

D:/CSE BUET/L3T2/Sessionals/CSE 322 - Computer Networks Sessional/Assignment 1/SMTP/src/smtp/SMTP.java

```
1 package smtp;
2
3 import java.io.BufferedReader;
4 import java.io.File;
5 import java.io.FileInputStream;
6 import java.io.FileReader;
7 import java.io.IOException;
8 import java.io.InputStreamReader;
9 import java.io.PrintWriter;
10 import static java.lang.System.exit;
11 import java.net.InetAddress;
12 import java.net.InetSocketAddress;
13 import java.net.Socket;
14 import java.net.UnknownHostException;
15 import java.util.Base64;
16 import java.util.Scanner;
17
18 /**
19  *
20  * @author Jahin
21  */
22 public class SMTP {
23
24     public static void main(String[] args) throws UnknownHostException, IOException {
25         BufferedReader br;
26         Scanner sc = new Scanner(System.in);
27         String mailServer = "smtp.sendgrid.net";
28         System.out.println("Connecting to " + mailServer);
29         InetAddress mailHost = InetAddress.getByName(mailServer);
30         InetAddress localhost = InetAddress.getLocalHost();
31         Socket smtpSocket = new Socket();
32         smtpSocket.connect(new InetSocketAddress(mailHost, 587), 20000);
33         BufferedReader in = new BufferedReader(new InputStreamReader(smtpSocket.getInputStream()));
34         PrintWriter pr = new PrintWriter(smtpSocket.getOutputStream(), true);
35         String initialID = in.readLine();
36         System.out.println(initialID);
37         System.out.println("Saying HELLO to Server");
38         pr.println("HELO "+localhost.getHostName());
39         pr.flush();
40         String welcome = in.readLine();
41         System.out.println(welcome);
42         if(welcome.charAt(0) == '5' || welcome.charAt(0) == '4'){
43             System.out.println("Errorn Connecting");
44             exit(1);
45         }
46         // TODO code application logic here
47
48         //Authentication
49         pr.println("AUTH LOGIN\n" +
50                 "SmFoaW45OQ==\n" +
51                 "amFoaW4xMjM0");
52         pr.flush();
53         welcome = in.readLine();
54         System.out.println(welcome);
55         welcome = in.readLine();
56         System.out.println(welcome);
57         welcome = in.readLine();
58         System.out.println(welcome);
59
60         if(welcome.charAt(0) == '5' || welcome.charAt(0) == '4'){
61             System.out.println("Errorn Authenticating");
62             exit(1);
63         }
64
65         br = new BufferedReader(new FileReader("setup.txt"));
66
67         System.out.print("Mail From: ");
68         String st = br.readLine();
69         //String st = "1505065.mrrj@ugrad.cse.buet.ac.bd";
70         pr.println("MAIL FROM: <" + st + ">");
71         pr.flush();
```

D:/CSE BUET/L3T2/Sessionals/CSE 322 - Computer Networks Sessional/Assignment 1/SMTP/src/smtp/SMTP.java

```
72     welcome = in.readLine();
73     System.out.println(welcome);
74     if(welcome.charAt(0) == '5' || welcome.charAt(0) == '4'){
75         System.out.println("Errorn in sender mail address");
76         exit(1);
77     }
78     System.out.print("Number of Recipiant: ");
79     int n = Integer.parseInt(br.readLine());
80     String[] rcpt = new String[100];
81     for(int i = 0; i < n; i++){
82         rcpt[i] = br.readLine();
83         pr.println("RCPT TO: <" + rcpt[i] + ">");
84         pr.flush();
85         welcome = in.readLine();
86         System.out.println(welcome);
87         if(welcome.charAt(0) == '5' || welcome.charAt(0) == '4'){
88             System.out.println("Errorn in reciever mail address");
89             exit(1);
90         }
91     }
92
93     pr.println("DATA");
94     pr.flush();
95     welcome = in.readLine();
96     System.out.println(welcome);
97     if(welcome.charAt(0) == '5' || welcome.charAt(0) == '4'){
98         System.out.println("Refused to read data");
99         exit(1);
100    }
101
102    //Mail data starts here
103    String line;
104    br = new BufferedReader(new FileReader("mail1.txt"));
105    String mail = "From: <"+st+">\nTo: ";
106    for(int i = 0; i < n; i++){
107        mail+="<" + rcpt[i] + "> ";
108    }
109    System.out.print("Subject: ");
110    mail += "\nSubject: " + br.readLine();
111    mail += "\nMIME-Version: 1.0\n" +
112        "Content-Type: multipart/mixed; boundary=sep\n" +
113        "\n" +
114        "--sep\n" +
115        "Content-type: text/plain; charset=us-ascii \n\n\n";
116
117    line = br.readLine();
118    while(!line.equals(".")){
119        mail +=line+"\n";
120        line = br.readLine();
121    }
122
123    //Attachment is attached if "y"
124    if(br.readLine().equalsIgnoreCase("y")){
125        String fname = br.readLine();
126        mail += "\n--sep\n" +
127            "Content--Type: application/octet-stream; name=\\\\"+fname+"\\\\" +
128            "Content-Disposition: attachment; filename=\\\\"+fname+"\\\\" +
129            "Content-Transfer-Encoding: base64\n\n\n";
130
131        File f = new File(fname);//change path of image according to you
132        FileInputStream fis = new FileInputStream(f);
133        byte byteArray[] = new byte[(int)f.length()];
134        fis.read(byteArray);
135        String imageString = Base64.getEncoder().encodeToString(byteArray);
136        mail += imageString + "\n...\n";
137    }
138
139    mail += "--sep--\n" +
140        ".\n" +
141        "QUIT";
142    System.out.println(mail);
```

D:/CSE BUET/L3T2/Sessionals/CSE 322 - Computer Networks Sessional/Assignment 1/SMTP/src/smt/SMTP.java

```
143         pr.println(mail);
144         pr.flush();
145         welcome = in.readLine();
146         System.out.println(welcome);
147         if(welcome.charAt(0) == '5' || welcome.charAt(0) == '4'){
148             System.out.println("Could not send mail");
149             exit(1);
150         }
151     }
152
153 }
```