Manual of Mail server

Team :

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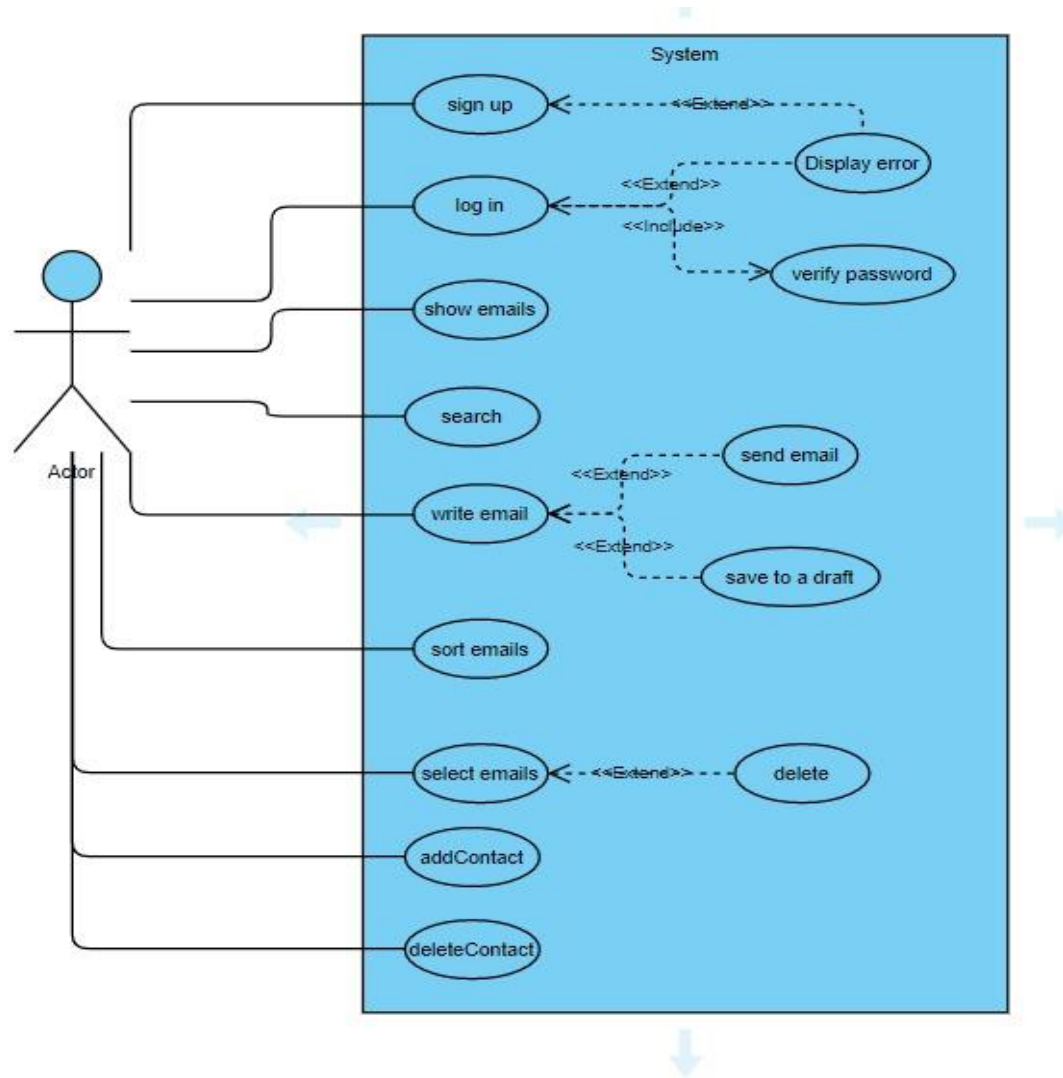
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How to run:-

