Team Name: Blue Collar

Team Leader: Gloria Muskaj

Team Members: Gloria Muskaj, Aldi Hamati, Alesia Gjana, Amanda Gaci, Erjola Avdiaj

Roles and Tasks

Aldi Hamati: *Use cases in the application regarding **sign-up/login**; forget password and editing personal information*

Gloria Muskaj: *Use cases in the application regarding **Make Payment**, Activity Model for user and handyman*

Alesia Gjana: *Use cases in the application regarding Appointment, Use case of the Application*

Amanda Gaci: *Use case in the application regarding **View Profile***

Erjola Avdiaj: *Use case in the application regarding **Leave review***

Software design and modelling

Through system design and modelling we are able to develop abstract models of the application where each new model being a fresh perspective of how the system works, is organized and interacts with other systems in some cases. Throughout this process we use graphical notations based in UML. As such, we as developers are able to understand and communicate more clearly every aspect of the application to the customer.

With the use case diagrams we display the interactions between the users and the system or other system. It includes actors that interact with use cases, use cases themselves which are the functions, the communication link between them and the system boundary to define what is inside and what is outside the system. Each use case can be described in more detail using a tabular description.

With sequence diagrams we show the sequence of interactions in the use case and the actors or objects are put at the top with a dotted line dropping vertically. The interaction between the objects is indicated by an arrow which shows a message and the dotted arrow a reply message, or synchronous and asynchronous. The vertical blocks from the lifelines or actors or objects indicate the time required, meanwhile in some cases we may have alternative blocks of what follows when an event occurs or not.

With the activity diagram we understand an advanced form of a flowchart where we understand the workflow. We start with an initial state and continue the action flow with activities sometimes branching and sometimes merging, forks or guards used at times too, as seen fit while ending with an end state.
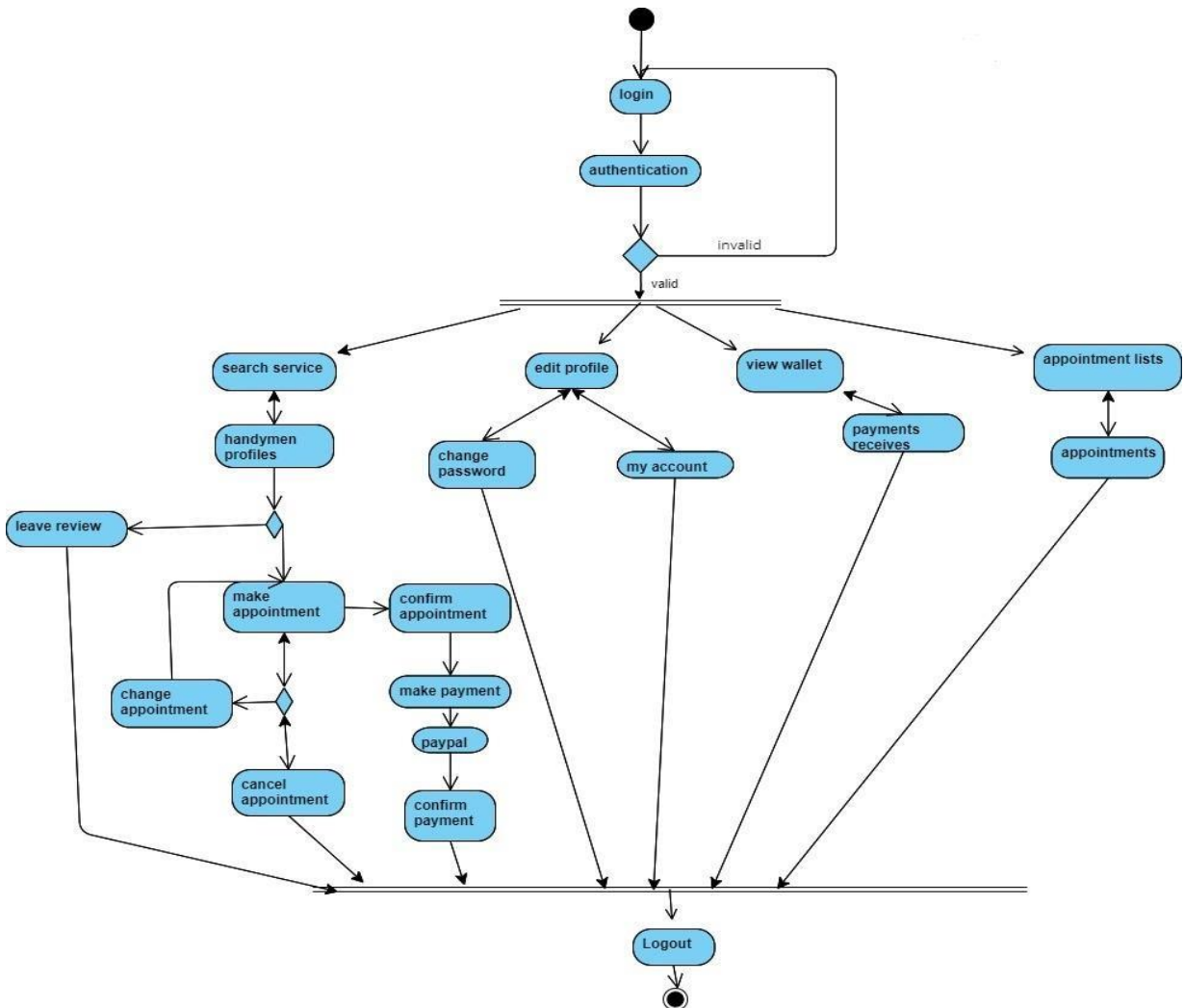
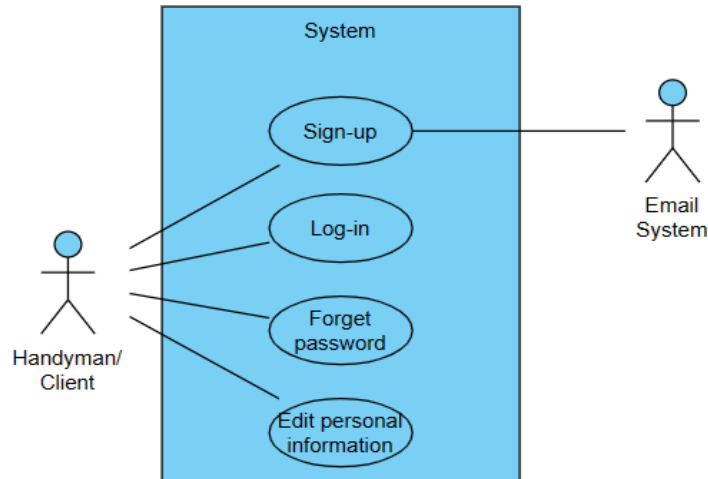*Handyman Application Full Application Use Case*
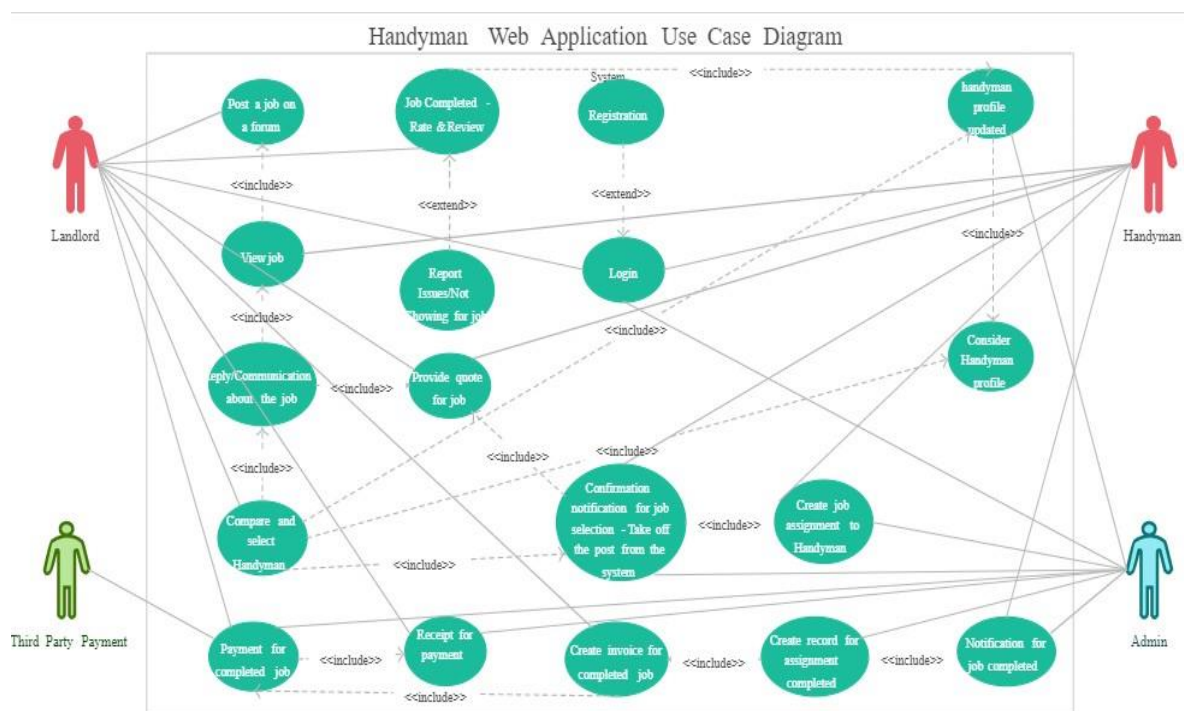
Activity model for handyman
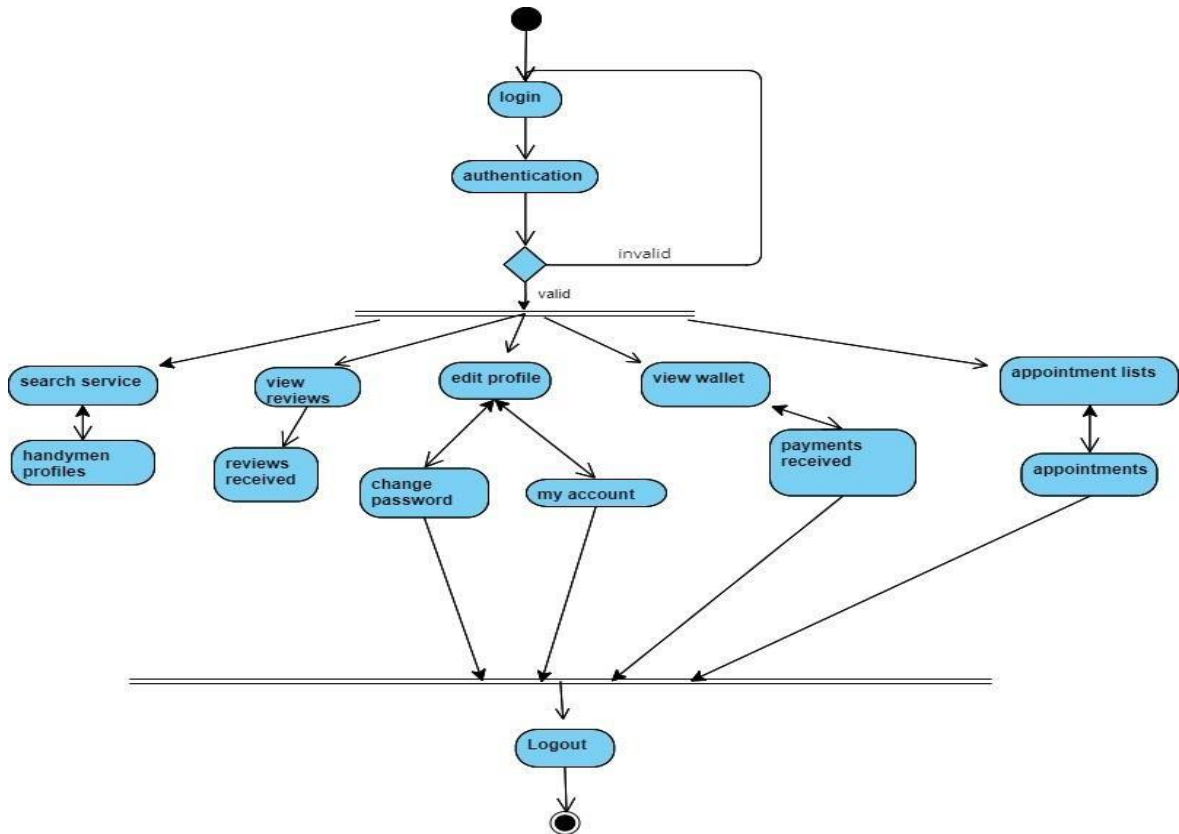
Activity model for client

