

Software Design Document (SDD)

1-User Characteristics:

-Admin (Manager):

- 1-Add / Delete / Update Staff.
- 2-Add / Delete products to/in the menu.
- 3 Update product.

-Staff:

- 1-View user's Feedback.
- 2-View user's Reservation.
- 3-View user's Orders.

-User (Customer):

- 1-Makes Reservations.
- 2-Views the menu.
- 3-Submits Feedback.

2-Operating Environments:

-IDE (IntelliJ ultimate):

IntelliJ IDEA is an integrated development environment written in Java for developing computer software written in Java, Kotlin, Groovy, and other JVM-based languages.

-Java Spring framework:

The Spring Framework is an application framework and inversion of control container for the Java platform.

-PostgreSQL database:

PostgreSQL, also known as Postgres, is a free and open-source relational database management system emphasizing extensibility and SQL compliance.

3-Detailed Description of Modules:

-Aspect Module:

Implements the AOP concept.

Contains:

-Logging Aspect Class

-Controller Module:

Controls all the API requests for the user, staff, and manager, and communicates with the service module to specify what function should be implemented for each request in the controller.

Contains:

- User Controller class.

- Manager Controller class.

- Staff Controller class.

- Order Controller class.

- Feedback Controller class.

-Entities Module:

Basically, our database entities and tables, it also specifies what constraints should exist for each column and specifies its datatypes.

-Services Module:

Our main module contains the full implementation for each function and knows how every function works in the project it interacts with every layer and communicates with the controller.

Contains:

- User Services class.

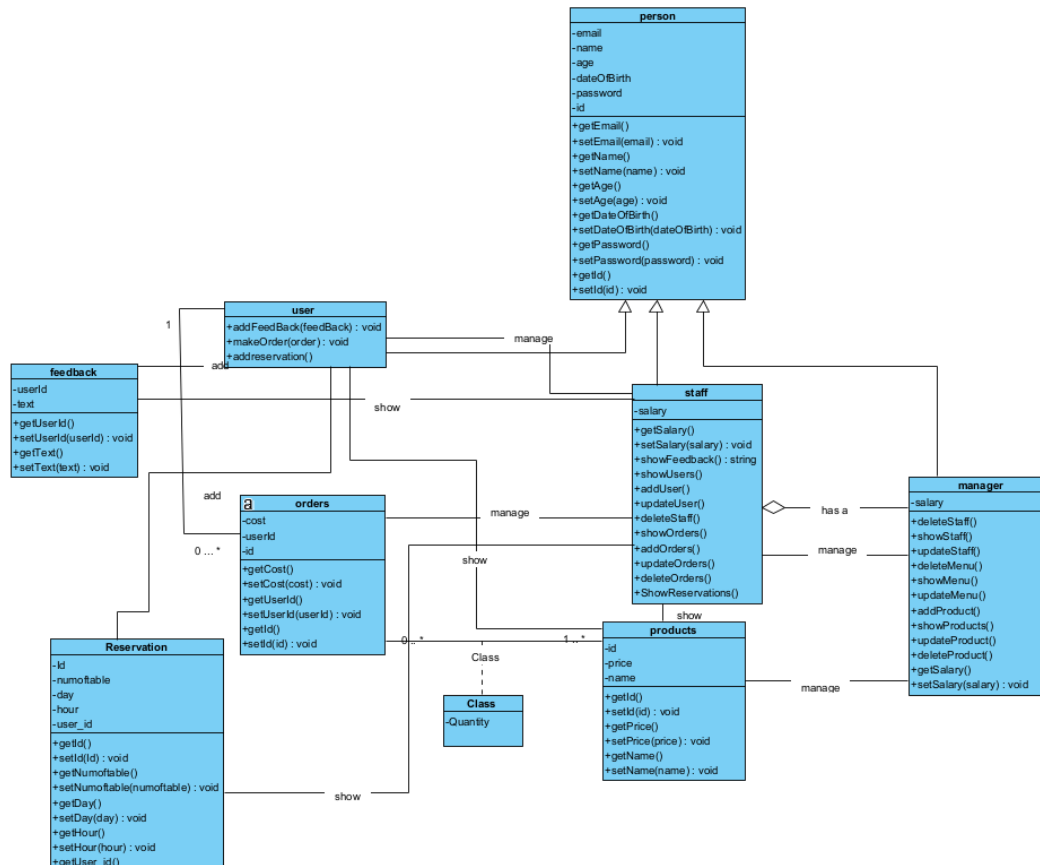
- Manager Services class.

- Staff Services class.

- Order Services class.

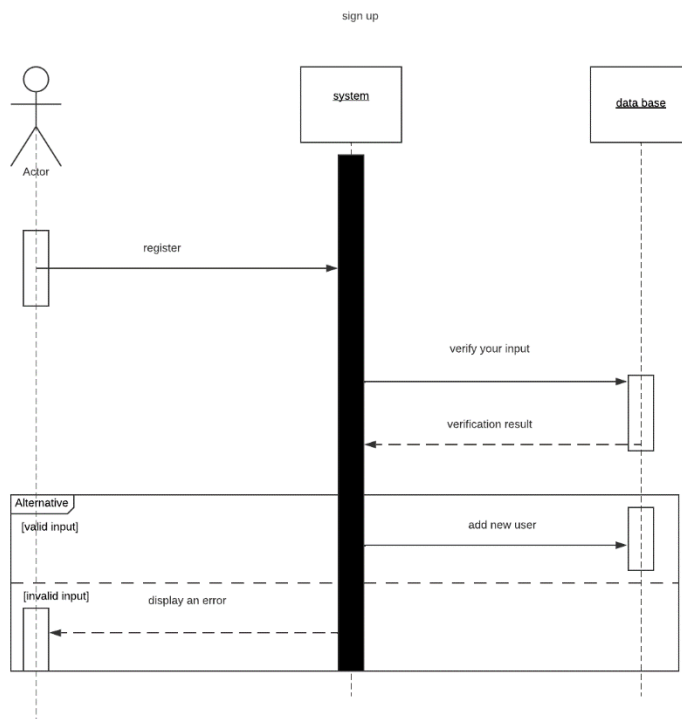
-Feedback Services class.

4-Class Diagram (Without OCL):

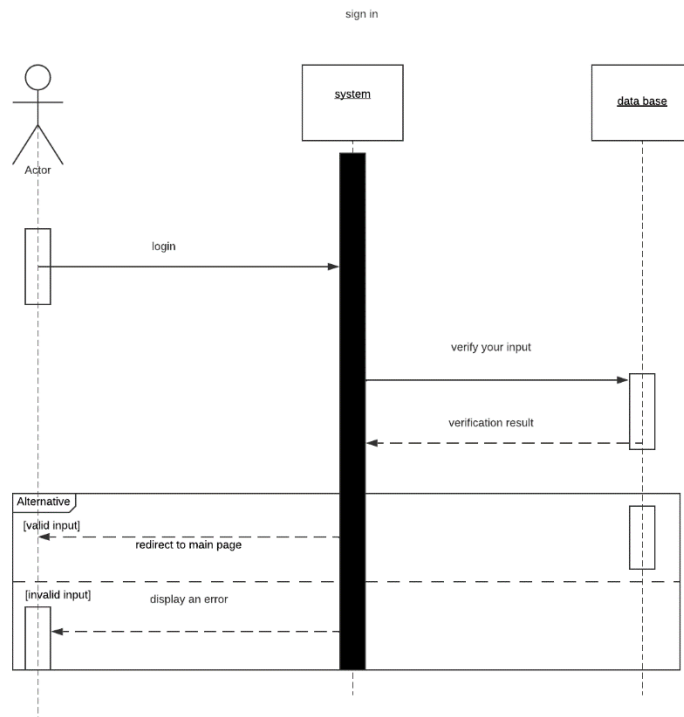


6-Sequence Diagrams:

