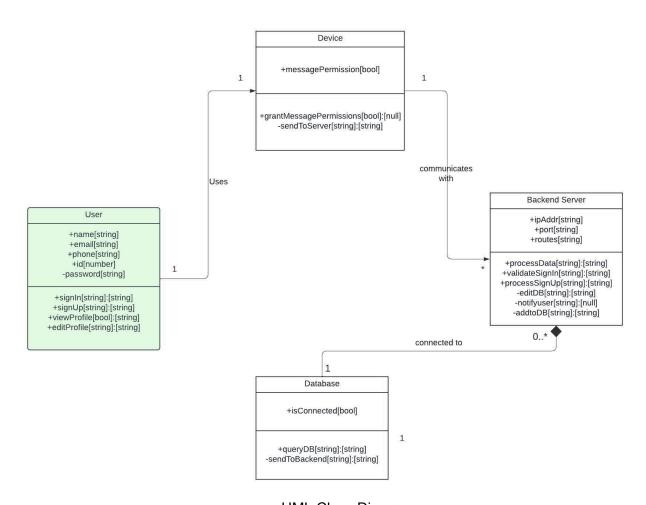
## **Product Design**

# Team 29, Hardik Kalia, Kushagra Dhingra, Samagra Bharti, Chinmay Sharma

### **Design Model**

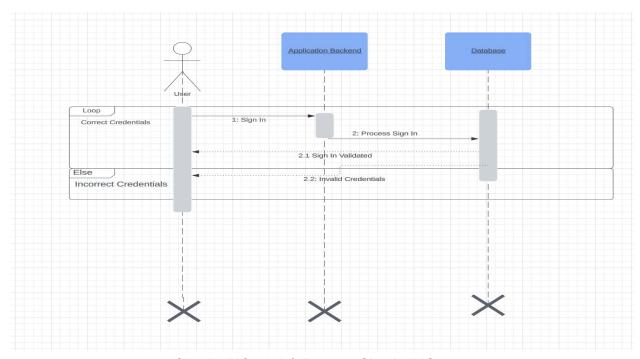


**UML Class Diagram** 

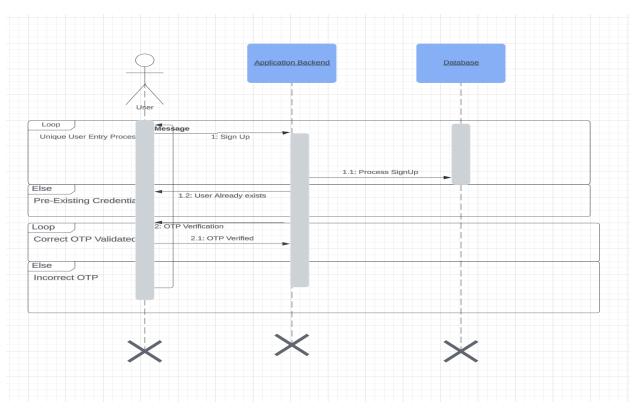
| <user></user>                 | Class state  |
|-------------------------------|--|
|                               | <ul> <li>Id: Unique id of the user</li> <li>Password</li> <li>Name</li> <li>Email Id</li> <li>Phone No.</li> </ul>   |
|                               | Class behavior   |
|                               | <ul> <li>signIn(): Takes email, password and returns whether sign in was successful</li> <li>signUp(): Takes email, password and an OTP and returns whether sign up was successful or not)</li> <li>viewProfile(): User can view his/her profile.</li> <li>editProfile(): User can edit his/her profile.</li> <li>viewOrder(): User can view the details of any order</li> </ul> |
| <backend server=""></backend> | Class state  • ipAddr : IP Address of the servers  |
|                               | <ul> <li>port: port number for receiving data</li> <li>routes: list of valid routes</li> </ul>   |
|                               | Class Behavior   |
|                               | <ul> <li>processData(): Performs NLP on scraped Messages</li> <li>validateSignIn(): Validates sign in information received from user</li> <li>processSignUp(): Processes sign up data</li> <li>editDB(): Edits data in database</li> <li>notifyUser(): Notifies user upon receiving a new message</li> <li>addtoDB(): Add data from backend server to database</li> </ul>        |
| <database></database>         | Class State  |
|                               | isConnected: Status of the database  |
|                               | Class Behavior   |
|                               | <ul> <li>queryDB(): run a query from the server</li> <li>sendToBackend(): Send data to server</li> </ul>   |

| <device></device> | Class State:  |
|-------------------|---|
|                   | messagePermissions: bool  |
|                   | ClassBehaviour:   |
|                   | <ul> <li>grantMessagePermissions(): Grant Permission to Server</li> <li>sendtoServer(): Send User data to server</li> </ul> |