- Run front-End server

    1. Choose (front-end) folder using Cmd

    2. Npm run serve

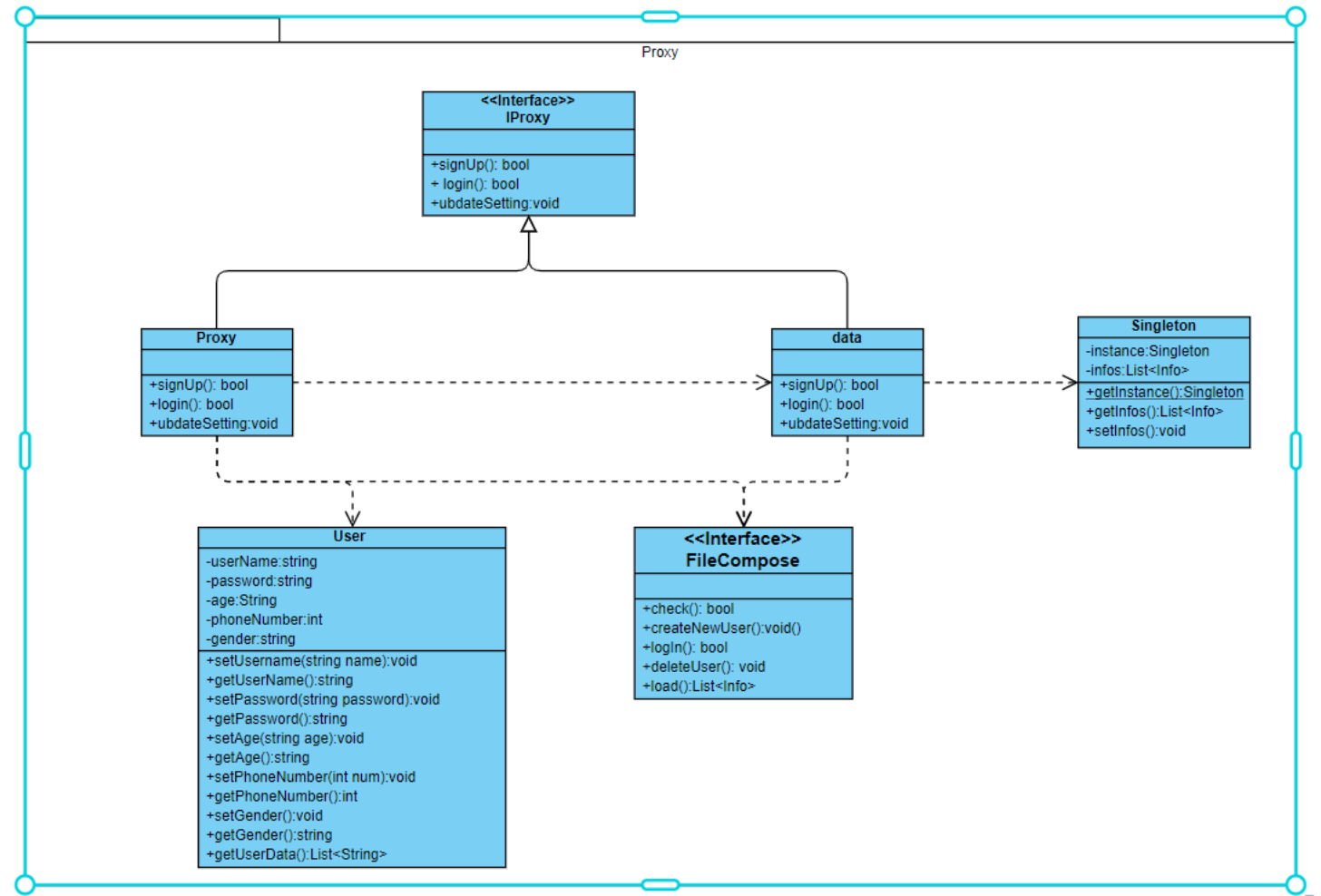- Run Back-End server

