XYZ Taxi App Planning and Specification Documents

Application Features Overview

Features

- Main (Home) Page
- Login/Registration Page
- Members Dashboard
- Admin Dashboard
- Global backend
- Global frontend

Main (Home) Page

- Menu

Login/Registration Page

- Registration Form
- Login Form

Members Dashboard

- Check outstanding balance
- Make a payment
- Submit a claim
- List all claims and payments to date
- Logout button (Header?)

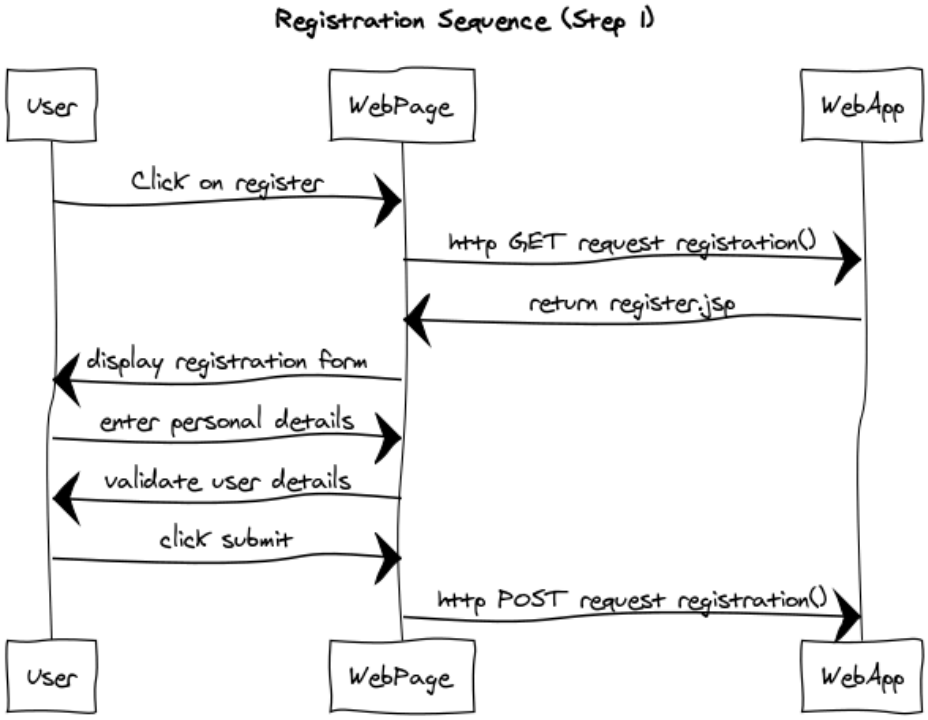
Admin Dashboard

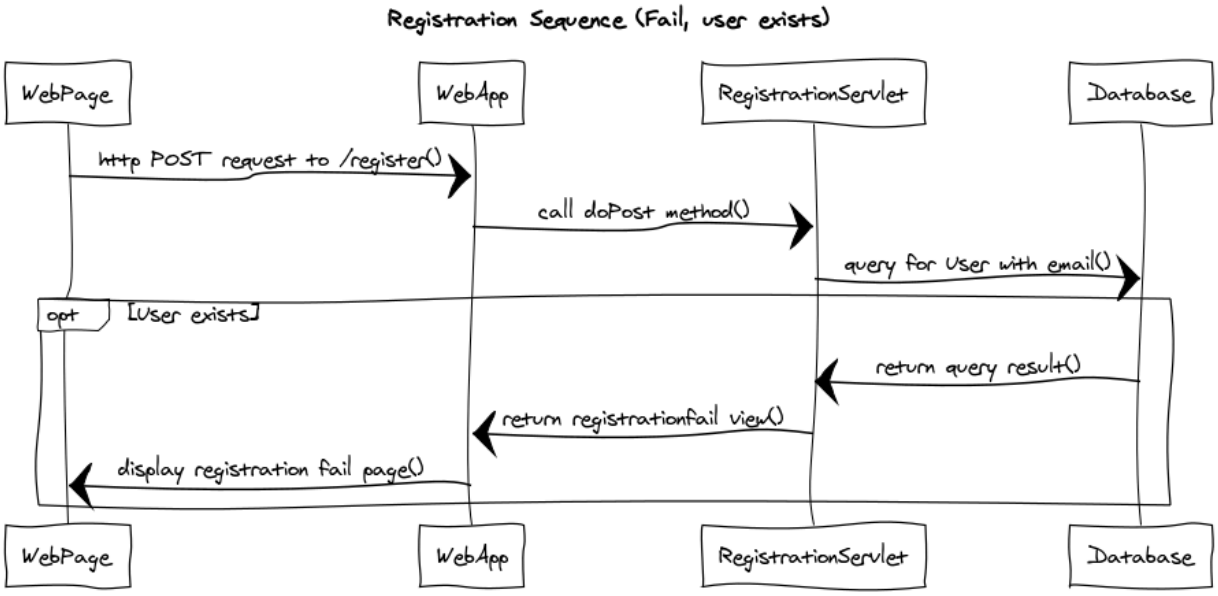
- Members applications
- Members list
- Outstanding balance list
- Claims list
- Process member applications
- Process member claims
- Manage membership status
- Report annual membership