1. Use cases in the application regarding *sign-up/login*, forget password and editing personal information


Sign-up use case

Tabular Description for sign-up:

Handyman Application: Sign-up	
Actors	Handyman/client, handyman application, email system, dB
Description	A user, be it a handyman or client, should be able to sign up with their personal information and create a profile or account in the application.
Data	User's personal information
Stimulus	User command issued by the handyman or client by clicking the sign up option
Response	Confirmation that sign-up was successful
Comments	It is key that the user specifies his/her role by clicking the profile of being either a handyman or client depending on their needs. The sign-up should be confirmed with a confirmation email from the application in the email specified by the user.

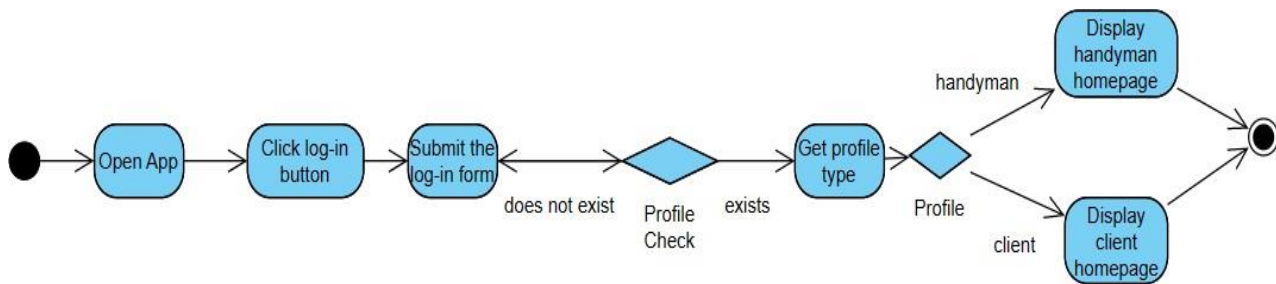Activity Diagram for sign-up:
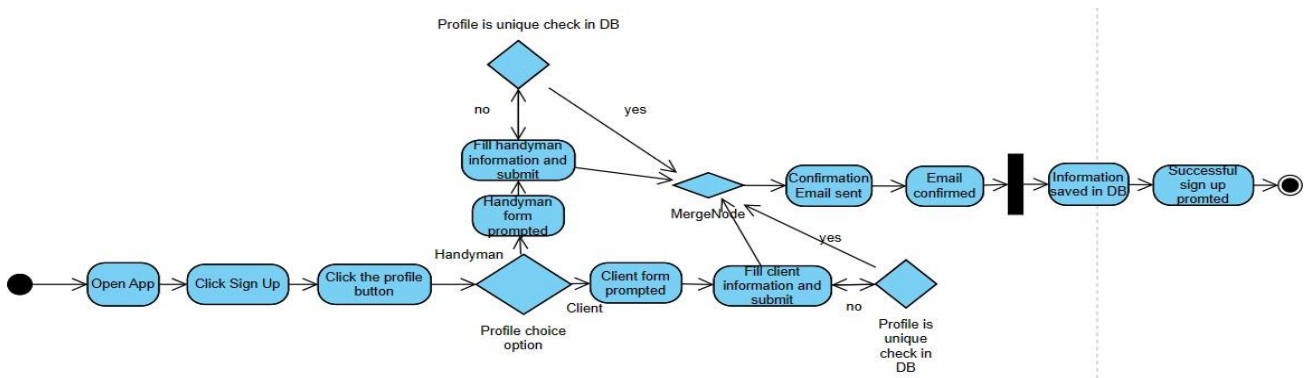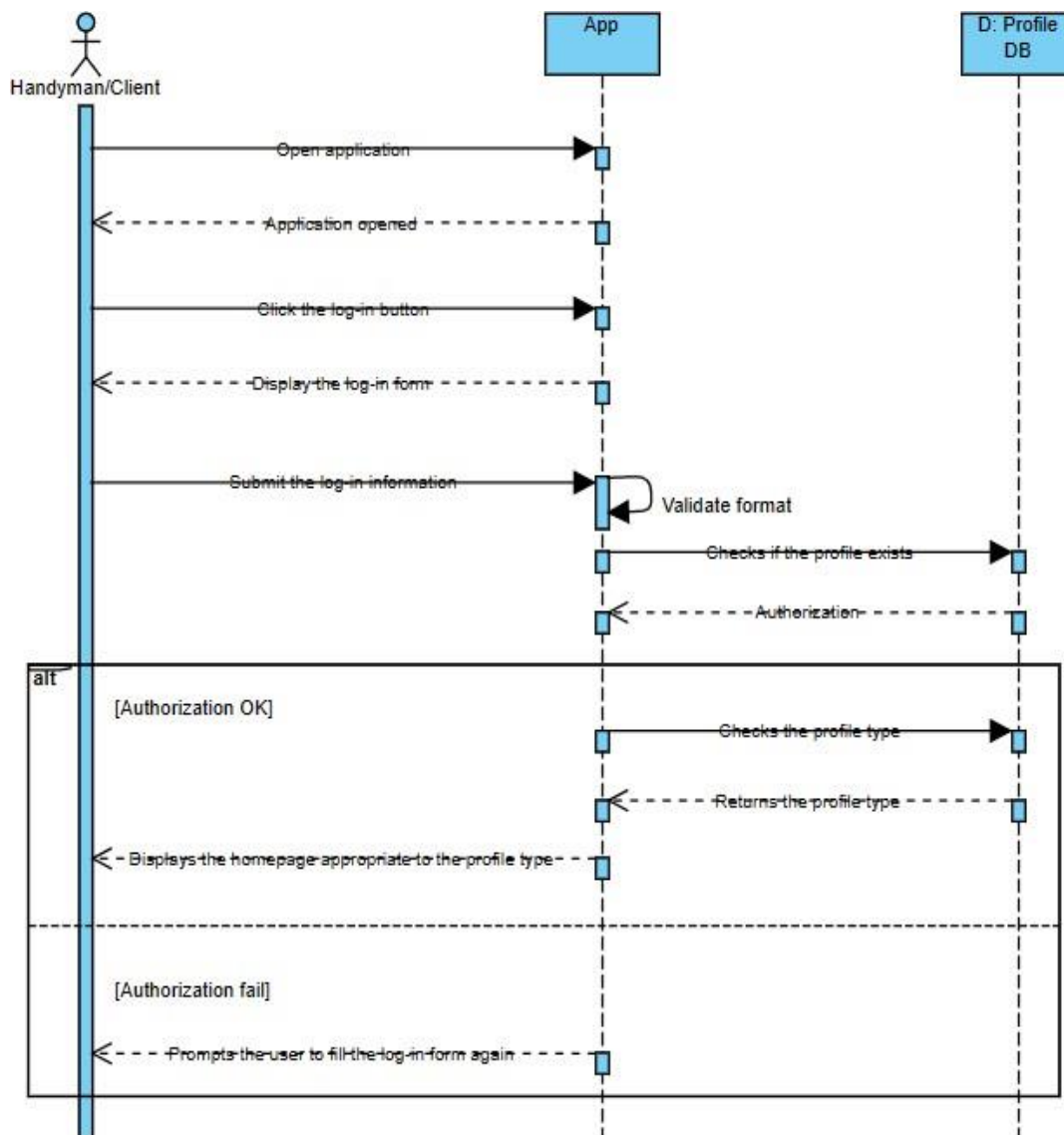
Sequence diagram for sign-up:
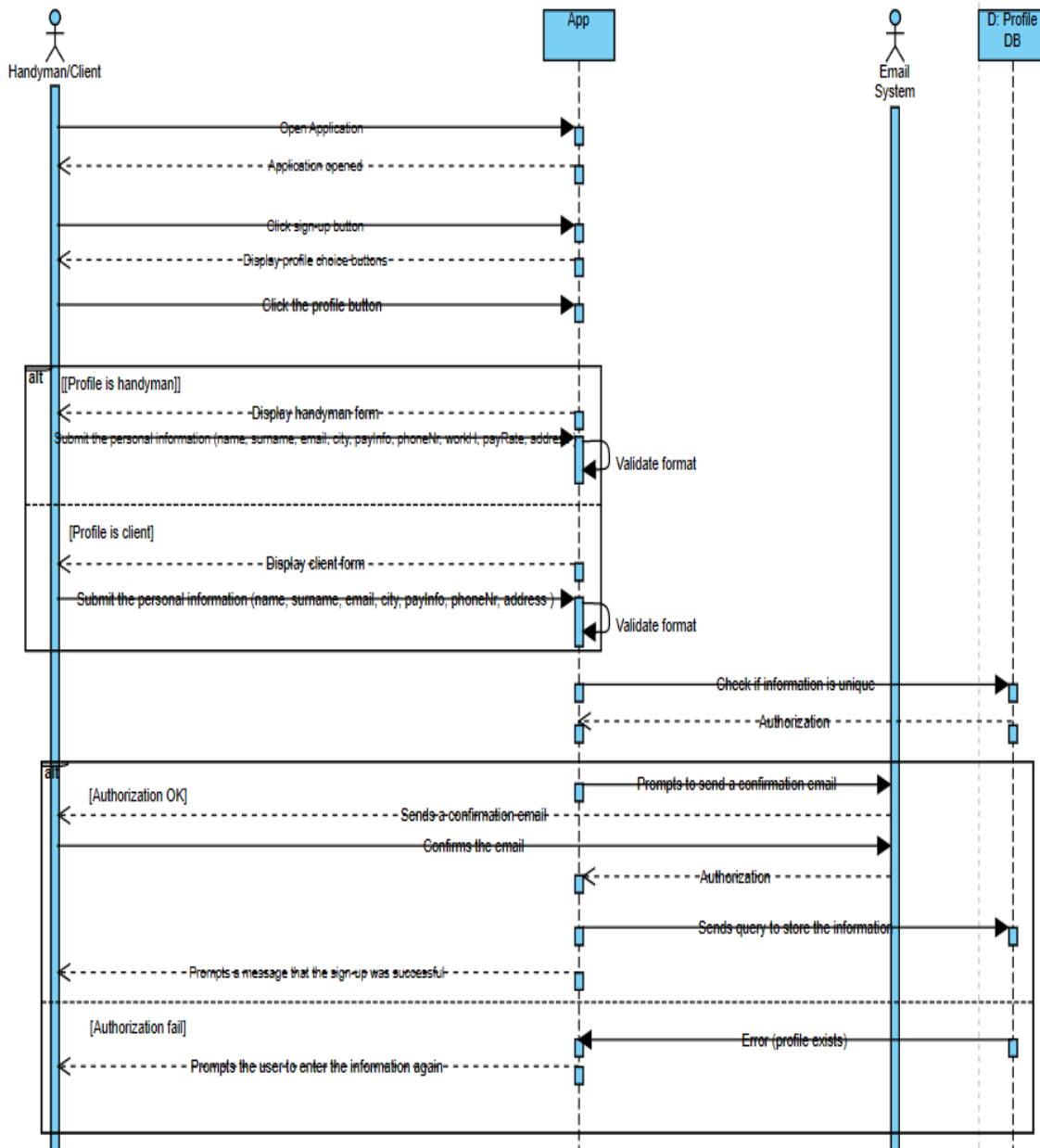
Log-in use case:

Tabular description for log-in:

Handyman Application: Log-in	
Actors	Handyman/client, handyman application, db
Description	A user, be it a handyman or client, should be able to log-in with their personal credentials and access the application.
Data	User's personal information
Stimulus	User command issued by the handyman or client by clicking the log-in option.
Response	Entrance to the application and being prompted the homepage.
Comments	Depending on the profile of the user depicted in the sign-up process, the user will be prompted a slightly different homepage with different options tailored to their profile needs.