    1. Run the project

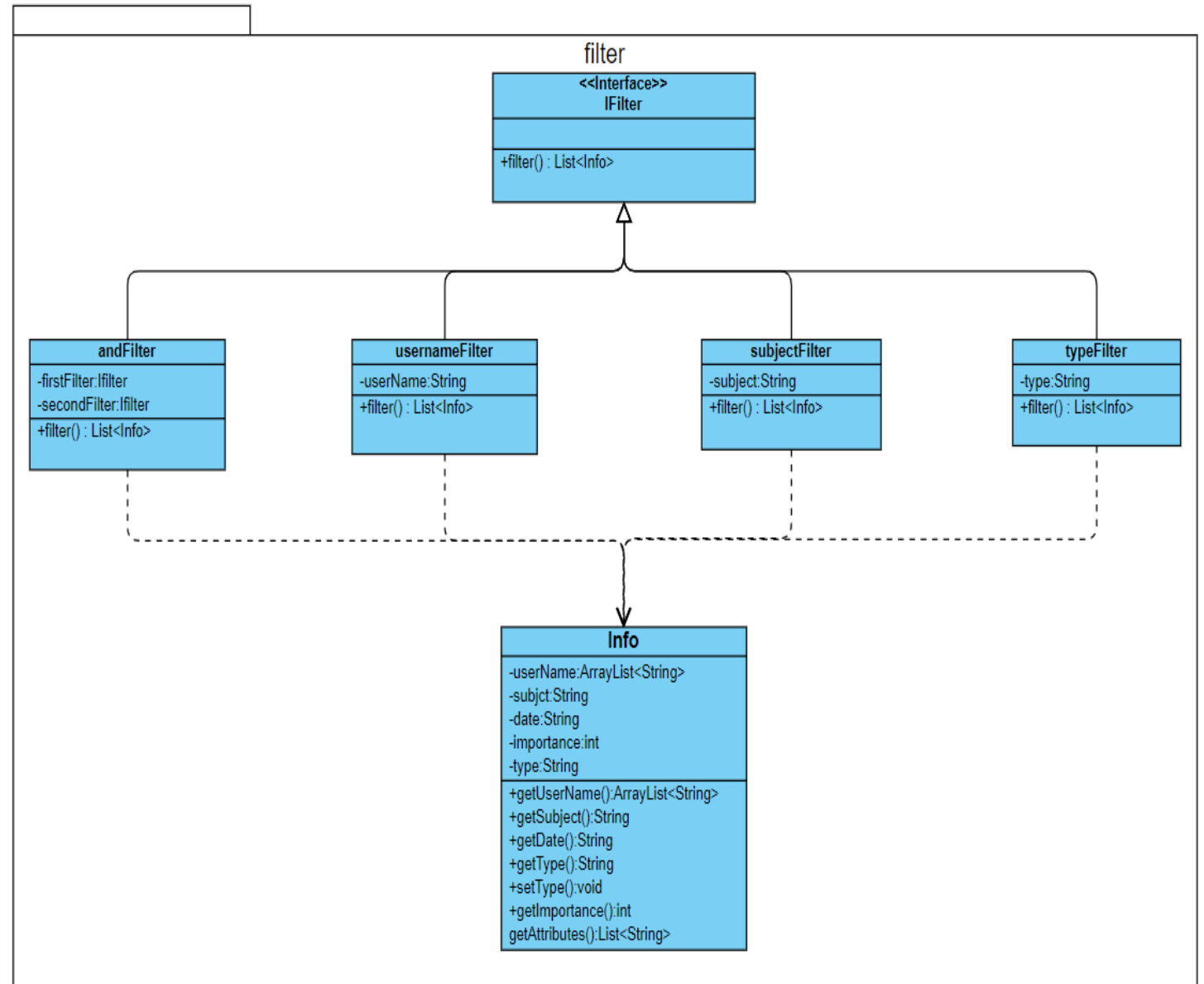# Uml Digrams:-

- Use case diagram:-

Design patterns Used:

1. **Proxy design pattern**

- Client check if the email and password is true in proxy before creating new object from real class to log in   or sign up
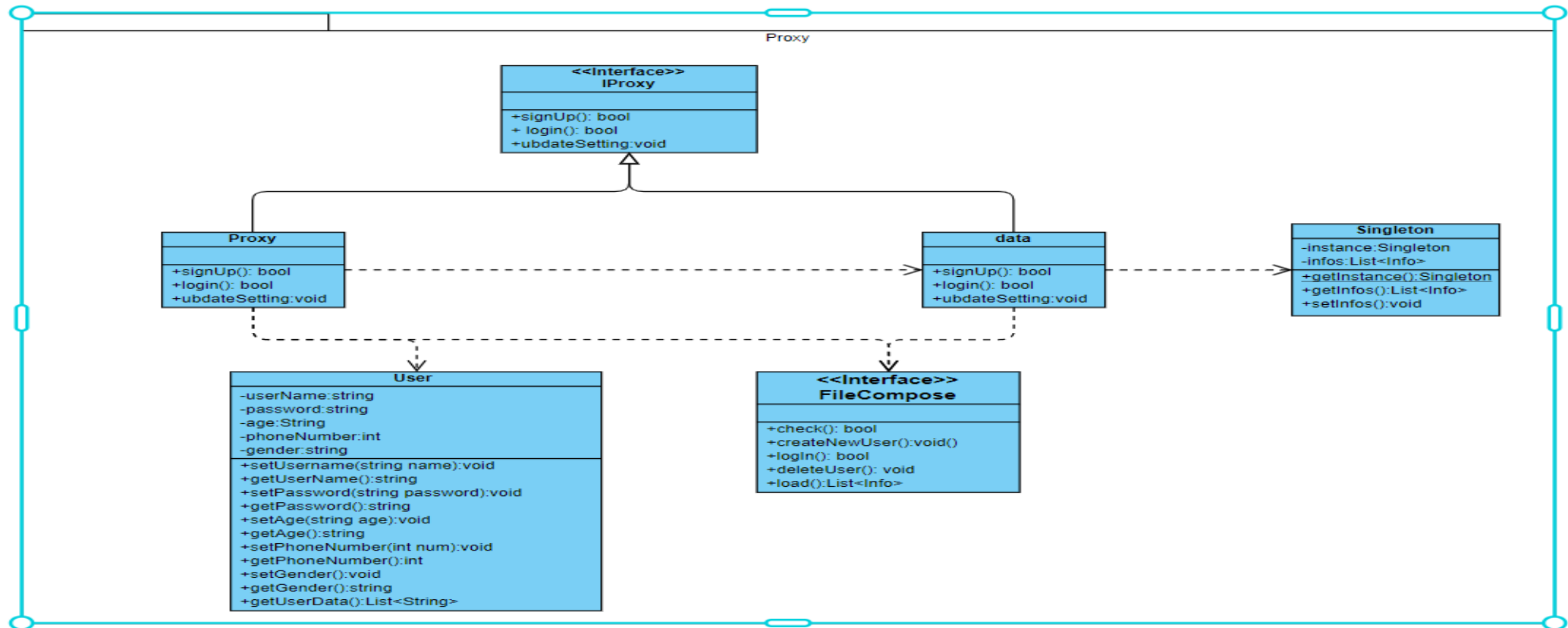
• 2-Filter design pattern :