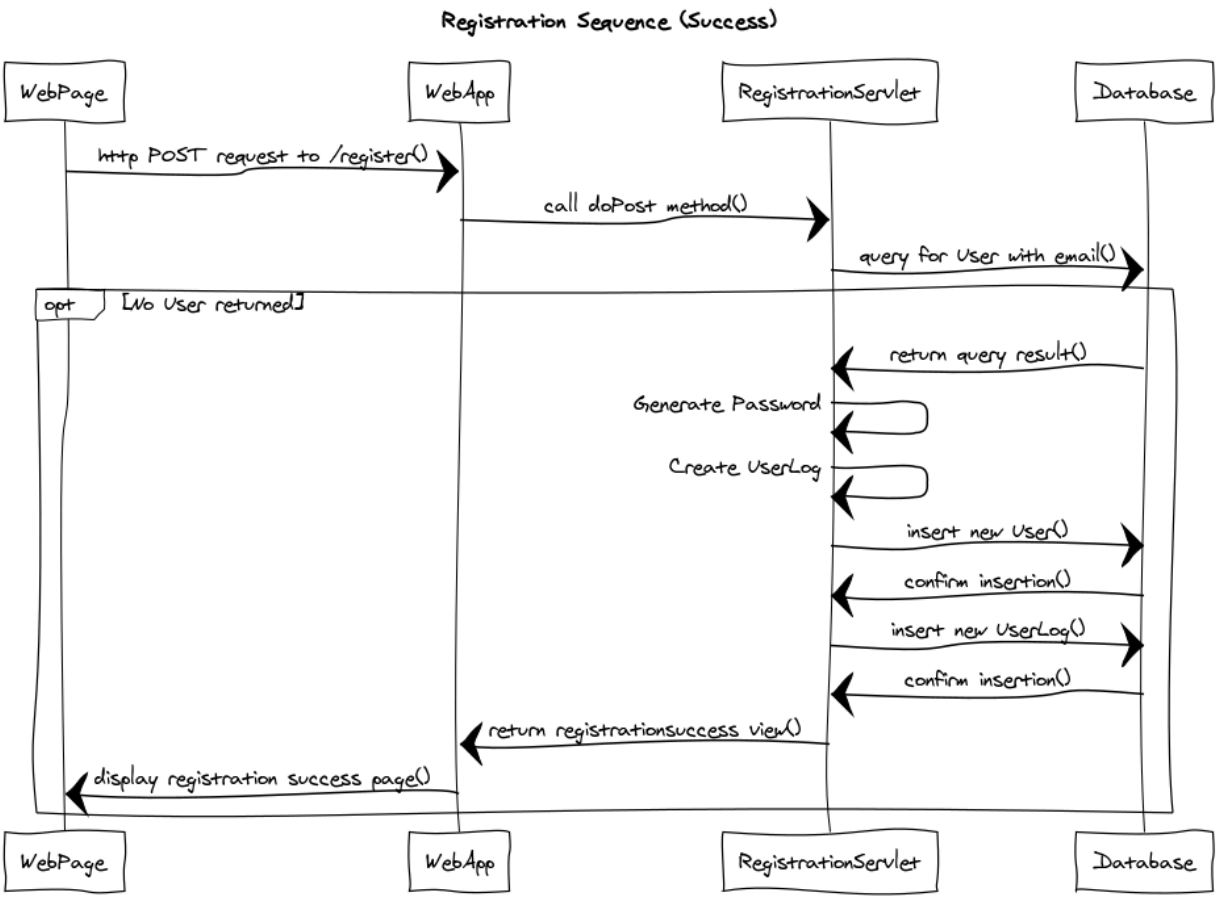
Database Schema

user	id, email, password, address, status, date_of_birth
user_role	id, user_id, role_id
user_session	id, user_id, hash, expiry_date
user_log	id, user_id, message, ip
role	id, name
role_permission	id, role_id, name
application	id, user_id,
membership	id, user_id, pounds, pence, status, start_date, claim_from_date
claim	id, membership_id, pounds, pence, claim_date
payment	Id, user_id, pounds, pence, stripe_id, reference