Activity diagram for log-in:
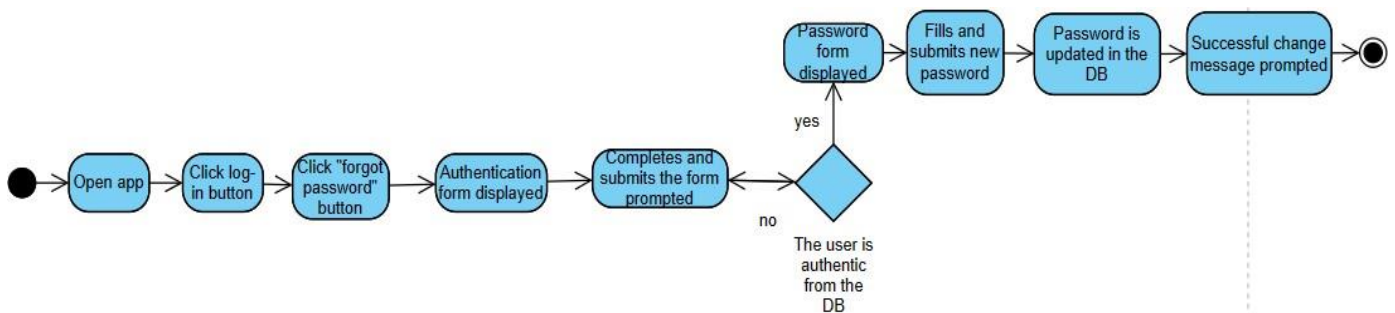

Sequence diagram for log-in:

Forget password use case

Tabular description for "forget password".

Handyman Application: "Forget password"	
Actors	Handyman/client, handyman application, db
Description	A user, be it a handyman or client, should be able to reset their passwords if they have forgotten it.
Data	User's personal information
Stimulus	User command issued by the handyman or client by clicking the "forget password" option.
Response	Confirmation the password has been reset successfully.
Comments	The user needs to remember all the other information that has been entered in the profile in order to be authenticated.

Activity diagram for "forget password":
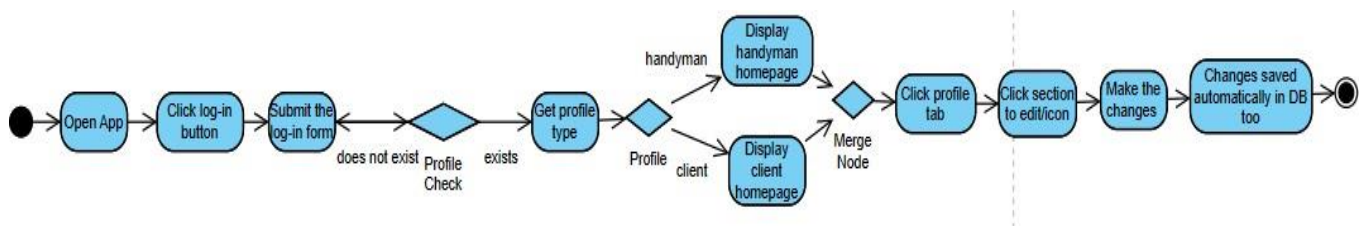

Sequence diagram for "forgot password"
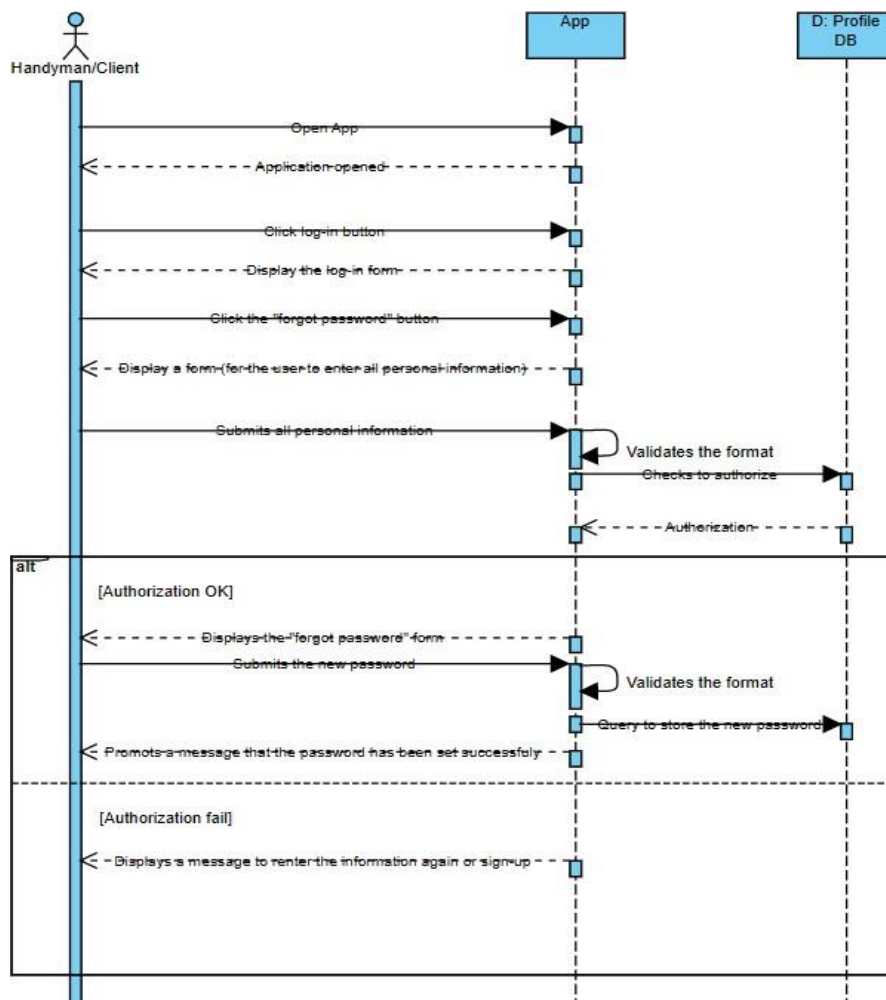
Edit personal information use case:

Tabular description for "edit personal information".

Handyman Application: "edit personal information"	
Actors	Handyman/client, handyman application, dB
Description	A user, be it a handyman or client, should be able to edit their profile information from their profile section.
Data	User's personal information
Stimulus	User command issued by the handyman or client by clicking the "profile section", and then by either clicking the area they want to change or by clicking the pen/edit button.
Response	The edit will be reflected immediately as changed. No confirmation will be prompted.
Comments	This feature will allow the users to keep their profile up-to-date as needed.

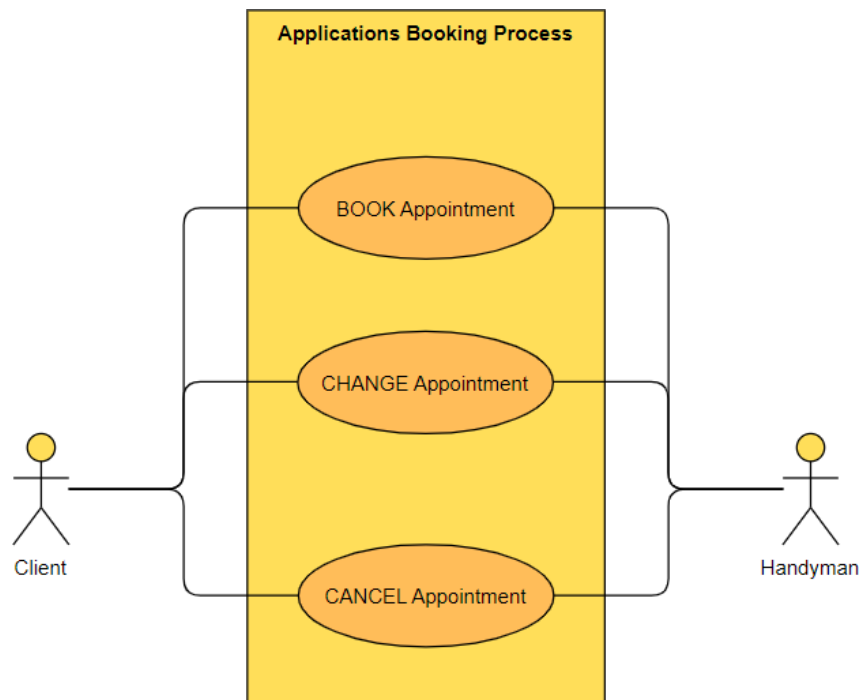Activity diagram for "edit personal information":