It is a design pattern that allows developers to filter a set of objects using different criteria condition like username ,subject and date and chaining them in a decoupled way through logical operations.
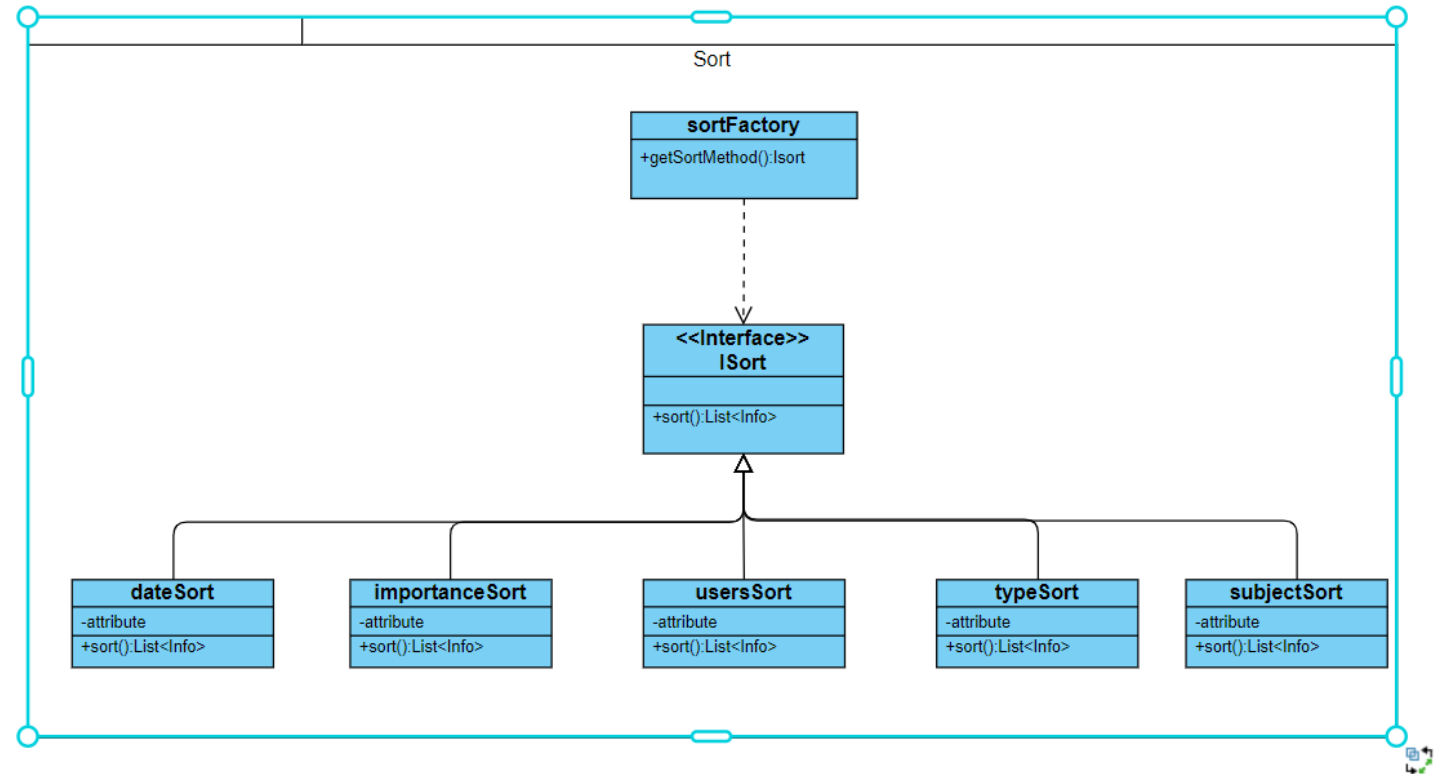
3-Singleton design pattern

- This pattern involves a single class which is responsible to create an object while making sure that only single object gets created. This class provides a way to access its only object which can be accessed directly without need to instantiate the object of the class.

- We use it to get all mails when user log in successfully and use the same list of mails in all classes

Proxy

<<Interface>>
IProxy

+signUp(): bool
+ login(): bool
+ubdateSetting:void

Proxy

+signUp(): bool
+login(): bool
+ubdateSetting:void

data

+signUp(): bool
+login(): bool
+ubdateSetting:void

Singleton

-instance:Singleton
-infos:List<Info>

+getInstance():Singleton
+getInfos():List<Info>
+setInfos():void

User

-userName:string
-password:string
-age:String
-phoneNumber:int
-gender:string

+setUsername(string name):void
+getUserName():string
+setPassword(string password):void
+getPassword():string
+setAge(string age):void
+getAge():string
+setPhoneNumber(int num):void
+getPhoneNumber():int
+setGender():void
+getGender():string
+getUserData():List<String>

