# Java Client/ Server application

```java
import java.io.BufferedReader;
import java.io.DataInputStream;
import java.io.DataOutputStream;
import java.io.IOException;
import java.io.InputStreamReader;
import java.net.ServerSocket;
import java.net.Socket;

public class MessageServer {
    public static void main(String asd[]) {
        try {
            String msg;
            ServerSocket ss = new ServerSocket(8082);
            System.out.println("Starting Server.....");
            Socket s = ss.accept();// Start listening at port 8082
            DataInputStream in = new DataInputStream(s.getInputStream());
            DataOutputStream out = new DataOutputStream(s.getOutputStream());
            BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
```

# Java Client/ Server application

```java
            while (!ss.isClosed()) {
                msg = (String) in.readUTF();
                System.out.println("Client: " + msg);
                if (msg.equalsIgnoreCase("bye")) {
                    out.writeUTF("bye");
                    out.flush();
                    ss.close();
                } else {
                    out.writeUTF(br.readLine());
                    out.flush();
                }
            }
            System.out.println("Server stopped.....");
        } catch (IOException e) {
            e.printStackTrace();
        }
    }
}
```

# Java Client/ Server application

```java
import java.io.BufferedReader;
import java.io.DataInputStream;
import java.io.DataOutputStream;
import java.io.IOException;
import java.io.InputStreamReader;
import java.net.ConnectException;
import java.net.Socket;

public class MessageClient {

    public static void main(String asd[]) {
        Socket soc = null;
        String msg;
        try {
            soc = new Socket("localhost", 8082);
            DataOutputStream out = new
            DataOutputStream(soc.getOutputStream());
            DataInputStream in = new DataInputStream(soc.getInputStream());
            BufferedReader br = new BufferedReader(new InputStreamReader(
            System.in));
```