Sequence diagram for "edit personal information":
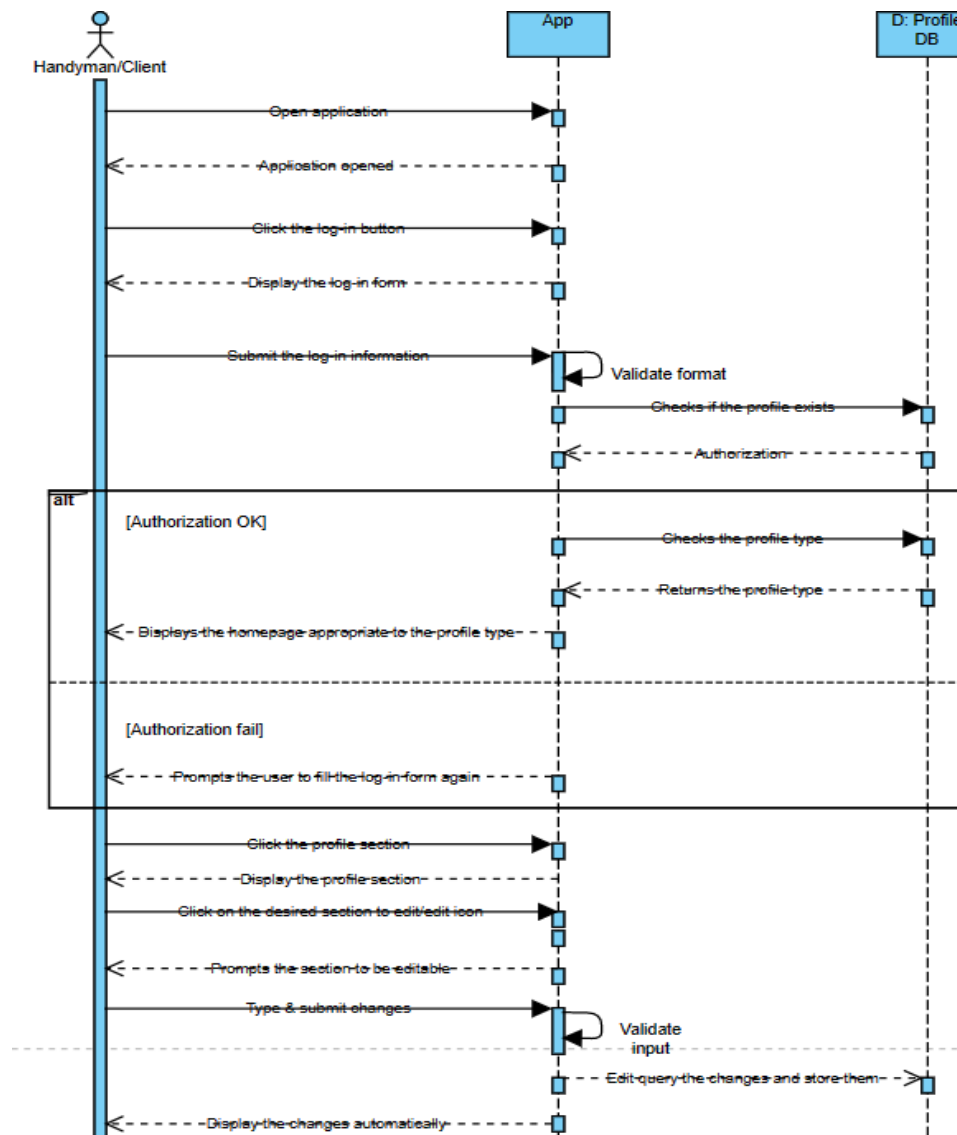
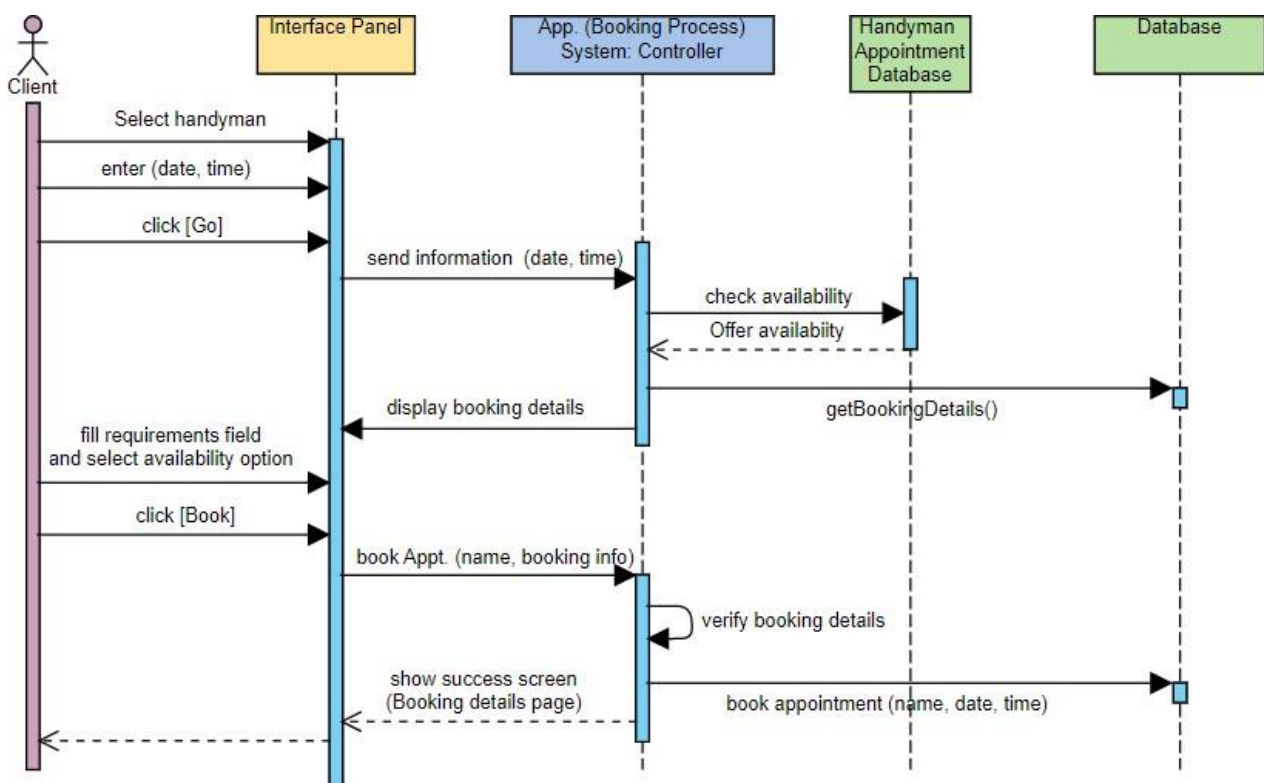*2.* Use cases in the application regarding *Appointment*

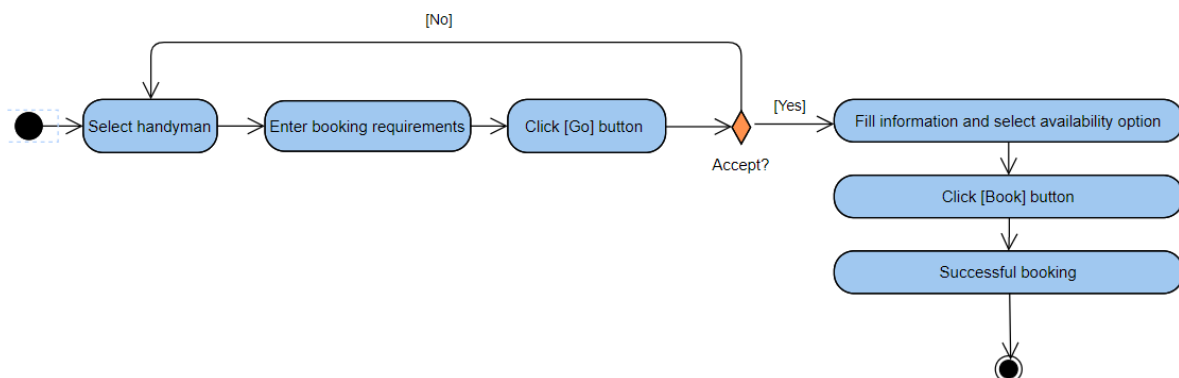1. Book Appointment
2. Change Appointment
3. Cancel Appointment