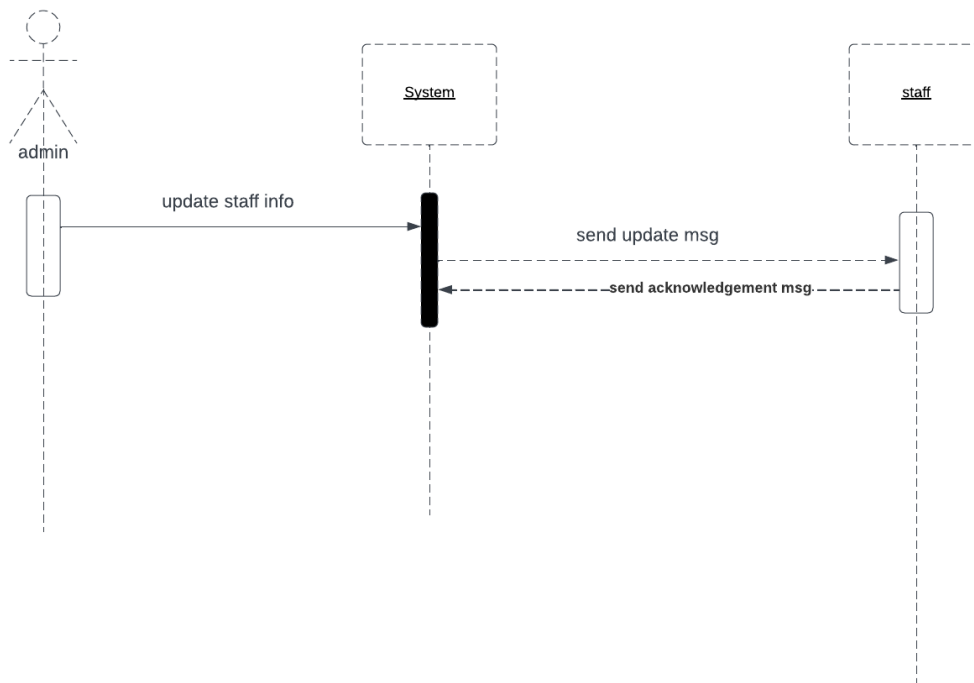
-Register



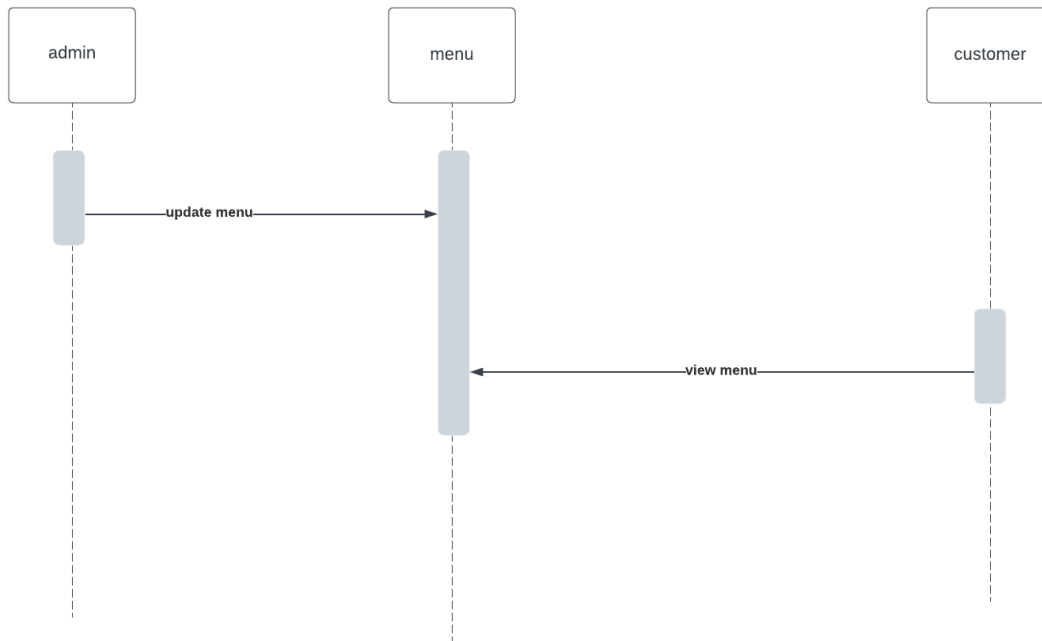
-Login



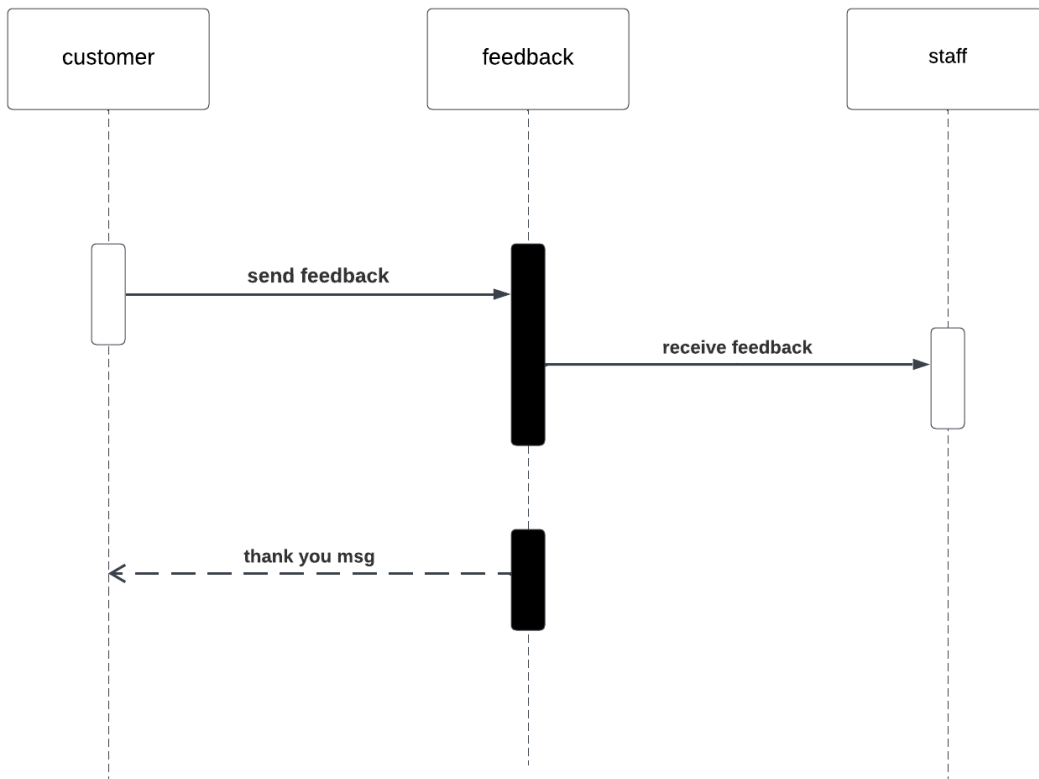
-Update staff info



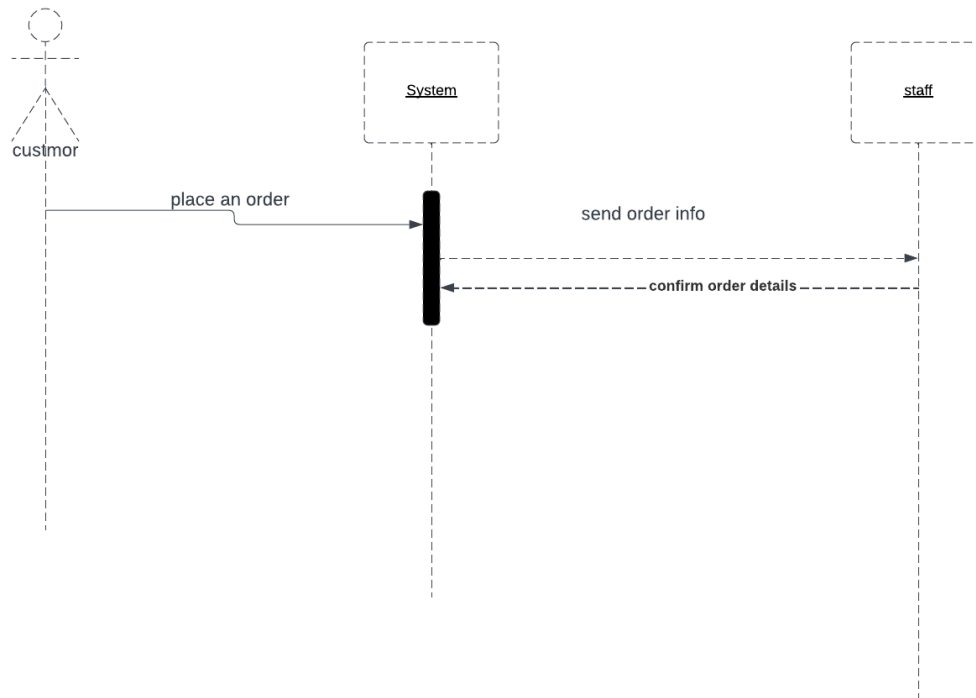
-Update & View menu



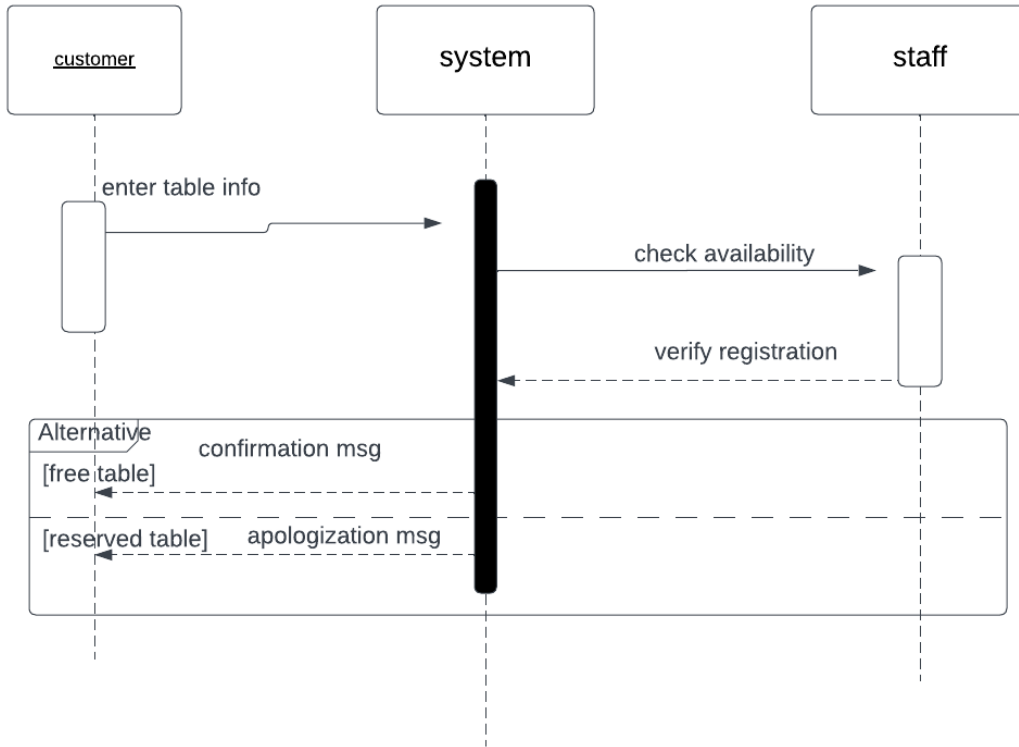
-Feedback



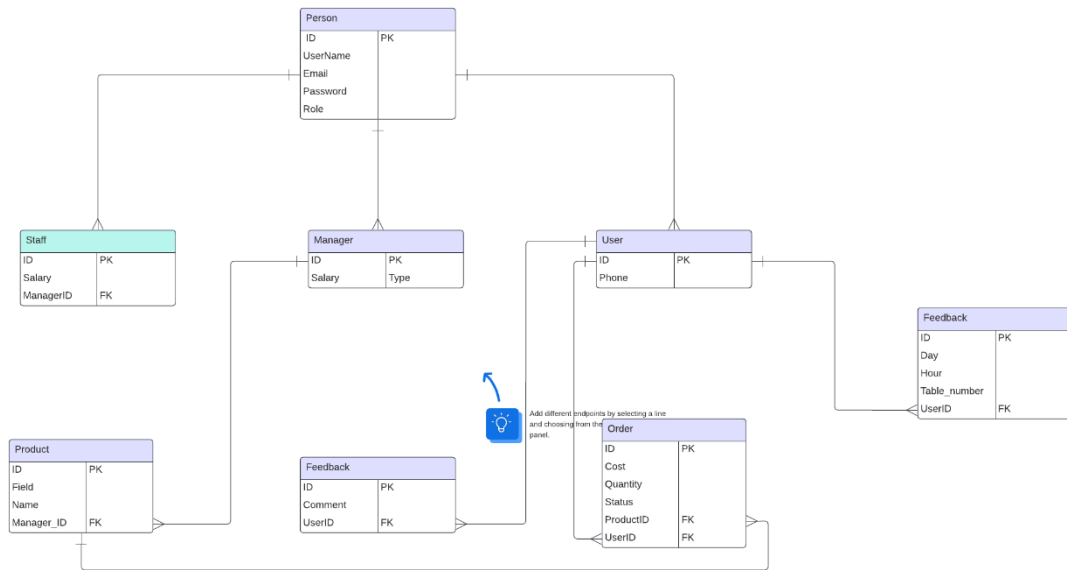
-Make order



-Reservation



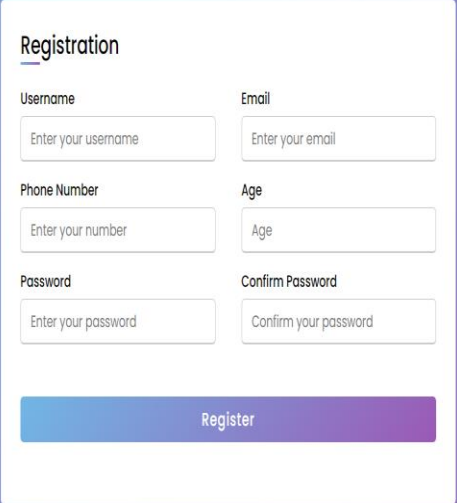
-Database



7- Navigation Flow:

-User

1-



The image shows a registration form centered on a blue-to-purple gradient background. The form is a white rectangle with rounded corners and a subtle drop shadow. At the top left of the form is the title "Registration" in a bold, black font, with a small blue underline. Below the title, the form is organized into two columns. The left column contains three input fields: "Username" (placeholder: "Enter your username"), "Phone Number" (placeholder: "Enter your number"), and "Password" (placeholder: "Enter your password"). The right column contains two input fields: "Email" (placeholder: "Enter your email") and "Age" (placeholder: "Age"). Below the "Confirm Password" label, there is an input field with the placeholder "Confirm your password". At the bottom of the form is a wide, horizontal button with a blue-to-purple gradient and the text "Register" in white, centered.

Registration

Username
Enter your username

Email
Enter your email

Phone Number
Enter your number

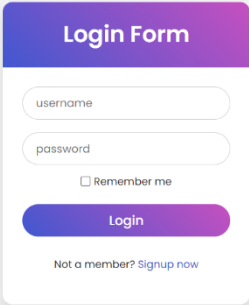
Age
Age

Password
Enter your password

Confirm Password
Confirm your password

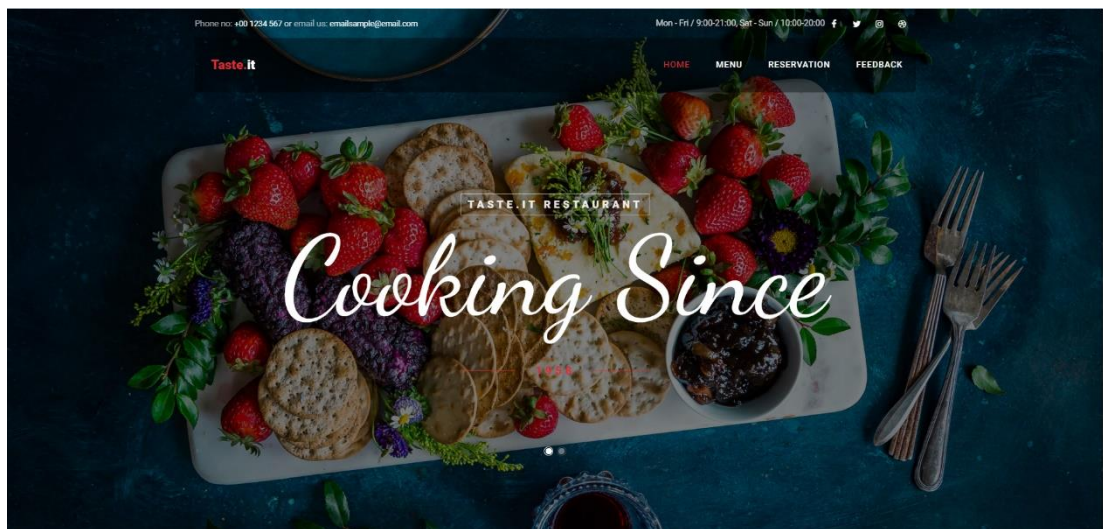
Register

2-

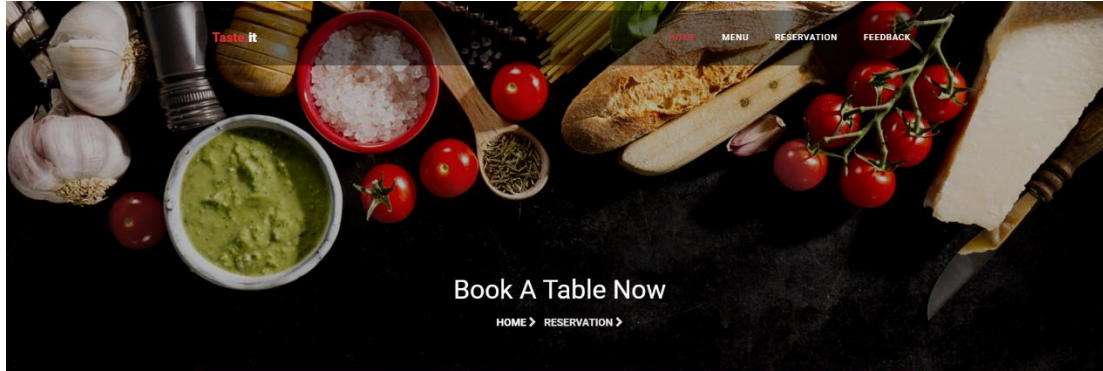


A login form with a purple header bar containing the text "Login Form". Below the header are two input fields labeled "username" and "password". A checkbox labeled "Remember me" is positioned below the password field. A purple "Login" button is located below the checkbox. At the bottom of the form, the text "Not a member? [Signup now](#)" is displayed.

3-



4-



Taste it

HOME MENU RESERVATION FEEDBACK

Book A Table Now

HOME > RESERVATION >

BOOK YOUR TABLE

Check in Time user ID

Table no.

Book Your Table Now

5-

Home Menu Reservation Feedback

Feedback Form

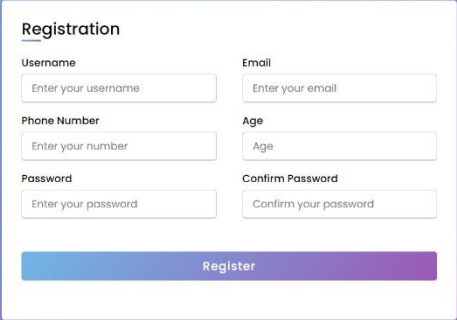
Comment:

User ID:

Submit Feedback

-Staff

1-



