

Mail Folder - Requirement

Requirement 2:

Now we are gonna start creating a folder and add mail to it. Start with creating a folder and use menu-driven approach to add, remove, display details of the mail in the folder.

a) Create a Class **Mail** with the following attributes:

Member Field Name	Type
id	Long
from	String
to	String
subject	String
content	String
receivedDate	java.util.Date
size	Double

Mark all the attributes as private, Create / Generate appropriate Getters & Setters, Add a default constructor and a parameterized constructor to take in all attributes in the given order: **public Mail(Long id, String from, String to, String subject, String content, Date receivedDate, Double size)**

b) Create a Class **MailFolder** with the following attributes:

Member Field Name	Type
name	String
mailList	ArrayList<Mail>

Mark all the attributes as private, Create / Generate appropriate Getters & Setters, Add a default constructor and a parameterized constructor to take in all attributes in the given order: **MailFolder(String name, List<Mail>mailList)**. In constructor pass the mailList value as an empty list. Only one folder will be present at a time.

c) Create the following static method in Mail class,

Method Name	Description
public static Mail createMail(String detail)	This method accepts a string which contains mail details separated by commas. Split the details and create a mail object from the details and return it.

The mail details should be given as a comma-separated value in the below order, **id,from,to, subject, content, receivedDate, size**

d) Create the following methods in MailFolder class,

Method Name	Description
public void addMailToFolder(Mail mail)	This method accepts a mail object and add the mail to the mail list of the current mail folder.
public Boolean removeMailFromFolder(Long id)	This method will get the id of the mail and delete the mail with the specified id from the current folder. If a mail with the given id found, delete the mail and return true . If a mail with the id is not found return false .
public void displayMails()	This method will display the mail list in the current folder. If the mail list is empty display " No mails to show ", else display "Mails in [folder name]" and display all the mail details in the specified format. Where [folder name] specifies the name of the folder.

After deletion, if true is returned print "**Mail successfully deleted**", else print "**Mail not found in the folder**". After adding mail to the folder, print "**Mail successfully added**".

Note: The above print statements should be present in the main method.

When the "mail" object is printed, it should display the following format

Print format:

**String.format("%-10s%-15s%-15s%-20s%-15s%-10s\n",
"Id","From","To","Subject","Content","ReceivedDate","Size"); Display 1 digit
after decimal point in Double.**

Sample Input and Output:

Enter the name of the folder:

Inbox

- 1.Add Mail
- 2.Delete Mail
- 3.Display Mails
- 4.Exit

Enter your choice:

3

No mails to show

- 1.Add Mail
- 2.Delete Mail
- 3.Display Mails
- 4.Exit

Enter your choice:

1

Enter the details of mail in CSV format:

12,john@abc.in,jane@abc.in,Hi,Happy New Year,01-01-2018,10

Mail successfully added

- 1.Add Mail
- 2.Delete Mail
- 3.Display Mails
- 4.Exit

Enter your choice:

1

Enter the details of mail in CSV format:

16,jack@abc.in,jane@abc.in,Hi,Happy Pongal,14-01-2018,15

Mail successfully added

- 1.Add Mail
- 2.Delete Mail
- 3.Display Mails
- 4.Exit

Enter your choice:

3

Mails in Inbox

Id	From	To	Subject	Content	Received Date	Size
12	john@abc.in	jane@abc.in	Hi	Happy New Year	01-01-2018	10.0
16	jack@abc.in	jane@abc.in	Hi	Happy Pongal	14-01-2018	15.0

- 1.Add Mail
- 2.Delete Mail
- 3.Display Mails
- 4.Exit

Enter your choice:

2

Enter the id of the mail to be deleted:

13

Mail not found in the folder

- 1.Add Mail
- 2.Delete Mail
- 3.Display Mails
- 4.Exit

Enter your choice:

2

Enter the id of the mail to be deleted:

16

Mail successfully deleted

- 1.Add Mail
- 2.Delete Mail
- 3.Display Mails
- 4.Exit

Enter your choice:

3

Mails in Inbox

Id	From	To	Subject	Content	Received Date	Size
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12 john@abc.in jane@abc.in Hi Happy New Year 01-01-2018 10.0

1.Add Mail

2.Delete Mail

3.Display Mails

4.Exit

Enter your choice:

4