

## **Project Title:**

**Pick & Move**

(Pickup and Shifting Service)

## **Course Title:**

Software Engineering and information System Design

**Course Code:** CSE 411

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## Introduction

Pick n Move is a service platform in Bangladesh to hire pickup, truck or covered van in minutes. It also helps to hire local service providers for shifting purposes (e.g. home shifting, office shifting, furniture shifting). When consumers are done with the service booking a verified service provider or verified vehicles will be sent to their premises at your scheduled time. After the service, they would pay through cash according to the bill that they were provided earlier (after confirming the contract). Vehicles of all sizes and shapes are available here for hire.

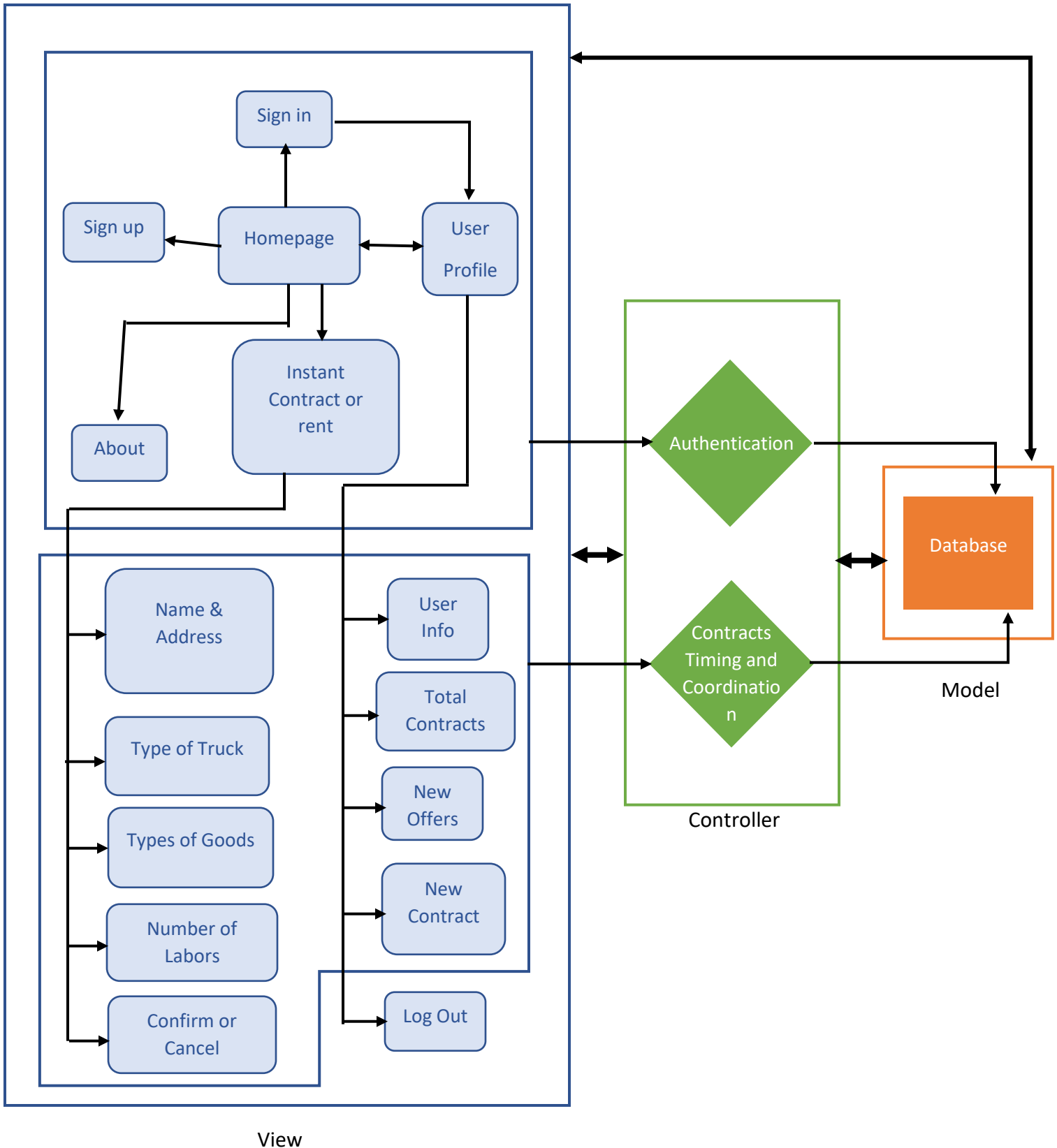
## Motivation

- Predominantly this webapp aims to make truck booking and hiring shifters more accessible to everyone for their business or personal needs. We aspire to arrange our service at the shortest time possible so consumers would not go through hassle to find trustable assistance to accomplish their needs.
- Pick n Move intends to ensure vehicle reservation at the most reasonable price possible. There is no middle man for vehicle reservation. Users can hire truck directly from the website and can book a trustworthy local service provider.

## Challenges

- Certain features such as location information or sharing in a web application is a bit difficult.
- Lack of team members and knowledge is making it difficult to complete the project in time.
- Difficult to make the UI as less technical possible because of not knowing the latest design trends.
- Not being able to test or implementing responsiveness of the web-app as the team has no access to certain devices or platforms
- Implementing application like instantly calculating the cost of the service wanted as different places have different costing of services

# Component Diagram



# Requirements

## Non – Functional Requirements:

- Ensuring great user experience (UX).
- Must have the feature to suggest the user the minimum number of laborers or shifter must be needed as not all use user know how many people needed or not.
- Incorporating the feature of making instant contracts so that one time or temporary users do not have to go through the hassle of creating an account for renting.
- Instant users should be authenticated by a one-step verification process.
- There should be accounts for frequent users like certain types of companies or people who might get extra discounts or offers.
- The app should be able to compute total transaction of money with the customer.

## Functional Requirements

- **User authentication:** As our app deal with sensitive information about the often or daily user's location, personal information a thorough authentication procedure should be followed.