A registration form titled "Registration" is centered on a blue-to-purple gradient background. The form is a white card with a thin border. It contains six input fields arranged in two columns. The left column has fields for "Username", "Phone Number", and "Password". The right column has fields for "Email", "Age", and "Confirm Password". Each field has a placeholder text: "Enter your username", "Enter your number", "Enter your password", "Enter your email", "Age", and "Confirm your password". Below the input fields is a wide, rounded rectangular button with a blue-to-purple gradient and the text "Register" in white.

Registration

Username
Enter your username

Phone Number
Enter your number

Password
Enter your password

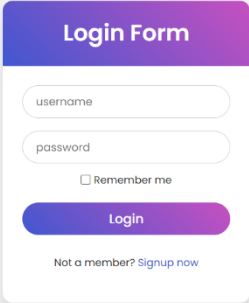
Email
Enter your email

Age
Age

Confirm Password
Confirm your password

Register

2-



A login form titled "Login Form" is centered on a light gray background. The form is a white card with a thin border. It has a header bar with a blue-to-purple gradient and the text "Login Form" in white. Below the header are two rounded rectangular input fields for "username" and "password". Below these fields is a checkbox labeled "Remember me". At the bottom of the form is a wide, rounded rectangular button with a blue-to-purple gradient and the text "Login" in white. Below the button is a link that says "Not a member? Signup now".

Login Form

username

password

☐ Remember me

Login

Not a member? [Signup now](#)

3-

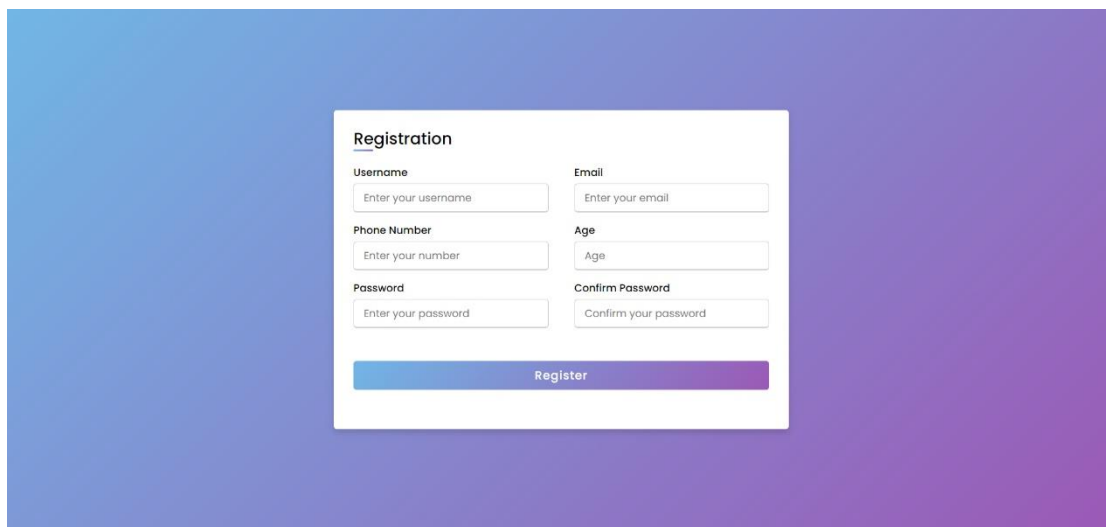
Reservations				
Reservation List				
ID	Name	Date	Hour	Table
<div>See FeedbacksSee Orders</div>				

4-

Feedback			
Feedback List			
User ID	User Name	Email	Comment
<div>See ReservationsSee Orders</div>			

-Manager / Admin

1-



The image shows a registration form centered on a background with a blue-to-purple gradient. The form is a white rectangle with a thin grey border. At the top left of the form is the title "Registration" in bold, underlined text. Below the title, the form is organized into two columns. The left column contains three input fields: "Username" with the placeholder "Enter your username", "Phone Number" with the placeholder "Enter your number", and "Password" with the placeholder "Enter your password". The right column contains two input fields: "Email" with the placeholder "Enter your email" and "Age" with the placeholder "Age". Below the "Age" field is a "Confirm Password" label and an input field with the placeholder "Confirm your password". At the bottom of the form is a wide, horizontal button with a blue-to-purple gradient and the text "Register" in white.