<<Interface>>
FileCompose

+check(): bool
+createNewUser():void()
+logIn(): bool
+deleteUser(): void
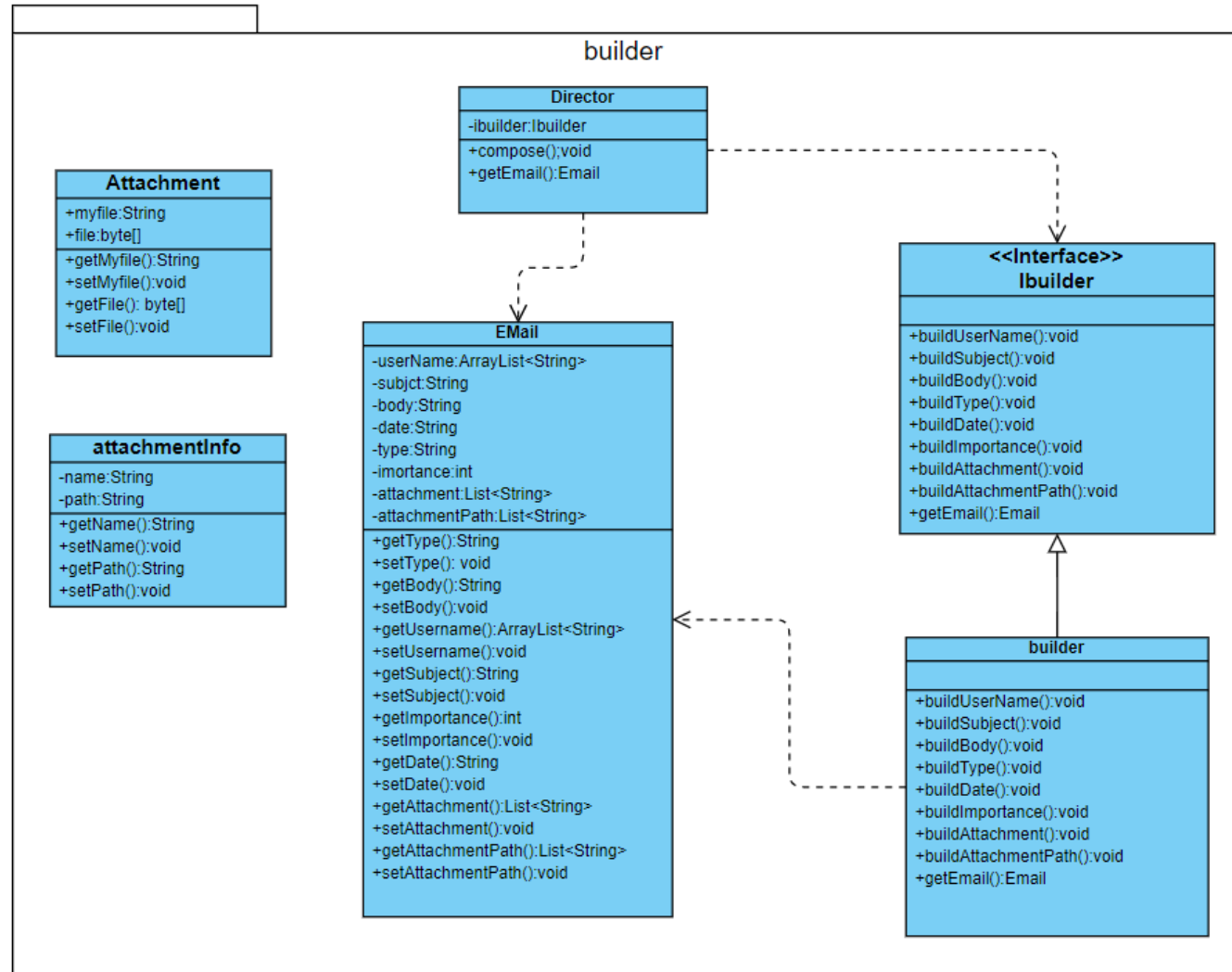+load():List<Info>