# Java Client/ Server application
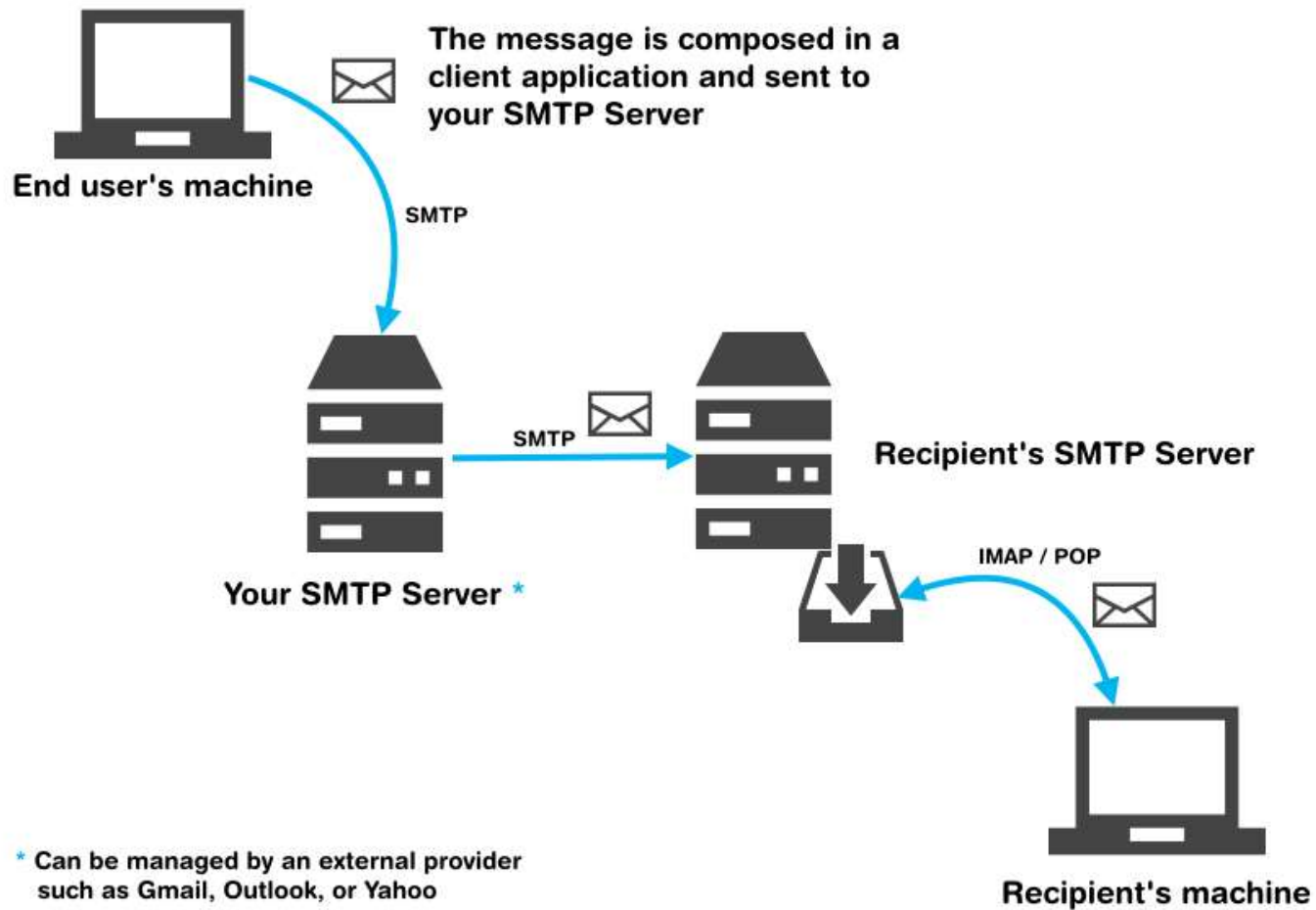
```java
        do {
            msg = br.readLine();
            out.writeUTF(msg);
            System.out.println("Server:" + in.readUTF());
            out.flush();
        } while (!msg.equalsIgnoreCase("bye"));
        soc.close();
    } catch (ConnectException e) {
        System.out.println("Server not found");
    } catch (IOException e) {
        e.printStackTrace();
    }
    }
}
```
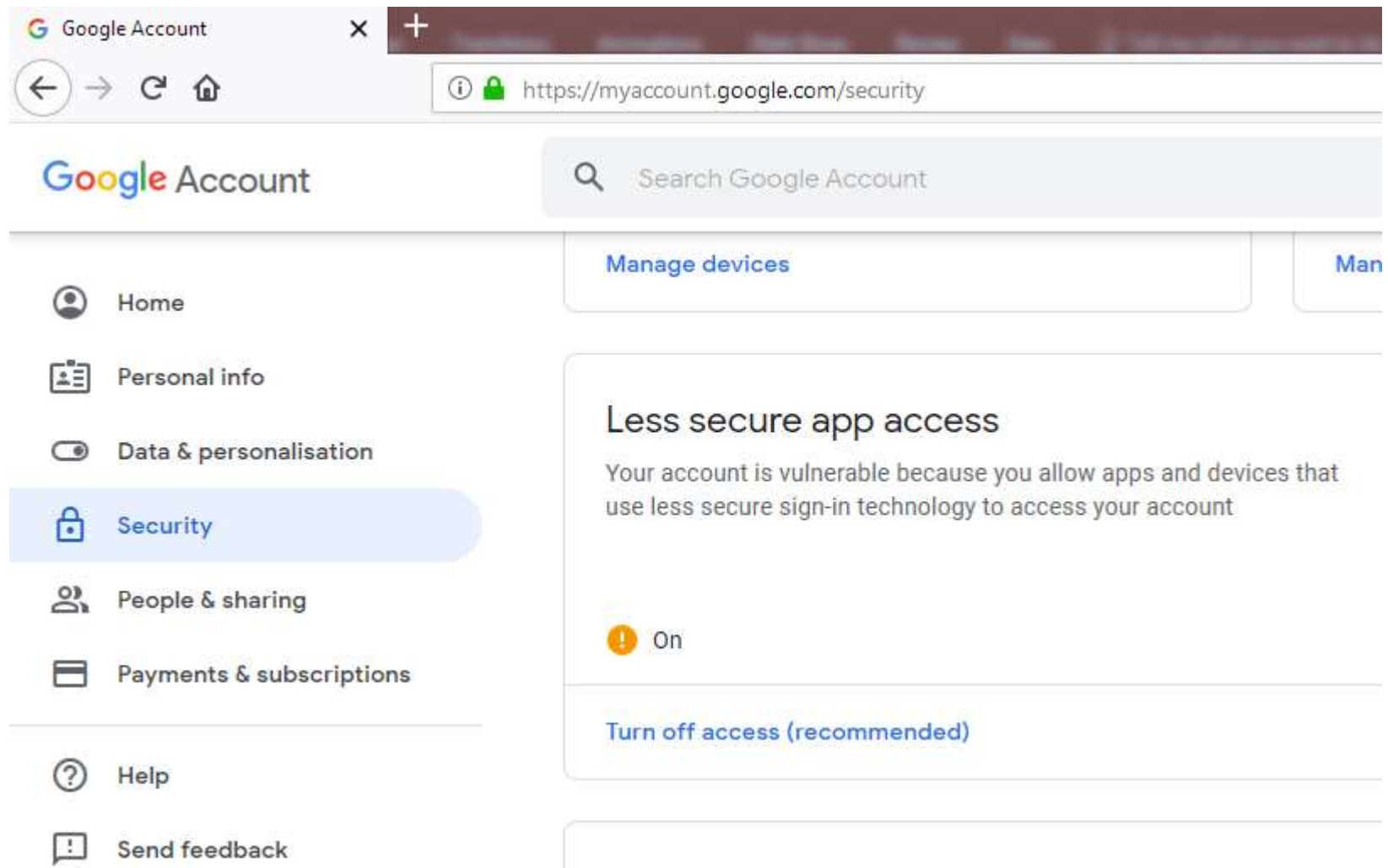
# Java Mail