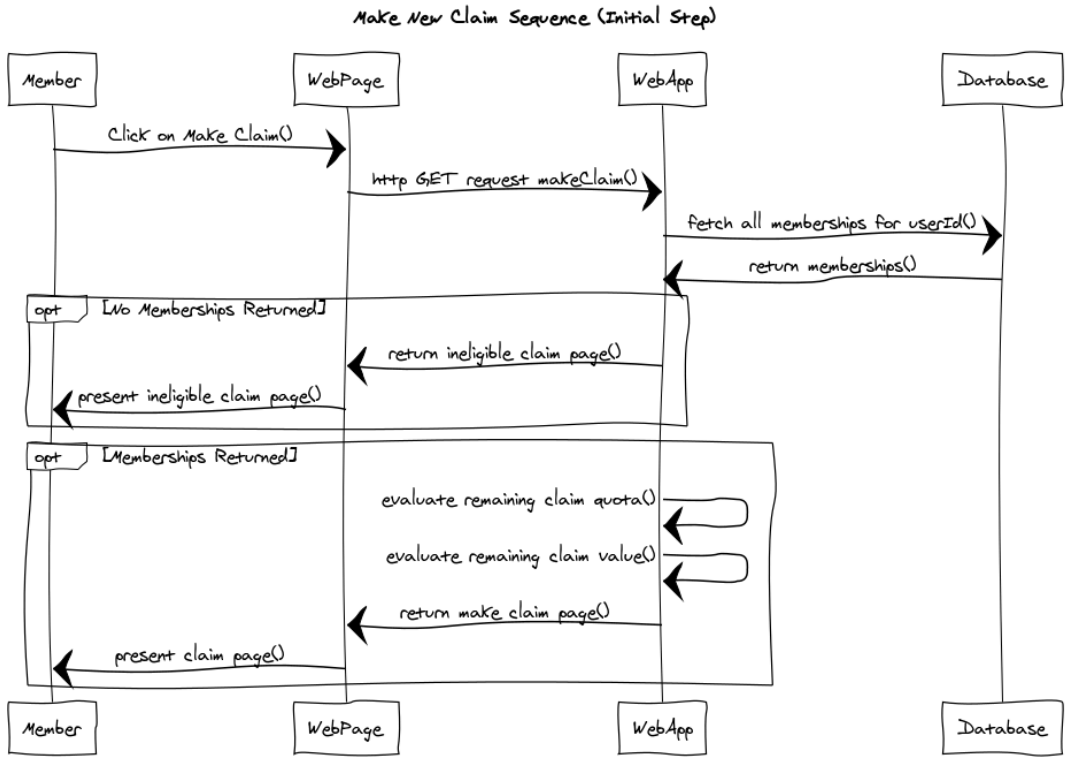
Registration Sequences

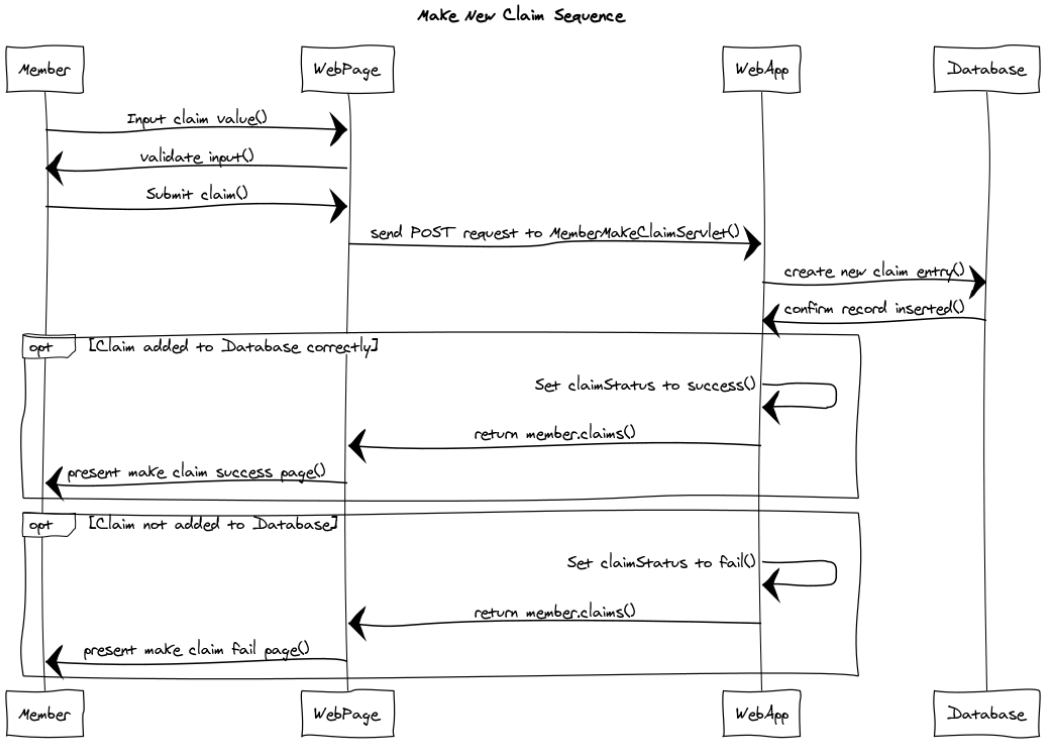




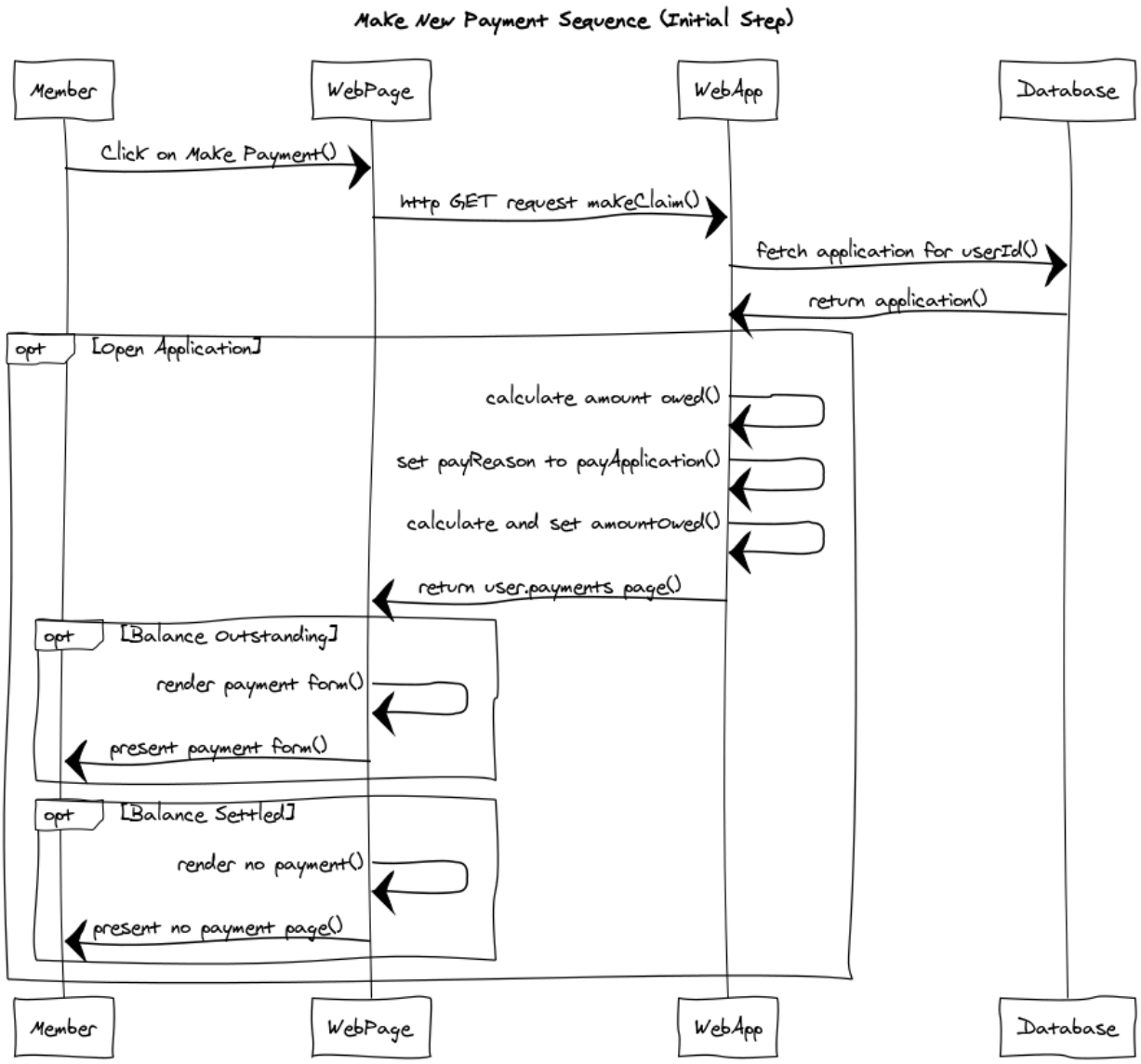

Registration Sequence (Success)
WebPage
WebApp
RegistrationServlet
Database
http POST request to /register()
call doPost method()
query for User with email()
opt
[No User returned]
return query result()
Generate Password
Create UserLog
insert new User()
confirm insertion()
insert new UserLog()
confirm insertion()
return registrationsuccess view()
display registration success page()
WebPage
WebApp
RegistrationServlet
Database