4-Factory design pattern

- There are different kinds of sort like username , date and subject

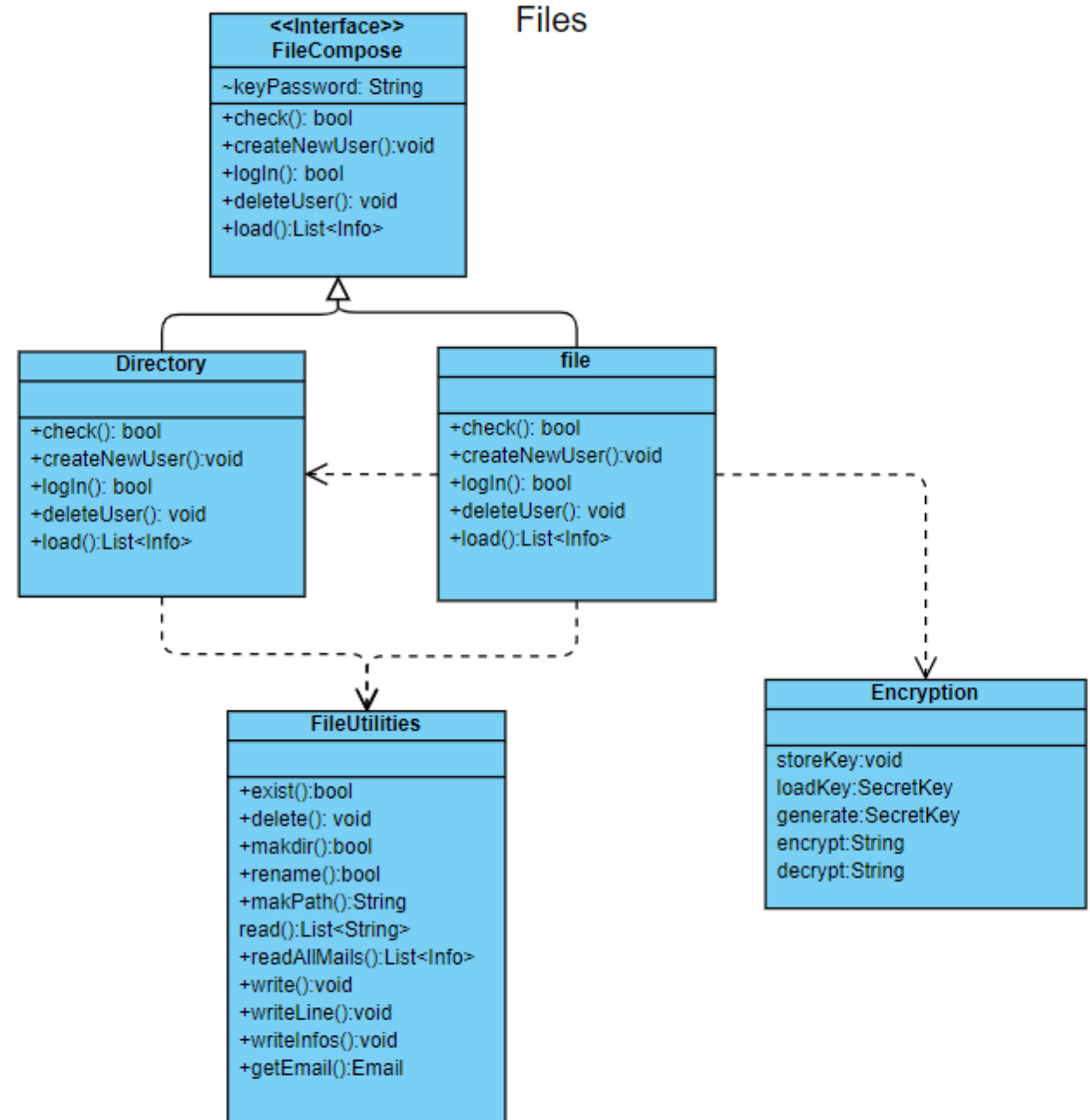- We use sort factory to get the kind of sort we need