1.1 Tabular description for **Book Appointment**

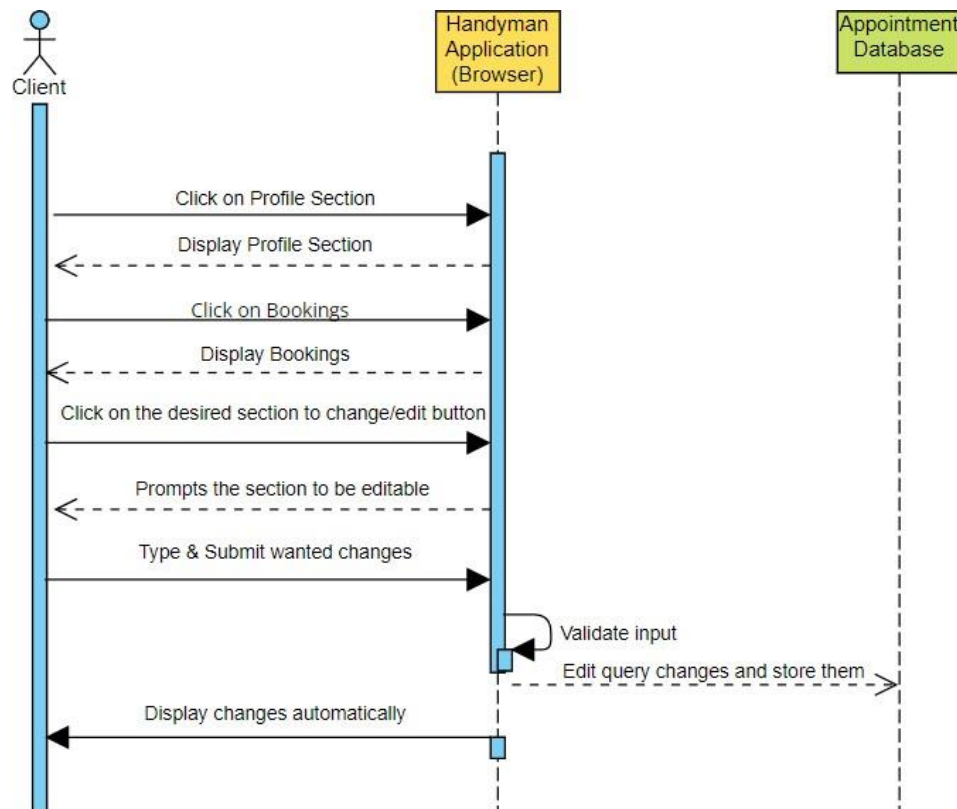| Handyman Application: Book Appointment	
Actors	Client, handyman, handyman application, app.DB
Description	Users must be able to book, cancel or change appointments.
Data	Users' information, appointment/booking information (date, time)
Stimulus	User command issued by the client by clicking on "Book" button
Response	Confirmation of the booking procedure
Comments	User must specify his/her information correctly in order to check availability and confirm the service appointment by the service provider.

1.2 Sequence diagram for Book Appointment

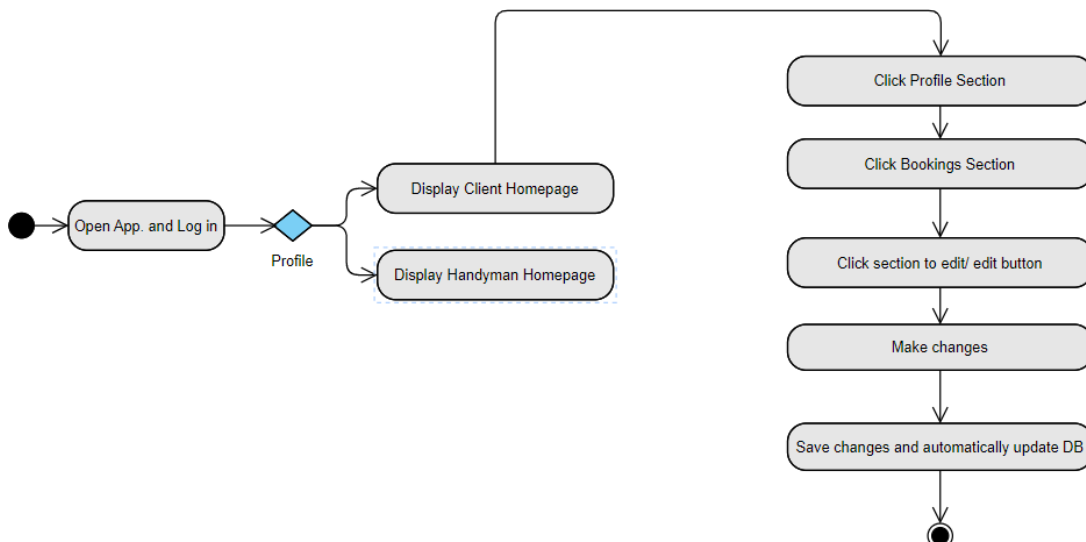1.3 Activity diagram for Book Appointment

2.1 Tabular description for **Change Appointment**

Handyman Application: Change Appointment	
Actors	Client, handyman application, app.DB
Description	Users must be able to change their appointment in case there is a time conflict or an unforeseen change to the date or time set previously.
Data	Users' information, booking information (date, time)
Stimulus	User command issued by the client by clicking on "Change" button
Response	Confirmation of the changed appointment
Comments	User must specify his/her information correctly in order to check availability and get confirmation for his booking.

2.2 Sequence diagram for Change Appointment

2.3 Activity diagram for Change Appointment

3.1 Tabular description for **Cancel Appointment**

Handyman Application: Cancel Appointment	
Actors	Client, handyman application, app.DB
Description	Users must be able to cancel their appointment anytime, at least 24 hours prior of their scheduled appointment, in case they no longer want to receive service.
Data	Users' information, booking information (date, time)
Stimulus	User command issued by the client by clicking on "Cancel" button
Response	Confirmation of the cancellation process
Comments	User must understand that at this moment his appointment has been cancelled and for this reason the requested service **will not be provided**. *User must be careful in case of confusion between *CANCEL* and *CHANGE* options.

