

## Java files:

1. BankServer.java – Reads private (bank) and public (bank, merchant, client) keys and passes it to BankServerThread.java. Also, accepts and starts a new thread every time a client connects.
2. BankServerThread.java – Houses the functions that exchange information with merchant server, client and database.
3. MerchantServer.java - Reads private (merchant) and public (bank, merchant, client) keys and passes it to BankServerThread.java. Also, accepts and starts a new thread every time a client connects.
4. MerchantServerThread.java – Houses the functions that exchange information with bank server, client and database.
5. KeyGenerator.java - Generates public and private key pair for client, merchant and bank.
6. CertificateAuthorityServer.java – Creates certificates for client, merchant and bank.
7. Database.java – Creates Users, Session, Products and OTP tables.
8. SendEmail.java – Sends the user successful/unsuccessful email.
9. SendSMS.java – Sends OTP to the client.
10. Attacker.java – Run one attack at a time
  - 10.1. Masquerade As client Attack
  - 10.2 Replay Attack
  - 10.3 Masquerade As merchant Attack
11. GetClientPublicKeyFromCert.java, RandomText.java, test\_hash\_encrypt\_send.java – testing functions. (not needed)