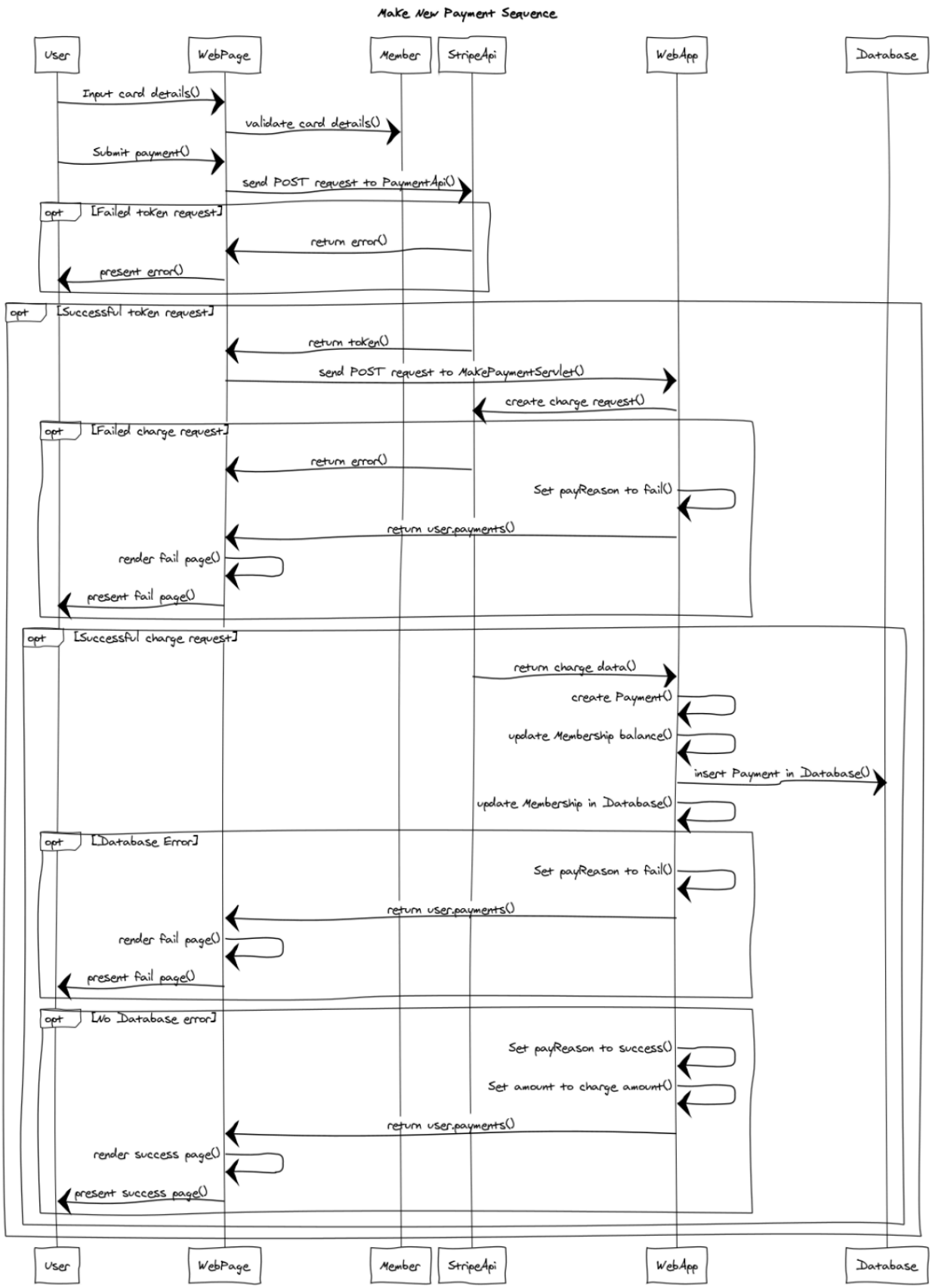
Make Claim Sequences





Make Payment Sequences




Make New Payment Sequence
User
WebPage
Member
StripeApi
WebApp
Database
Input card details()
validate card details()
Submit payment()
send POST request to PaymentApi()
opt
[Failed token request]
return error()
present error()
opt
[Successful token request]
return token()
send POST request to MakePaymentServlet()
create charge request()
opt
[Failed charge request]
return error()
Set payReason to fail()
return user.payments()
render fail page()
present fail page()
opt
[Successful charge request]
return charge data()
create Payment()
update Membership balance()
insert Payment in Database()
update Membership in Database()
opt
[Database Error]
Set payReason to fail()
return user.payments()
render fail page()
present fail page()
opt
[No Database error]
Set payReason to success()
Set amount to charge amount()
return user.payments()
render success page()
present success page()
User
WebPage
Member
StripeApi
WebApp
Database