3.2 Sequence diagram for Cancel Appointment
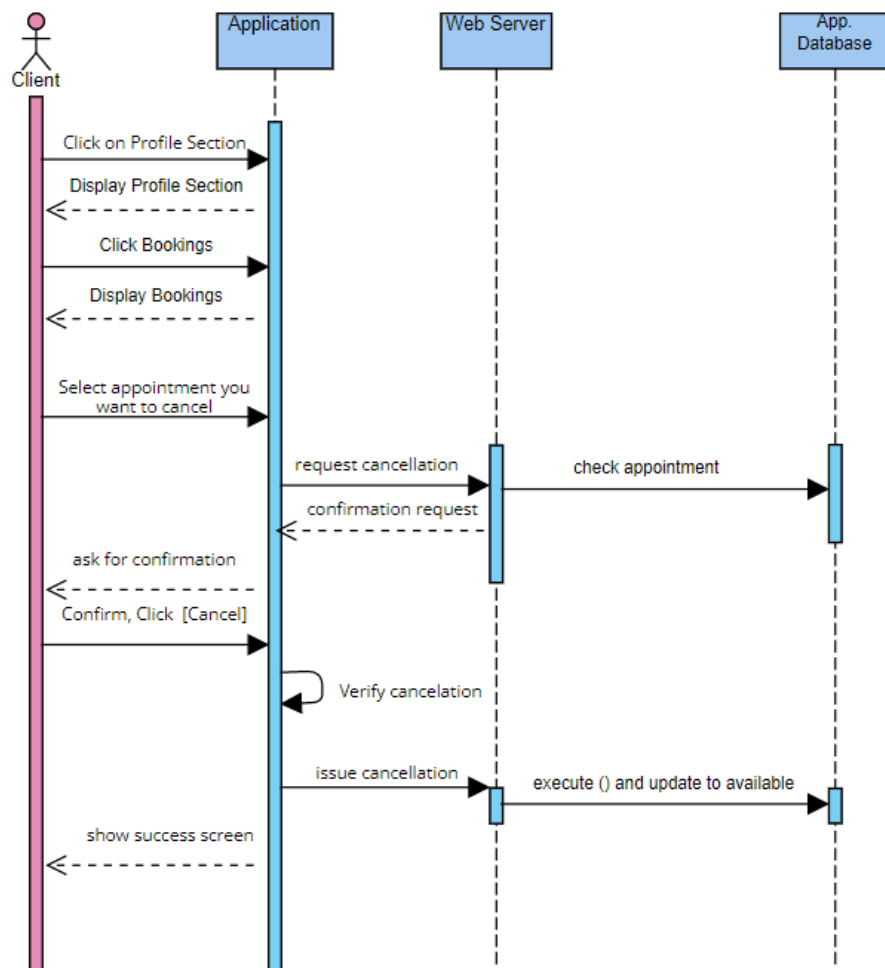
## 3.3 Activity diagram for Cancel Appointment
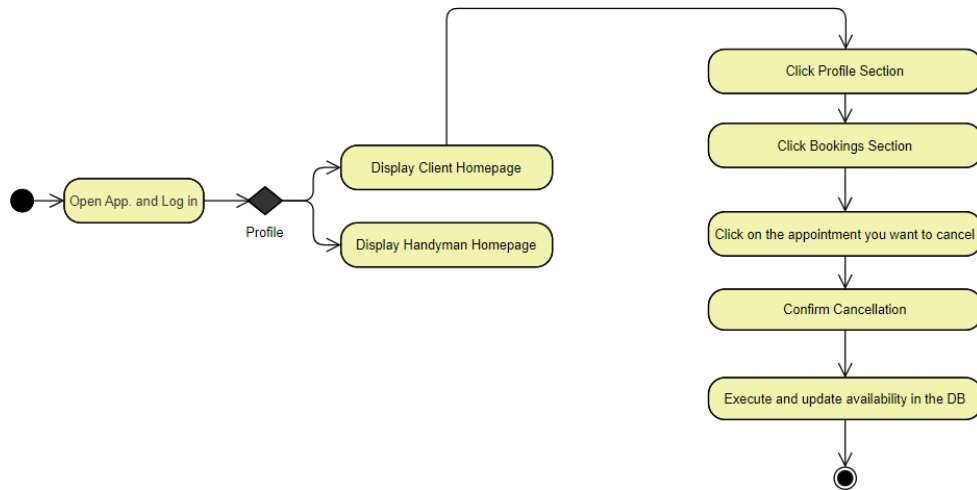
Explanation: In each sequential and activity diagram, the user is already logged in to the application and therefore has access to all functionalities the application provides. Since the login process is described thoroughly at the beginning of the designing and modelling section, the Booking System with its functionalities is explained separately as seen above.

3. Use cases in the application regarding *Make Payment*

Explanation: Taking into consideration that the sign up/login and booking appointment has been made, we proceede with the payment procedure.
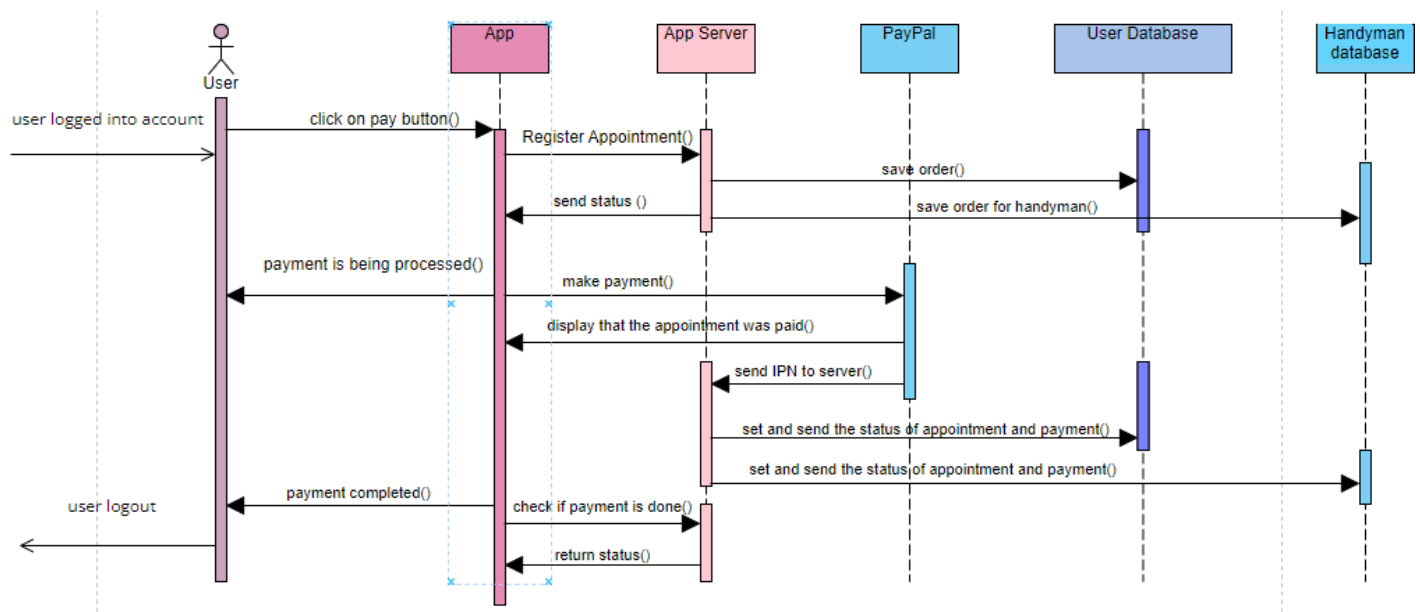
Use case for **Make Payment**
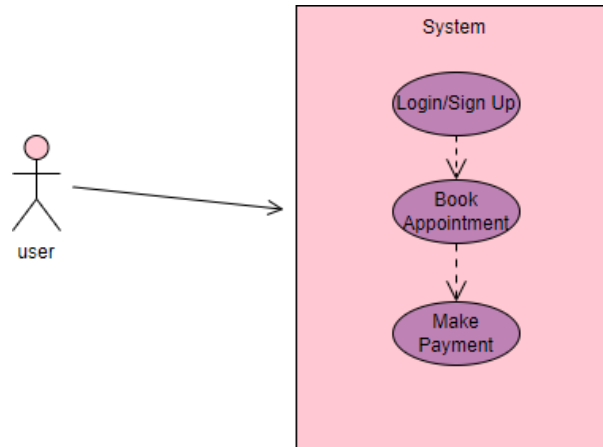
Tabular description for Make Payment

| Handyman Application: Make payment	
Actors	User, handyman application, user DB, handyman DB
Description	User must be able to make PayPal payments.
Data	Users' information, booking information (date, time).
Stimulus	User command issued by the client by clicking on "Pay" button
Response	Confirmation of the payment procedure.
Comments	User must specify their personal information correctly in order for the payment to be done successfully.

