DATA FLOW MODEL

REGISTRATION/SIGNUP

PROVIDE FORM → DATA ACQUISITION → PROCESSING OF DATA

LOGIN

PROVIDE FORM → DATA ACQUISITION → PROCESSING OF DATA

AUTHENTICATON USING THIRD PARTY

MODEL GENERATION → MODEL DB → CLASS I-FIER

CLASS I-FIER — TRUE → PROFILE OR HOMEPAGE

CLASS I-FIER — FALSE → FAILED RETRY

DATA MODEL

PROFILE

first name	string
last name	string
contact no.	varchar
password	varchar
email	varchar
uid	varchar

ADDRESS

Address line1	text
Address line2	text
city	text
zipcode	text
state	text
country	text
uid	varchar

WALLET

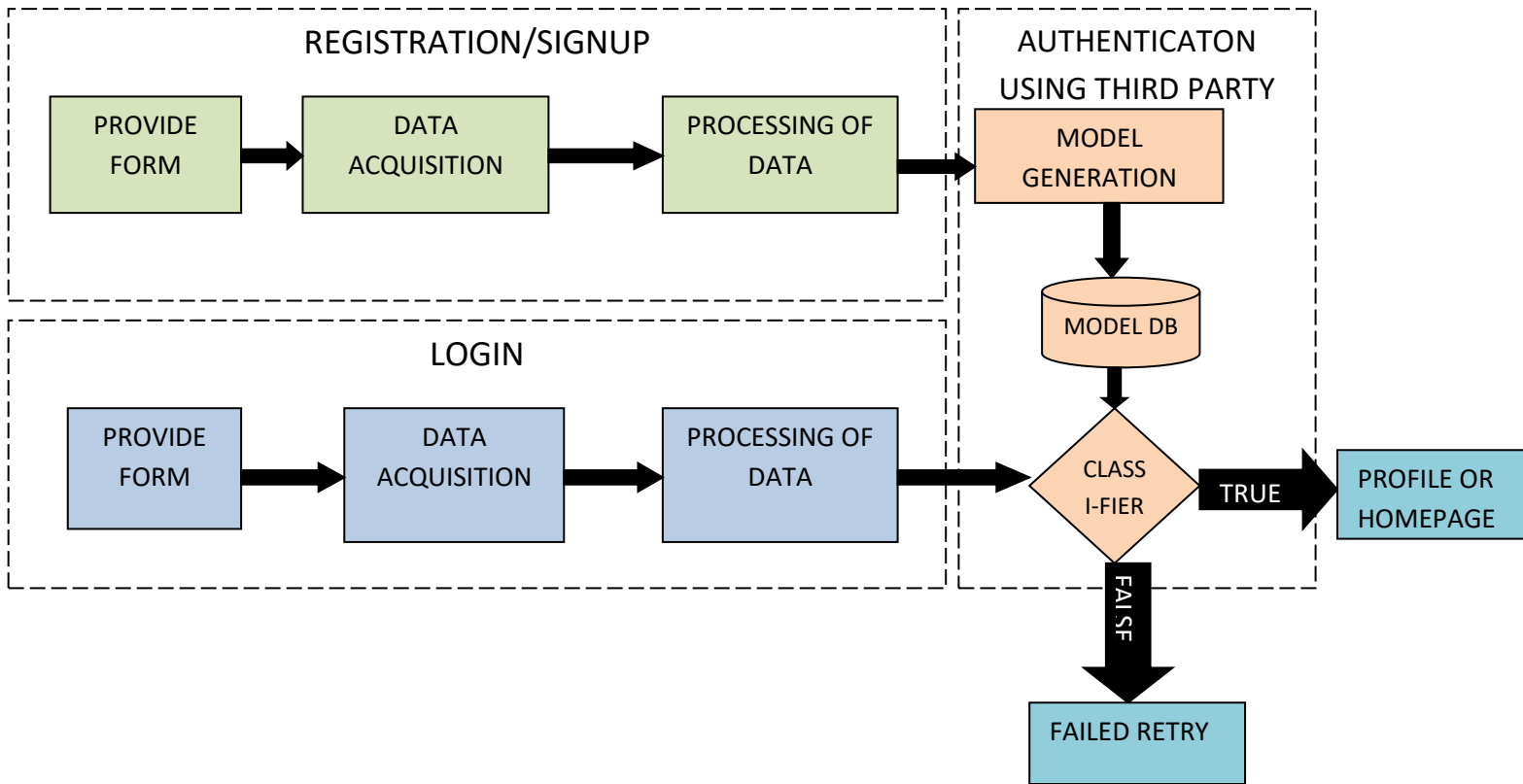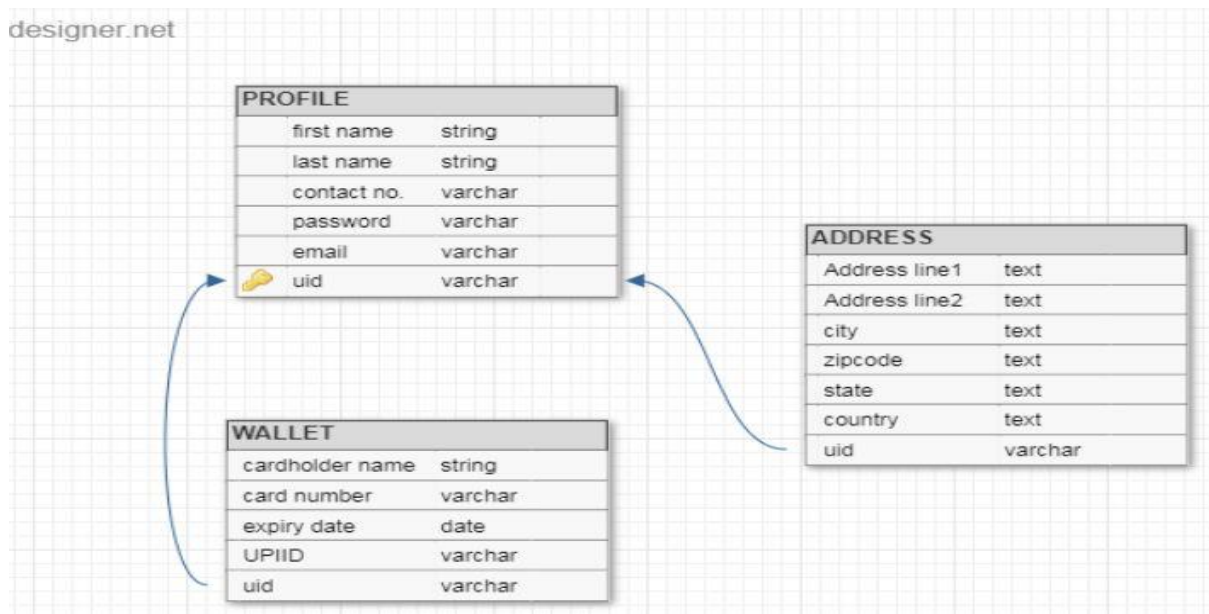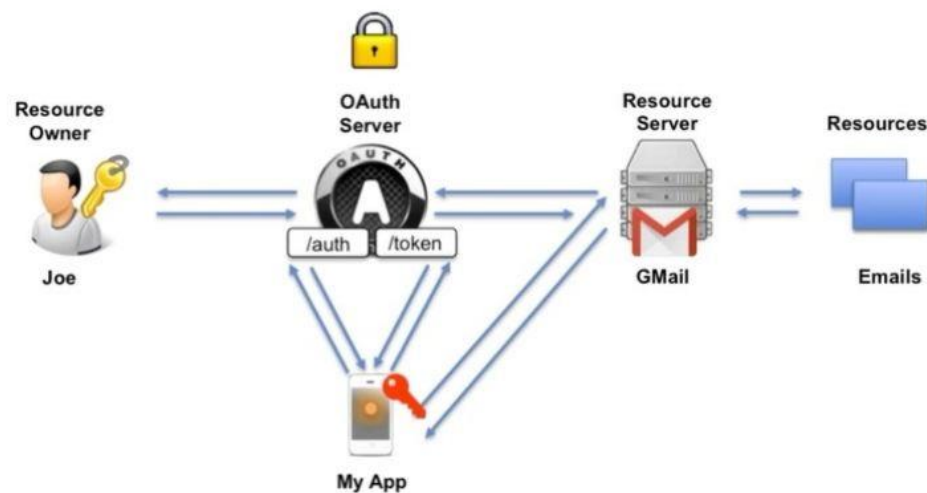| cardholder name	string
card number	varchar
expiry date	date
UPIID	varchar
uid	varchar

The profile includes the signup/login details as well.

SECURITY BASED RESEARCH

We will be using OAuth2.0 as the third party service for authorization purpose by Google.

Few of the links referred:

- https://developers.google.com/identity/protocols/oauth2
- https://developers.google.com/gmail/api/auth/about/auth
- https://oauth.net/2/
- https://www.youtube.com/watch?v=fxRXLbgX53A&feature=youtu.be
- https://developer.okta.com/blog/2019/03/12/oauth2-spring-security-guide

We will be implementing the resource owner password credential flow.

CASSANDRA QUERIES

As of now just created the table inserted data and tried updating the data already inserted by pulling the image of Cassandra using docker.