End user's machine

The message is composed in a client application and sent to your SMTP Server

SMTP

SMTP

Your SMTP Server *

Recipient's SMTP Server

IMAP / POP

Recipient's machine

\* Can be managed by an external provider such as Gmail, Outlook, or Yahoo

# Jar files

1) java-mail-1.x.x.jar
2) activation.jar

# Send mail program using java mail and Gmail

## Change security settings

# Send mail program using java mail and Gmail

```java
import java.util.Properties;
import javax.mail.Message;
import javax.mail.MessagingException;
import javax.mail.Session;
import javax.mail.Transport;
import javax.mail.internet.AddressException;
import javax.mail.internet.InternetAddress;
import javax.mail.internet.MimeMessage;

public class Program {
    public static void main(String[] args) {
        String from = "your gmail id (without @gmail.com)";
        String pass = "your password";
        String[] to = { "receiver email1", "receiver email2"};
        String subject = "Test";
        String body = "This is a test mail";
        sendMail(from, pass, to, subject, body);
    }
```

# Send mail program using java mail and Gmail

```java
private static void sendMail(String from, String pass, String[] to,
                            String subject, String body) {
    Properties props = System.getProperties();
    String host = "smtp.gmail.com";
    props.put("mail.smtp.starttls.enable", "true");
    props.put("mail.smtp.host", host);
    props.put("mail.smtp.user", from);
    props.put("mail.smtp.password", pass);
    props.put("mail.smtp.port", "587");
    props.put("mail.smtp.auth", "true");
    Session session = Session.getDefaultInstance(props);
    MimeMessage message = new MimeMessage(session);
    try {
        message.setFrom(new InternetAddress(from));
        InternetAddress[] toAddress = new InternetAddress[to.length];

        // To get the array of addresses
        for (int i = 0; i < to.length; i++) {
            toAddress[i] = new InternetAddress(to[i]);
        }
```

# Send mail program using java mail and Gmail

```java
            for (int i = 0; i < toAddress.length; i++) {
                    message.addRecipient(Message.RecipientType.TO,
            toAddress[i]);
            }
            message.setSubject(subject);
            message.setText(body);
            Transport transport = session.getTransport("smtp");
            transport.connect(host, from, pass);
            transport.sendMessage(message, message.getAllRecipients());
            transport.close();
            System.out.print("Mail sent...");
        } catch (AddressException ae) {
            ae.printStackTrace();
        } catch (MessagingException me) {
            me.printStackTrace();
        }
    }
}
```