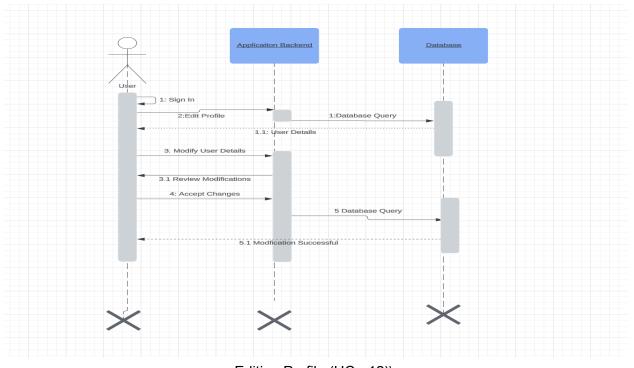
## Sequence Diagram(s)



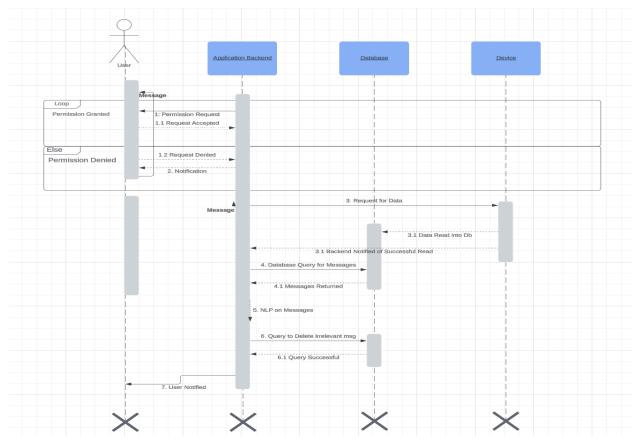
Sign In (UC - 03) & Process Sign In (UC -04)



Sign Up (UC - 01) & Process Sign Up (UC - 02)



Editing Profile (UC - 12)\



Scrape Messages (UC - 05) & Processing of Messages (UC - 06)

#### **Design Rationale**

#### Why Display Order Details in a Separate Page?

We display the Order Summary separately to provide clear and concise information about the order details. This allows users to review their purchase and ensure the accuracy of the information. Displaying it separately also helps in reducing confusion, cognitive load, and improving the overall user experience. In other words, the user can review in a more digestible format, without too much overwhelming information in a single page.

Additionally, the separate display of the Order Summary can facilitate a smoother transaction process. It allows users to double-check their orders, making amendments if necessary, without having to navigate back and forth between pages. This can potentially minimize errors and misunderstandings, leading to a more satisfactory customer experience.

#### Adding a FAQ Page

Having a Frequently Asked Questions (FAQ) page about Cart-Genie helps the users with immediate answers to common questions, saving them time and effort of reaching out to customer service. This not only enhances user satisfaction, but also reduces the workload of the customer service team. It also addresses common concerns and queries on the FAQ page, which can potentially reduce cart abandonment rate, as users are more likely to complete the purchase if their doubts and uncertainties are addressed promptly and effectively along with contact details.

#### Alternative Login Option via Phone Number and One-Time Password

Using OTP (One Time Password) and phone number as sign in methods provides an alternative, convenient, and secure way for users to log in. This method is particularly handy for users who may not remember their usernames or passwords. It also adds an extra layer of security as the OTP is sent directly to the user's registered phone number, making it more difficult for unauthorized users to gain access. It simplifies the login process, thereby enhancing the overall user experience.