Registration

Username
Enter your username

Email
Enter your email

Phone Number
Enter your number

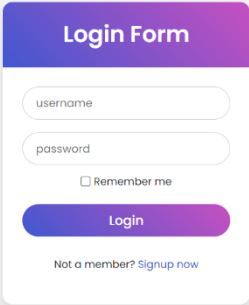
Age
Age

Password
Enter your password

Confirm Password
Confirm your password

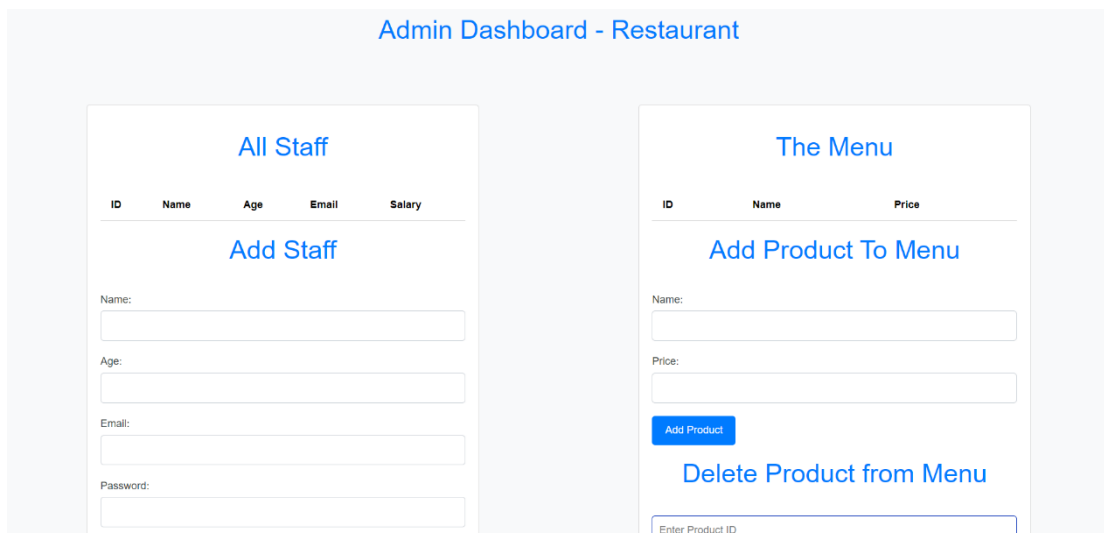
Register

2-



A login form centered on a light gray background. The form has a purple header bar with the text "Login Form" in white. Below the header, there are two input fields: "username" and "password". A checkbox labeled "Remember me" is positioned below the password field. A purple "Login" button is located below the checkbox. At the bottom of the form, there is a link that says "Not a member? [Signup now](#)".

3-



An admin dashboard for a restaurant, titled "Admin Dashboard - Restaurant" in blue text at the top center. The dashboard is divided into two main sections. The left section is titled "All Staff" and contains a table with columns: ID, Name, Age, Email, and Salary. Below the table is a link "Add Staff" and a form with fields for Name, Age, Email, and Password. The right section is titled "The Menu" and contains a table with columns: ID, Name, and Price. Below the table is a link "Add Product To Menu", a blue "Add Product" button, a link "Delete Product from Menu", and a form with a field labeled "Enter Product ID".

Add Staff

Delete Staff

Enter Staff ID

Delete Staff by ID

Update Staff By ID

ID:

Name:

Age:

Email:

Password:

Update Product By ID

ID:

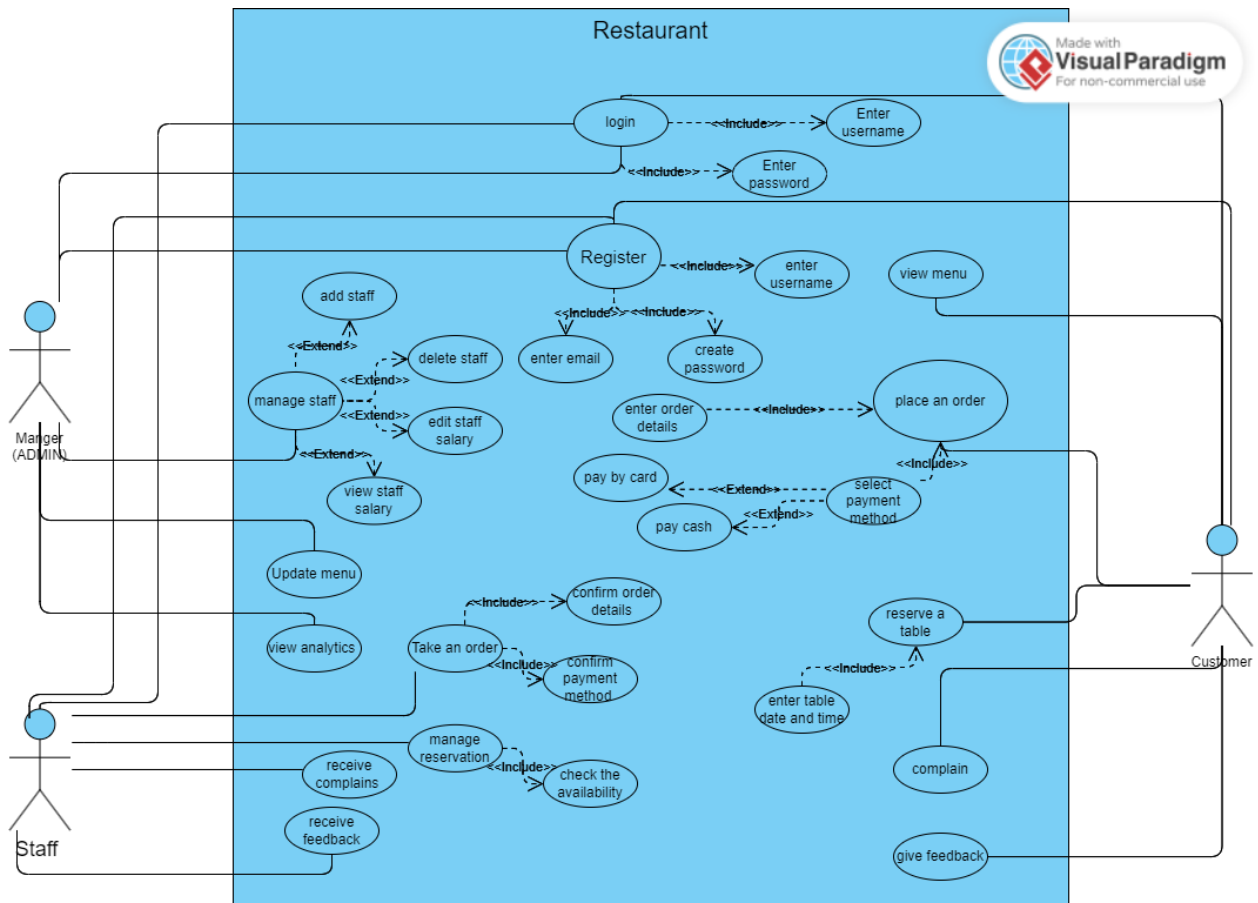
Name:

Price:

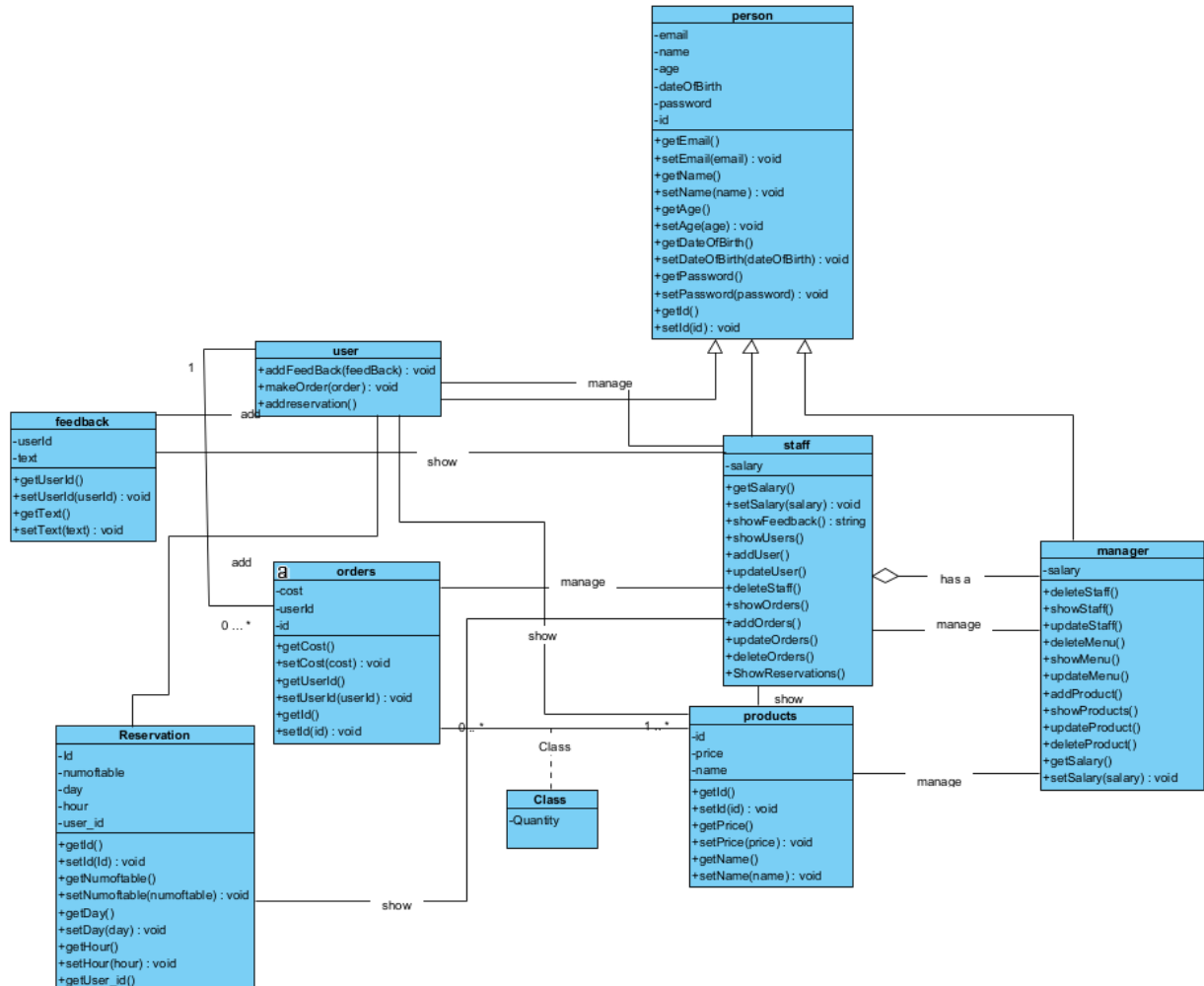
Add Product

Diagrams:

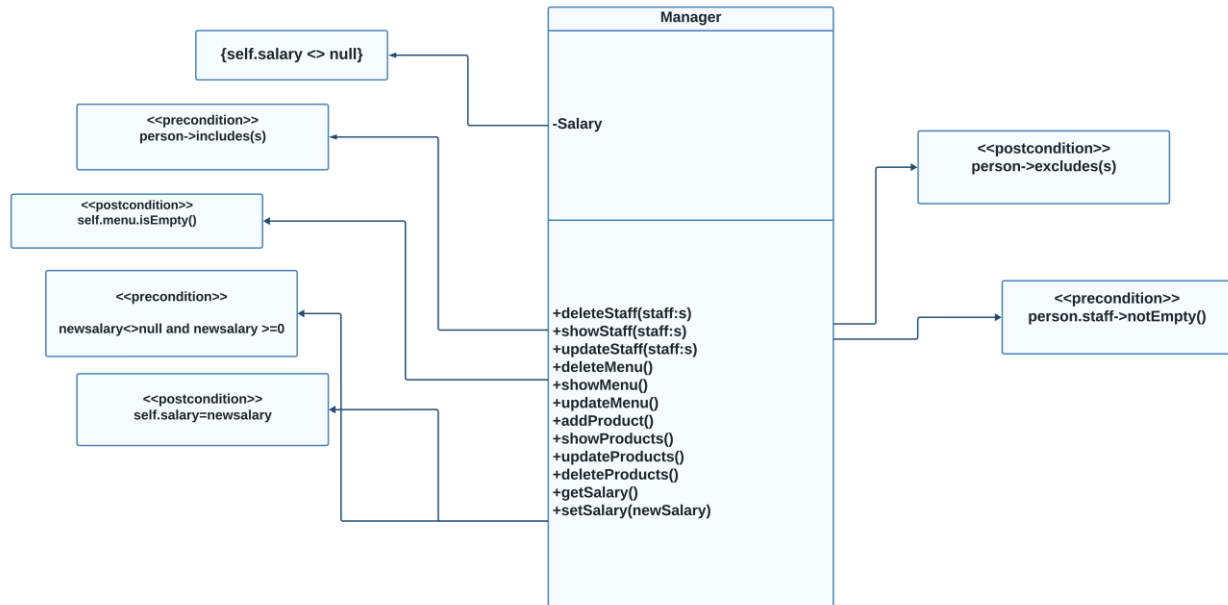
- **Use-case.**



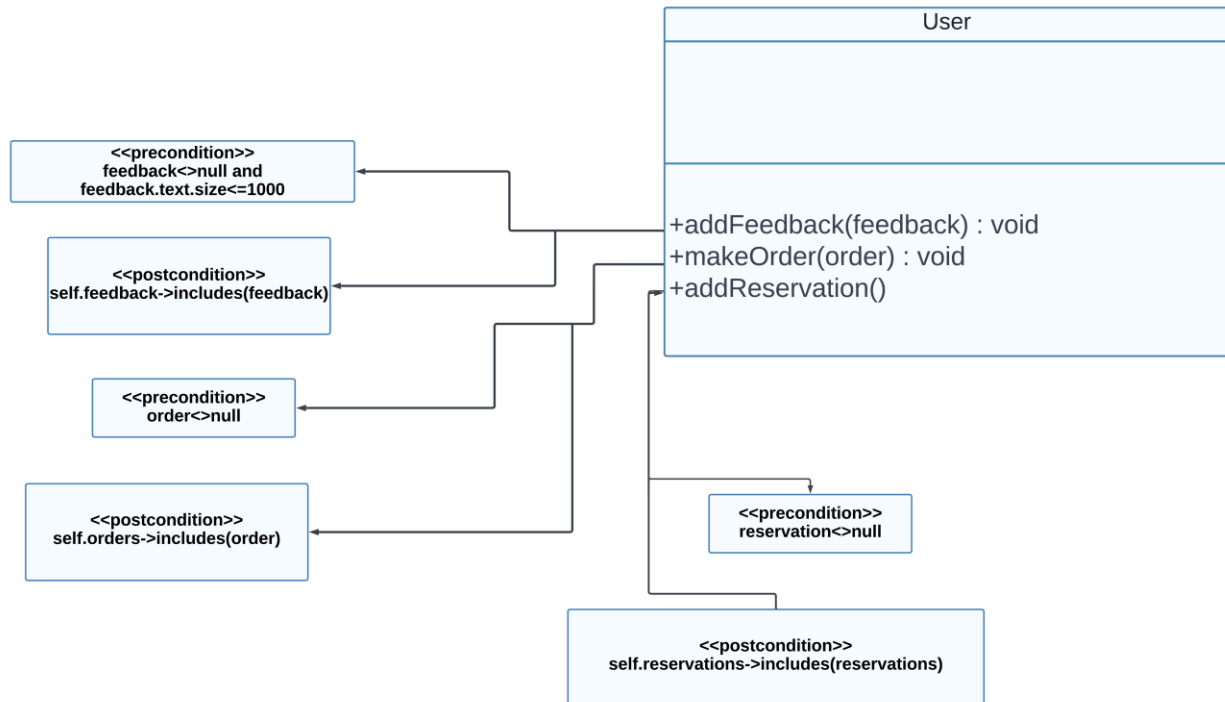
- **Class diagram**



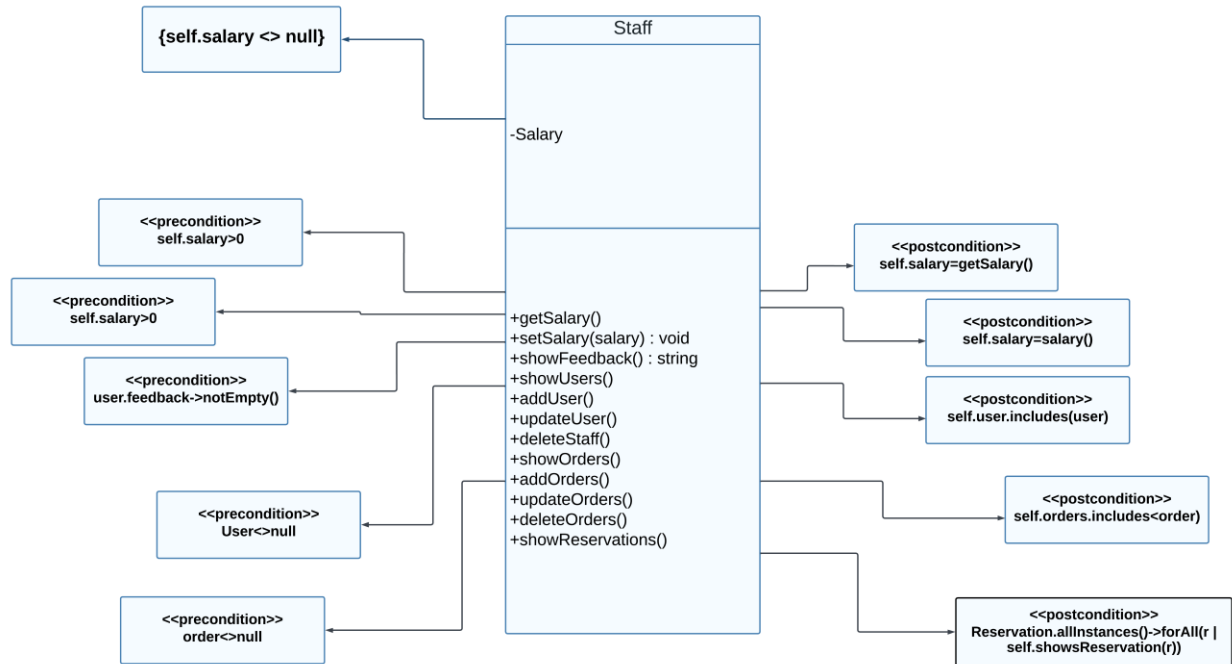
- OCL diagram
- Manager class



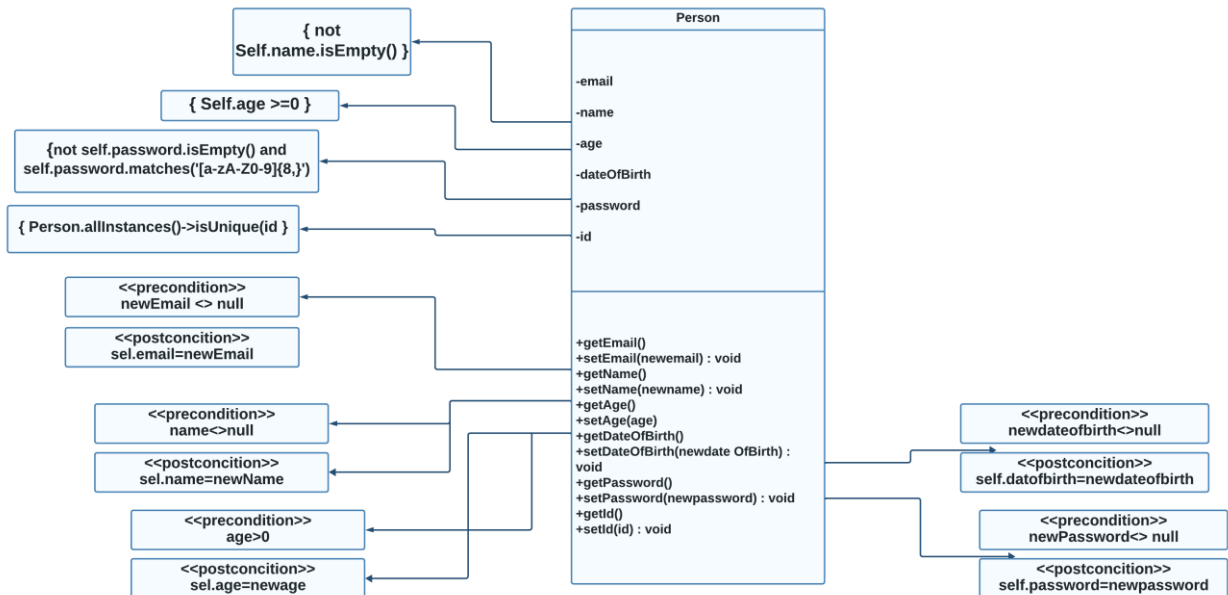
- User class



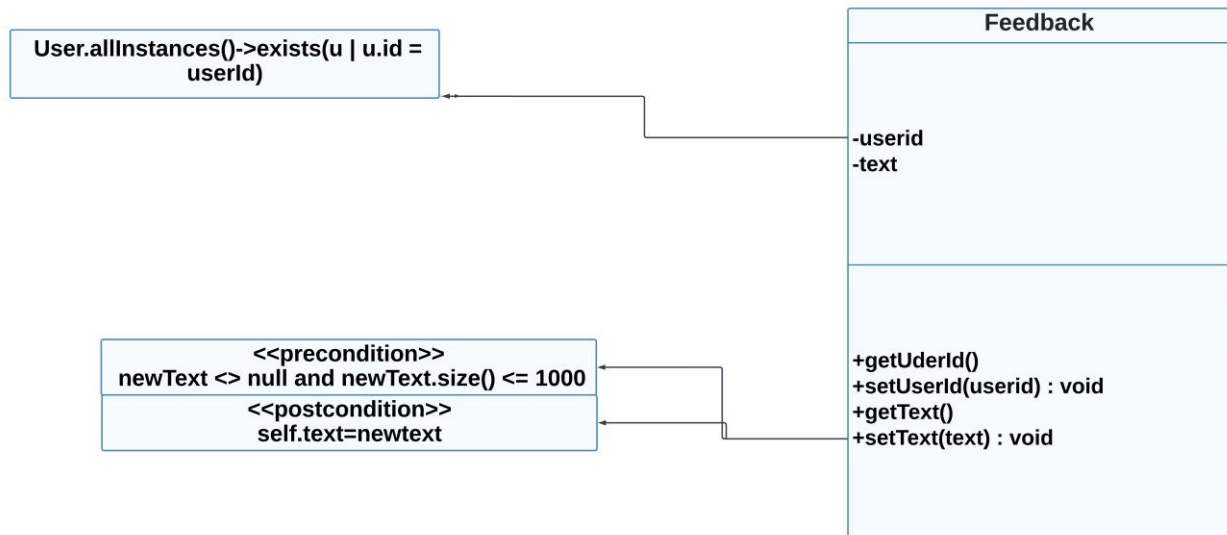