5-Builder design pattern

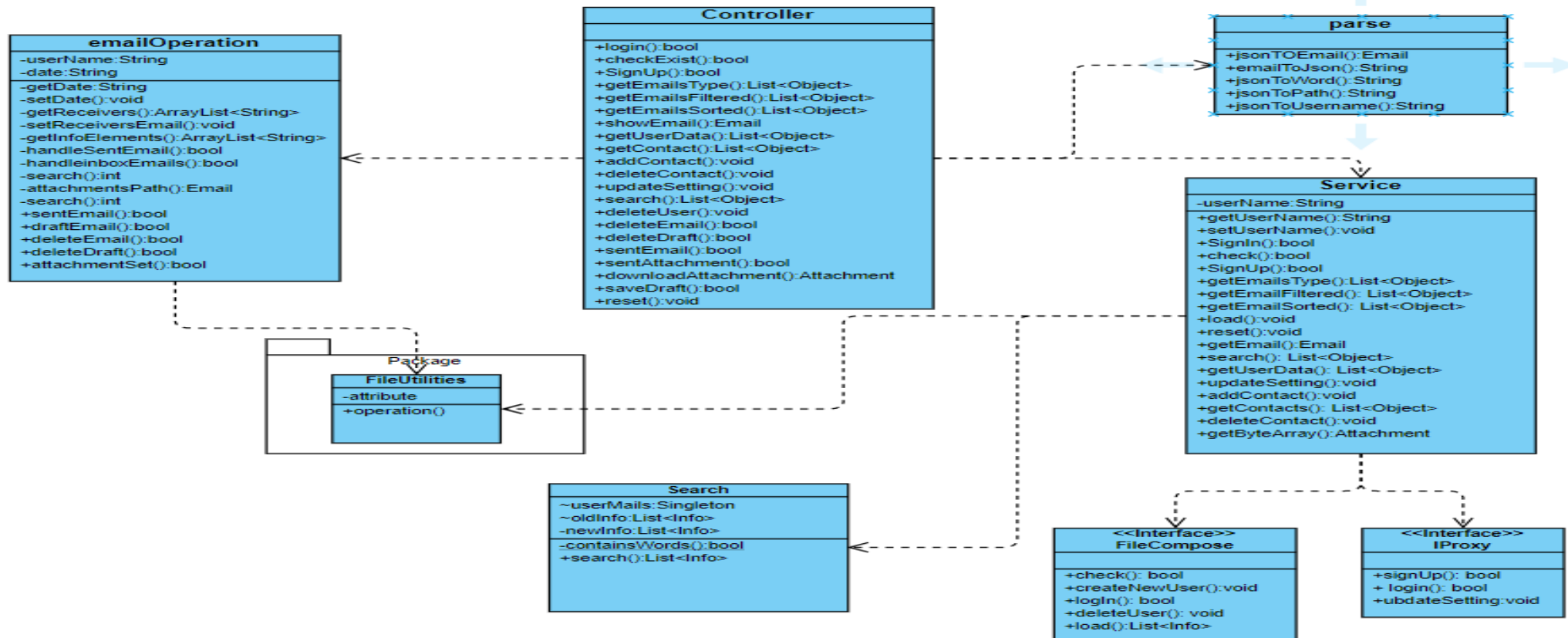- Separate the construction of a Mail from its representation So that client can not know how mail is built

6-File composite design pattern

• Used to create Directories and files(index,data) to save users and mails of each users

Files

<<Interface>> FileCompose

~keyPassword: String

+check(): bool
+createNewUser():void
+logIn(): bool
+deleteUser(): void
+load():List<Info>

Directory

+check(): bool
+createNewUser():void
+logIn(): bool
+deleteUser(): void
+load():List<Info>

file

+check(): bool
+createNewUser():void
+logIn(): bool
+deleteUser(): void
+load():List<Info>

FileUtilities

+exist():bool
+delete(): void
+makdir():bool
+rename():bool
+makPath():String
read():List<String>
+readAllMails():List<Info>
+write():void
+writeLine():void
+writeInfos():void
+getEmail():Email

Encryption

storeKey:void
loadKey:SecretKey
generate:SecretKey
encrypt:String
decrypt:String

7-MVC design pattern

snapshots of UI

- Sign in page

- Sign up page

Create a new account

Email: [Enter email]

Mobile phone: [Enter your mobile number]

Password: [Enter Password]

Retype password: [Enter Password]

Gender: [Choose one ▾]

Age: [Enter your age]

[Sign Up]

You already have an account? sign in now.

- Profile page

- Send Email page

- Setting page

- Contact Page

Assumption:-

1- You MUST NOT log in with more than one user at the same time, you should log out first and try to log in with another One

Note: Handling this case wasn't required according to TA

2- the username is the same as the email , so if you are asked to enter the username or email , they are the same

3- if you try to send a new email , and instead of clicking send you click "close" , the email automatically moved to draft folder and all attachments in it are completely ignored .

4- if you are in the draft folder , you can click edit email and now you have 3 choices , if you edit the email and then you click send , the email removed from draft and is sent successfully , if you edit the email and then you click close , the old one removed and the new one take its place in draft folder , finally , if you edit email and then click "X" button in the upper right corner , now the email is removed from draft folder

5- you can send the email to multiple users by typing their usernames and adding them to the list before sending

6- if you search on something , you will get all emails that contain this word or sentence in the body ,the subject or the username .