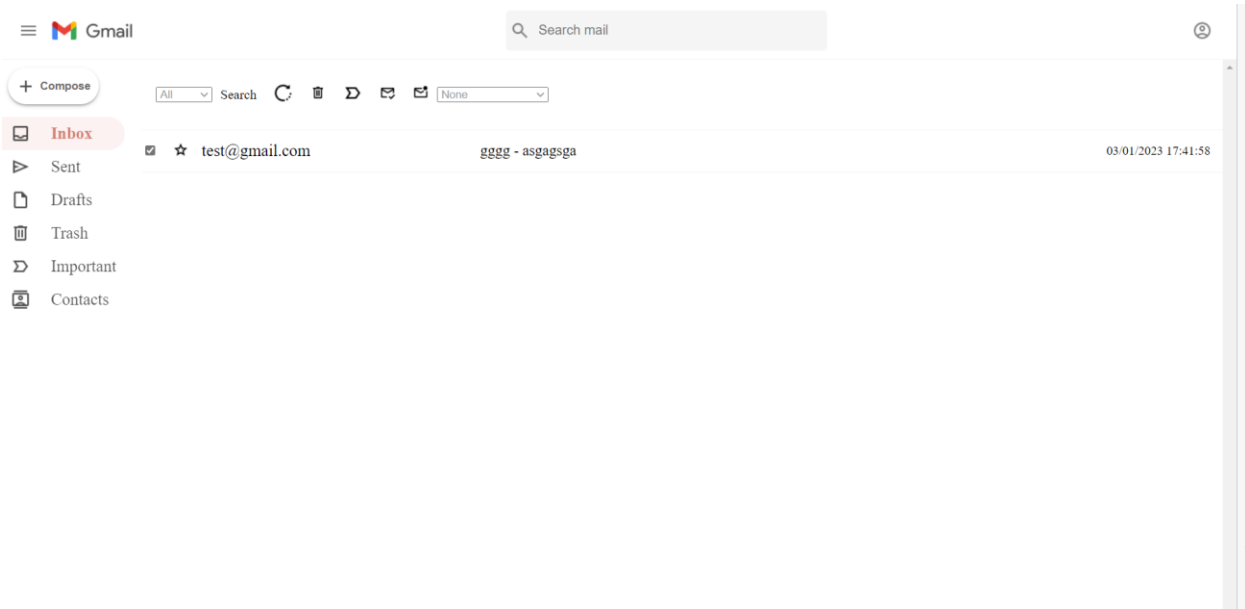
...

Login

Sign UP



Delete the message



+ Compose

All

Search



Inbox

> Sent

Drafts

Trash

> Important

Contacts

+ Compose



Inbox

> Sent

Drafts

Trash

> Important

Contacts

☐ ★ test@gmail.com gggg - asgagsga 03/01/2023 17:41:58

+ Compose



- 📁 Inbox
- ▶ Sent
- 📄 Drafts
- 🗑️ Trash
- 📌 Important
- 👤 **Contacts**

☐ **taha** taha@gmail.com

+ Compose

- 📁 Inbox
- ▶ **Sent**
- 📄 Drafts
- 🗑️ Trash
- 📌 Important
- 👤 Contacts

new

👤 **abdosaad** <abdosaad@gmail.com>
to taha@gmail.com

03/01/2023 16:43:38

test

[Download attachment](#)

The screenshot shows the Gmail web interface. On the left is a sidebar with a list of folders: 'Inbox', 'Sent', 'Drafts' (highlighted in red), 'Trash', 'Important', and 'Contacts'. Each folder has a small icon to its left. The main area of the interface displays a list of three draft emails. Each email row includes a checkbox on the left, a star icon, the word 'Draft' in red, the subject line 'null - null', and a unique ID on the right. The IDs are '1672759310262', '1672759375163', and '1672762391128'. At the top of the interface, there is a search bar with the placeholder text 'Search mail' and a search icon. Below the search bar, there are buttons for '+ Compose', a circular refresh icon, and a trash can icon.

Add Contact



Name:

Email:

ADD