• Staff class



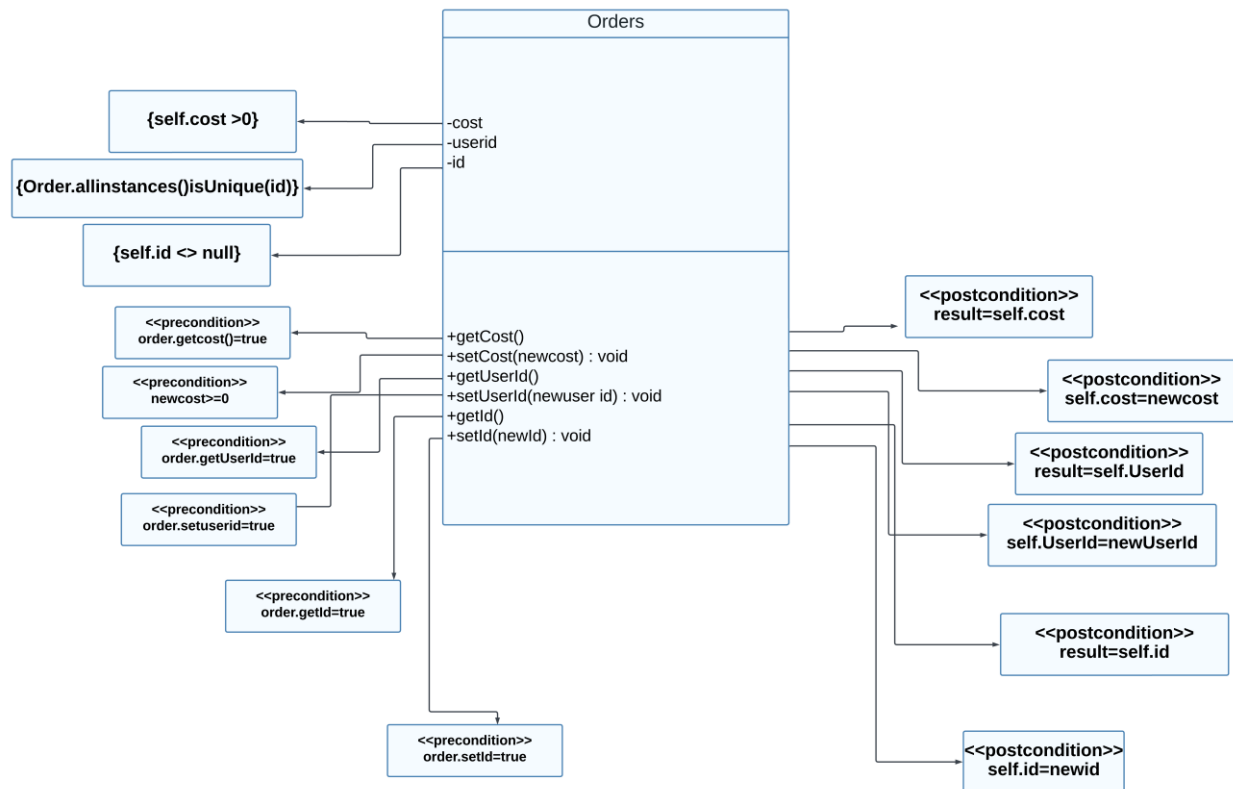
• person class



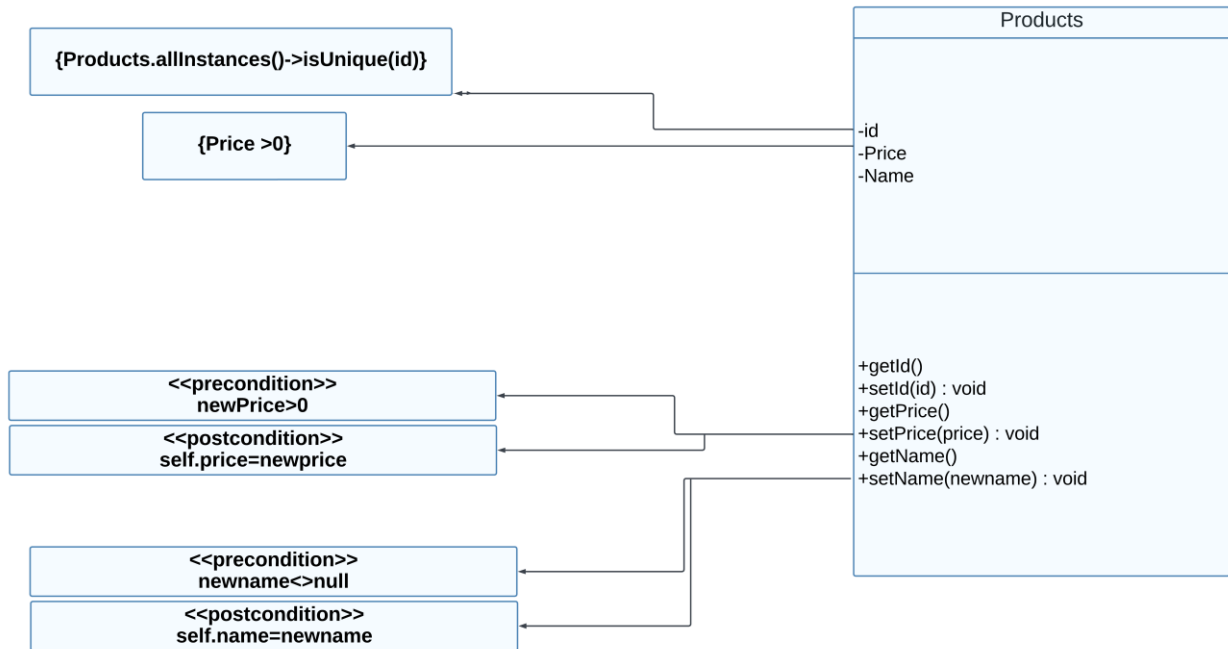
- **feedback class**



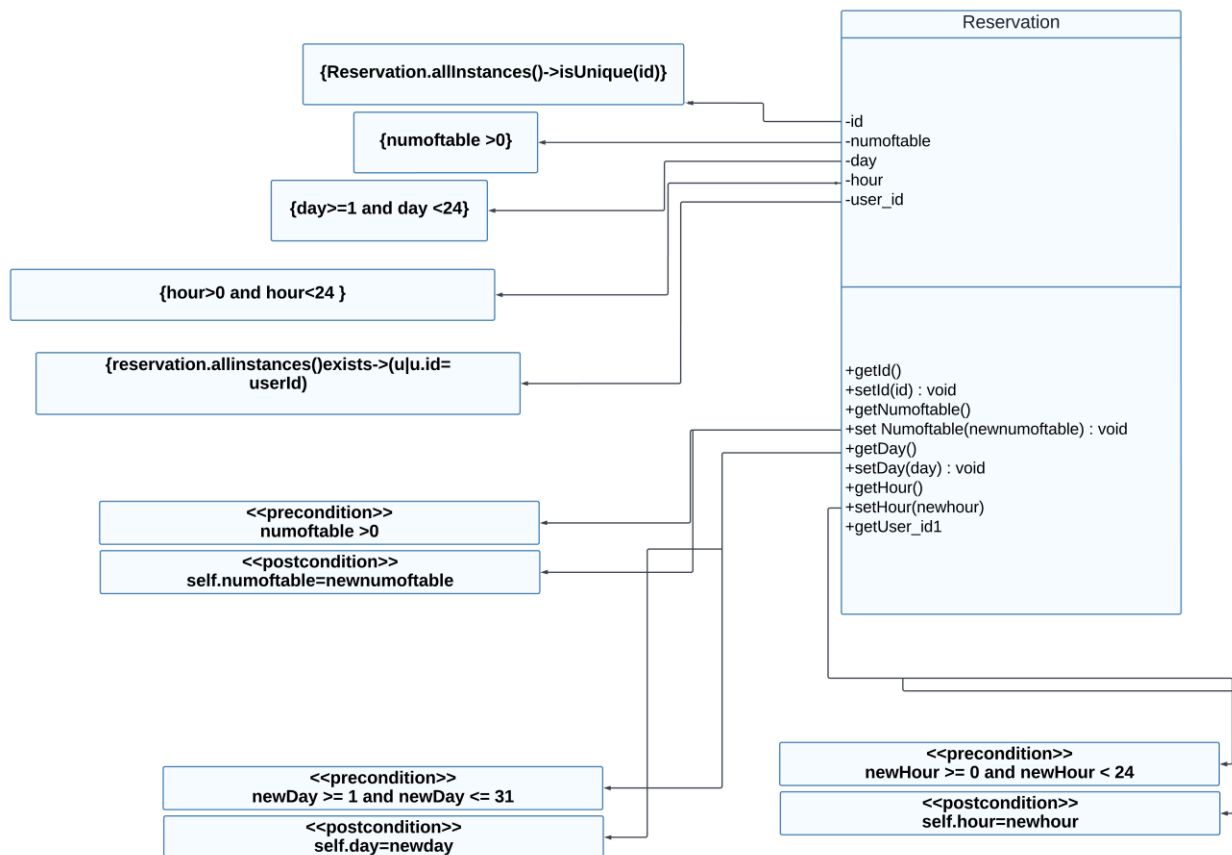
- **orders class**



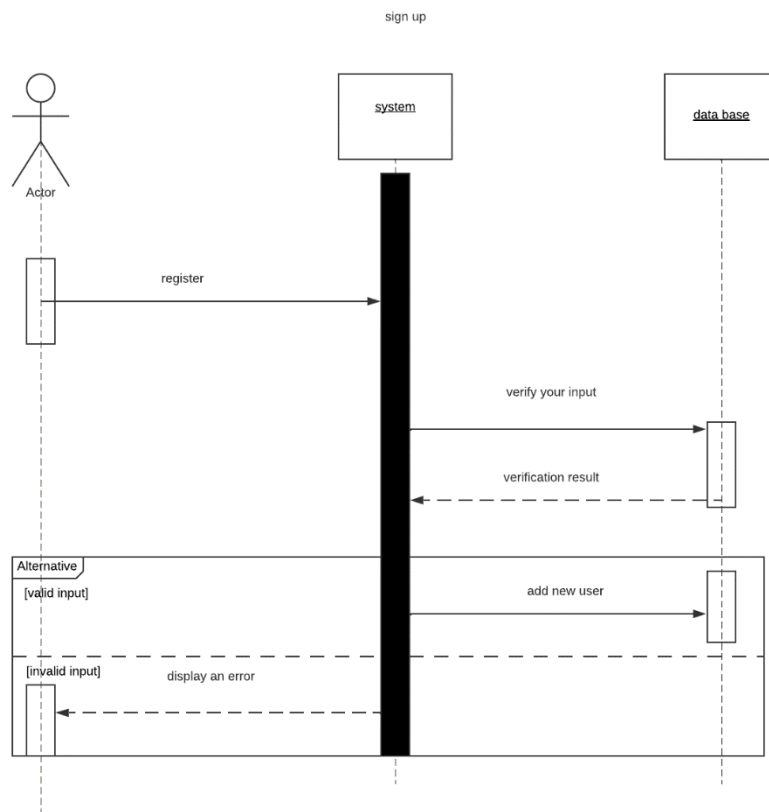
• Products class

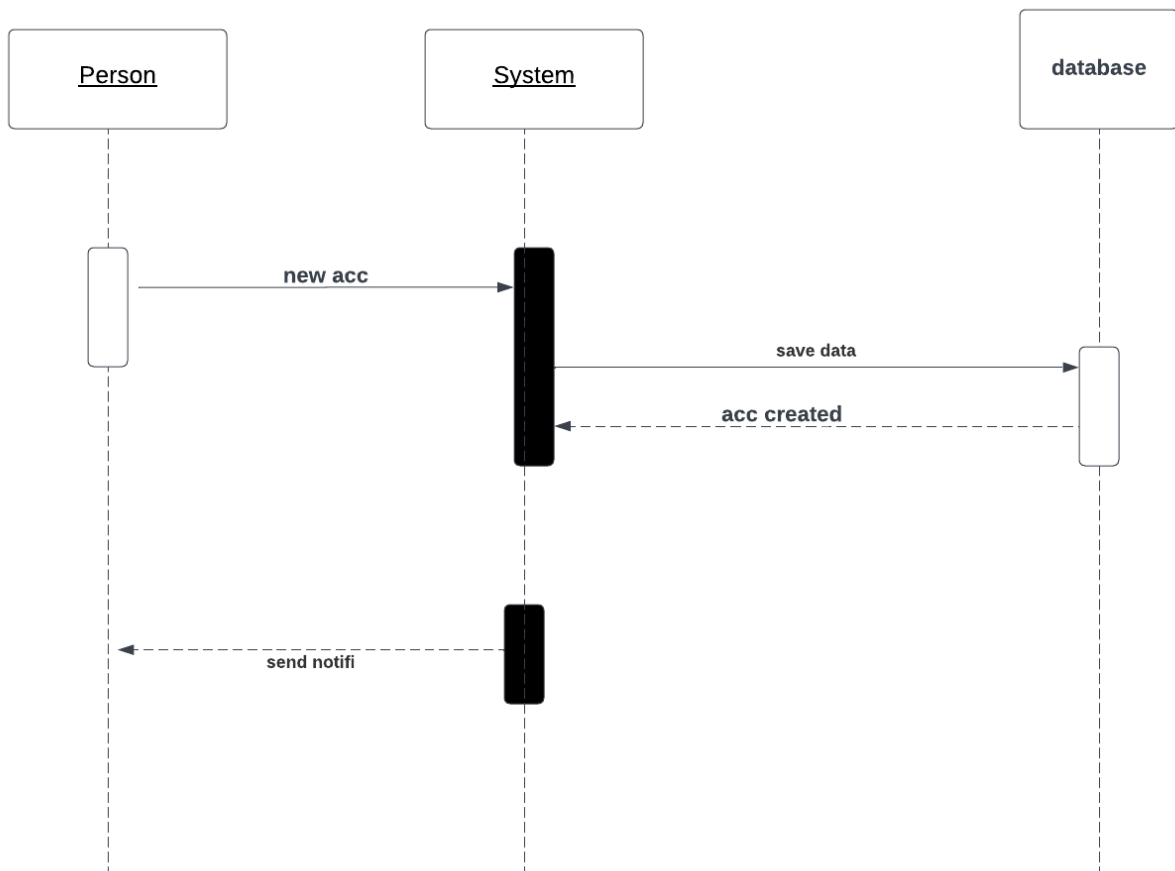