Sequence Diagram for Make payment
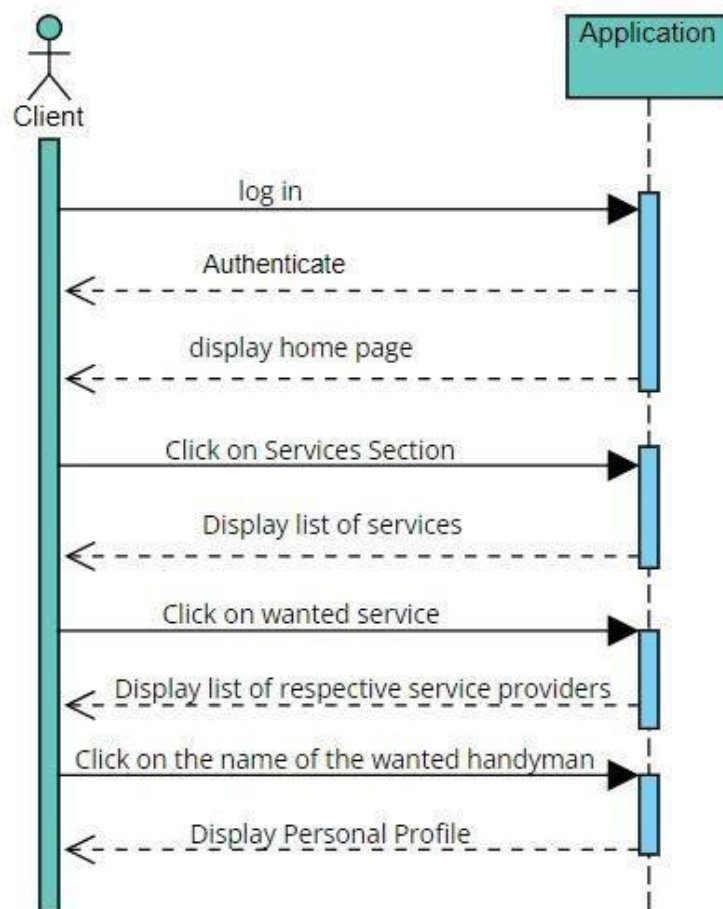
Activity diagram for Make Payment
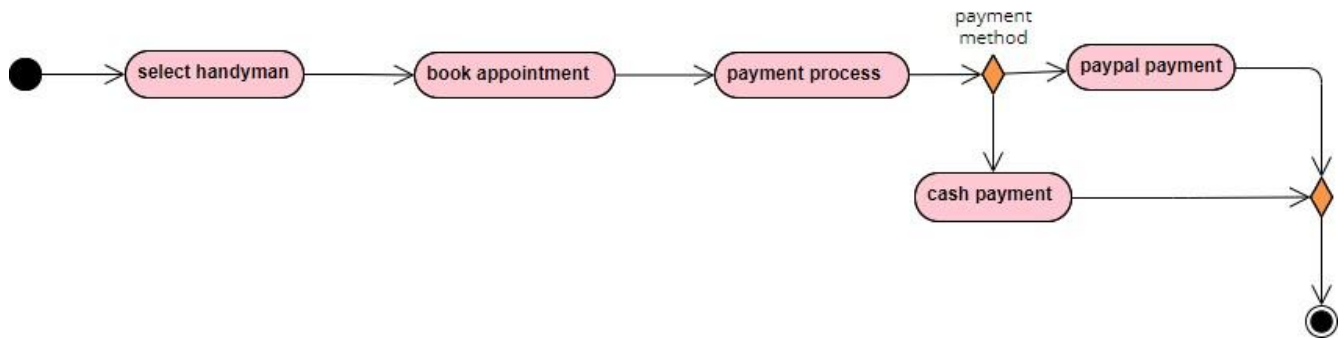
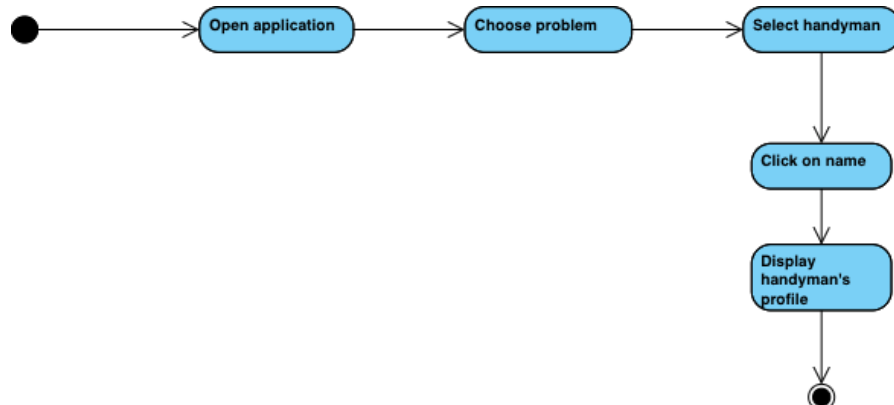4. Use case in the application regarding **view profile** from the user.
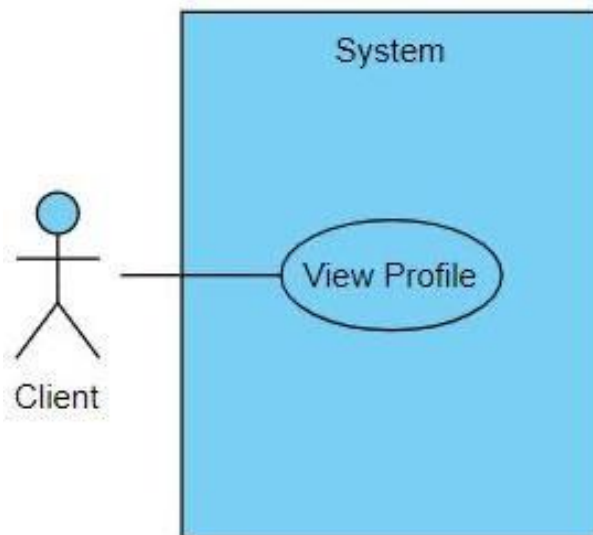
Tabular description of the "View Profile" use-case.

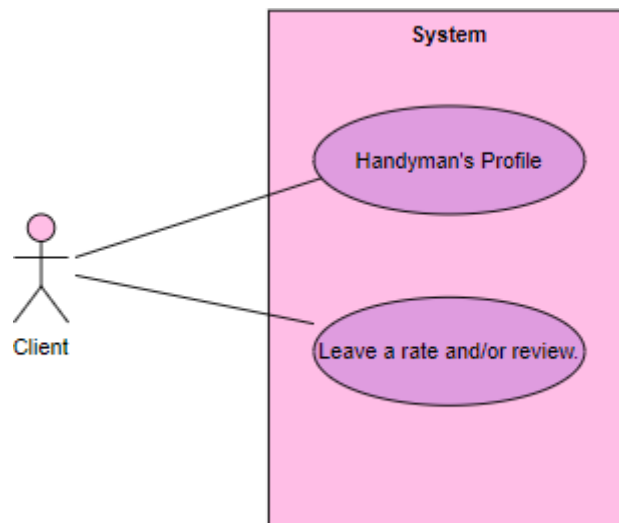| Handyman Application: View profile	
Actors	Client/The handyman.
Description	Both users are able to view other handyman's profile.
Data	Handyman's personal information (name, phone nr., city, home address, pay rate).
Stimulus	User command issued by clicking on "View Name".
Response	Display of Handyman information.
Comments	User must click on Handyman's name in order to generate this information.

Sequence diagram for view profile
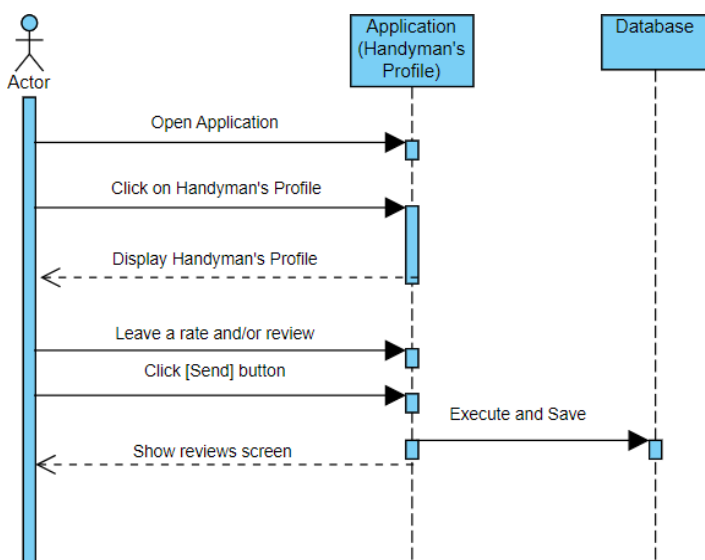

Activity diagram for view profile

5. Use case in the application regarding **Leave review** from the user.

Tabular description of the "Leave Review" use-case.

Handyman Application: Leave Review	
Actors	Client.
Description	The client should be able to log in, rate and/or leave a review in handyman's profile.
Data	User's personal information.
Stimulus	User command issued by client by checking handyman's profile and leaving a review.
Response	Confirmation that the review is posted in handyman's profile.
Comments	The client should be able to leave rates and reviews in any handyman's profile.

Sequence diagram for "leave review"   Activity diagram for "leave review"