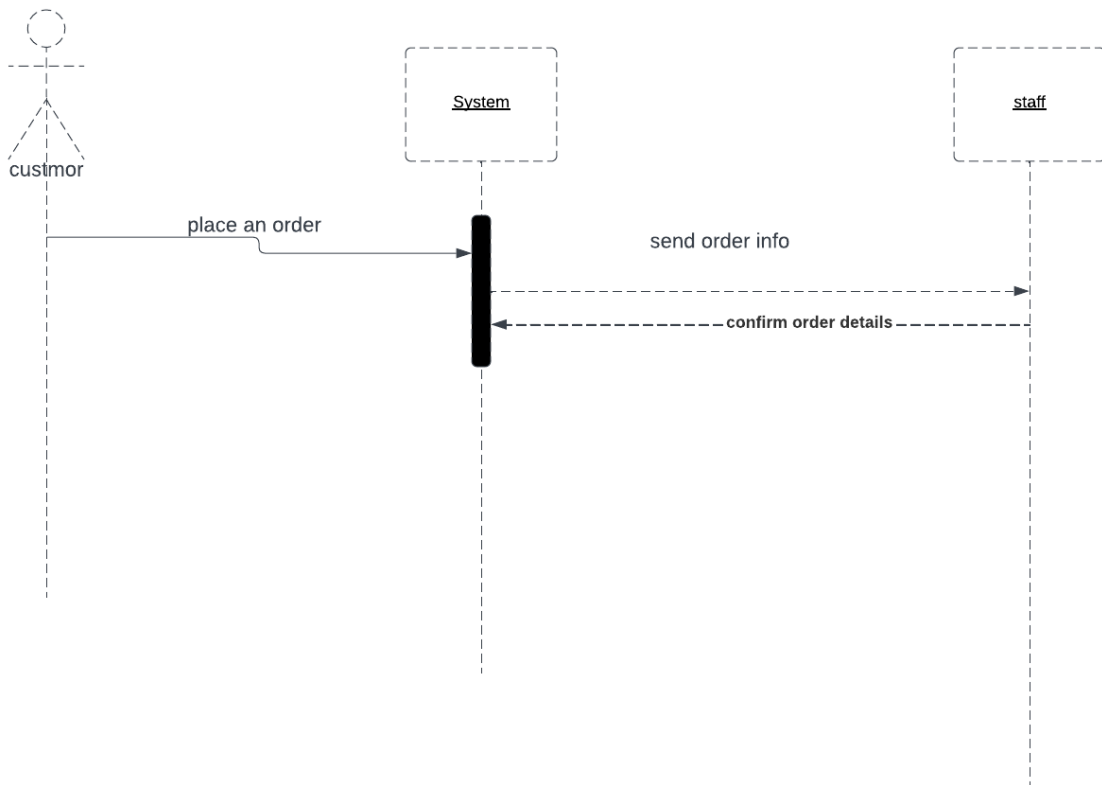
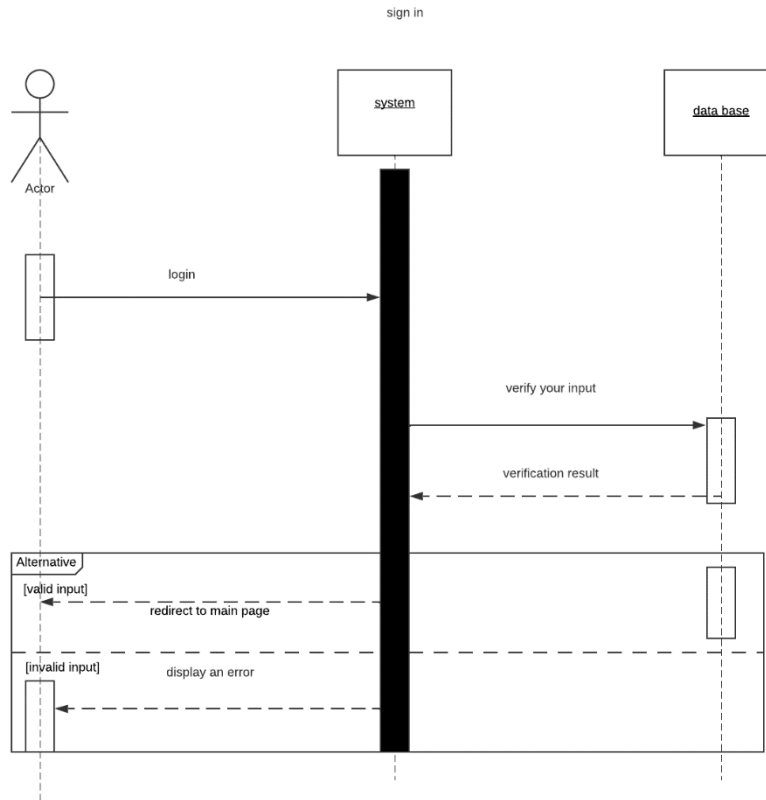
• reservation class

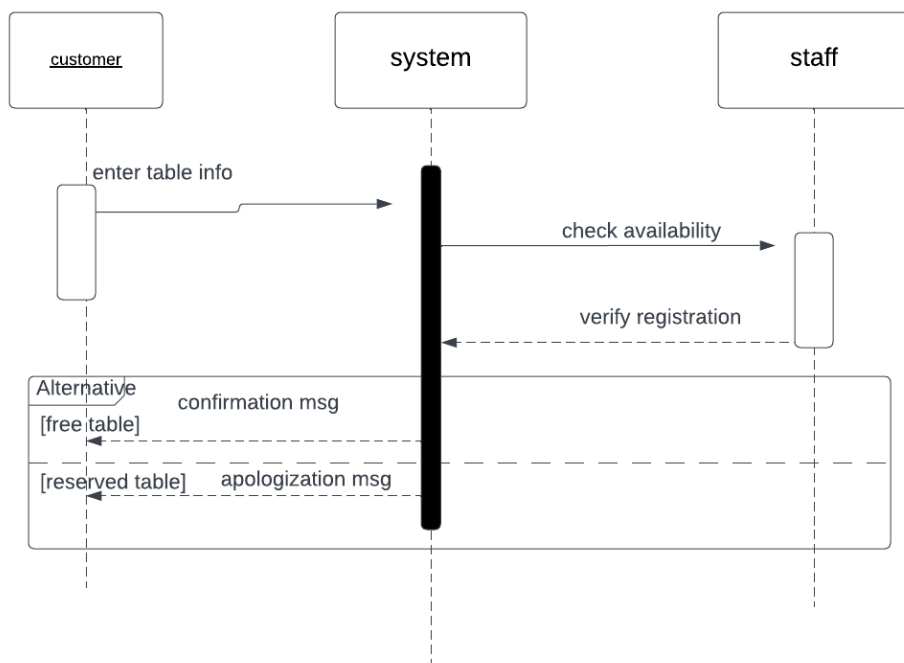
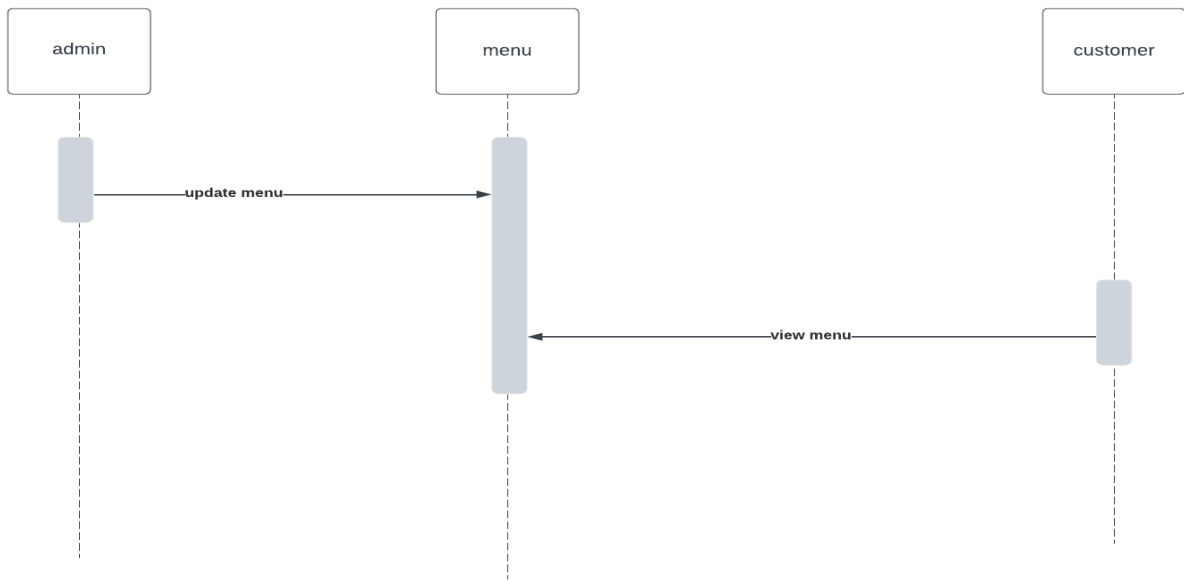


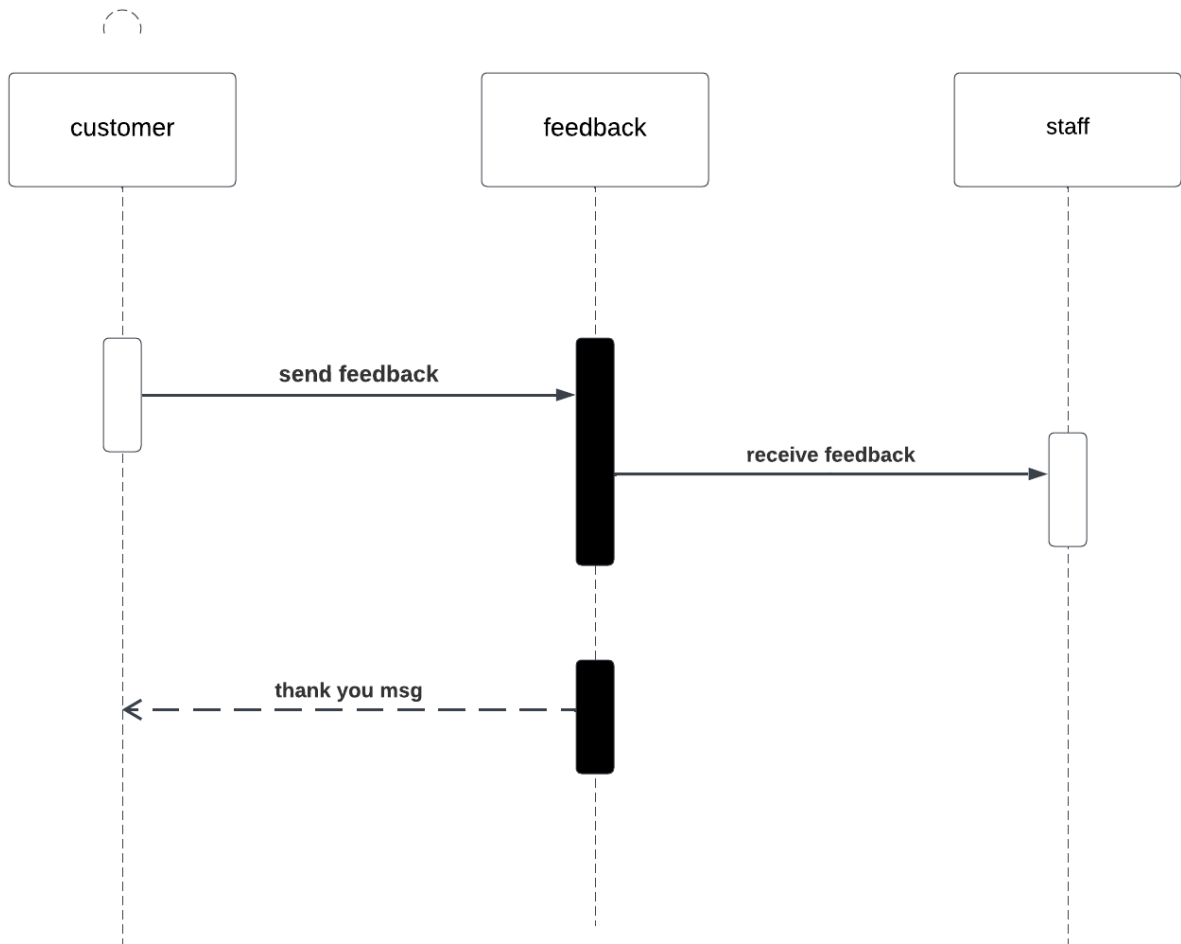
Sequence diagrams.











Activity diagrams