**Scenario:** When a user tries to access their account while they are not logged in, they would be redirected to the login page. Only after the user enters their username and password and authentication is complete, they will be redirected to their desired page. Pages with sensitive/personal information can only be accessed through logging in to the system.

Those with no accounts wanting to make an instant contract would go through one step authentication process to make sure their given number is real and that user is a real person.

**There will be 2 types of users: i. Admin, ii. Registered User, iii. One-time user**

**i. Admin:** Administrators of the system.

**Input:** username, password

**Output:** user authentication, admin panel, access to administrative functions, logout.

**ii. Registered User:** Users with registered accounts.

**Input:** username, password.

**Output:** user authentication, access to user homepage & profile, logout.

**iii. One-Time User:** Users who do not use it in regular basis.

- **User Profile:**

User profile will be of 2 types: member (consumer) and admin.

Profiles should contain full name, username, user email, contact number.

**Member Users:**

*Hiring/Booking a Truck (and Labor):*

Member Users can hire a truck (and labor) through account. They will provide loading and unloading location, truck category, number of labors required (if any). Users will be able to track their past bookings and total points (acquired by hiring a service) in their accounts.

**Admin Users** can visit customer/consumers' profiles to inspect bookings. Also, admin can track customers' points.

**Customizing User Settings:** Users can customize their accounts through the profile option. There should be options to edit personal and account information (such as name, password, username, avatar, contact information, etc.) and manage their privacy and security settings.

- **Password Recovery:** In case if a registered user forgets password, there should be a

feature to reset password. User will provide the system an email address. An email will be sent to that email address containing a link. User will be able to reset the password using that link.

- **One-time Hiring:**

For users who do not wish to use the system for more than once, there will be a one-time hiring feature available for them. They will not have to go through all the sign-up requirements, rather will be able to order by providing full name, contact no and order details only.

- **Premium Membership:**

Booking for a job should help individual member users gain point. Each hire will make them receive 10 points. These points will be evaluated in premium membership & exclusive offer purposes. User accounts above a certain point level will be considered as premium users. Those account holders will be offered discounts in future bookings.

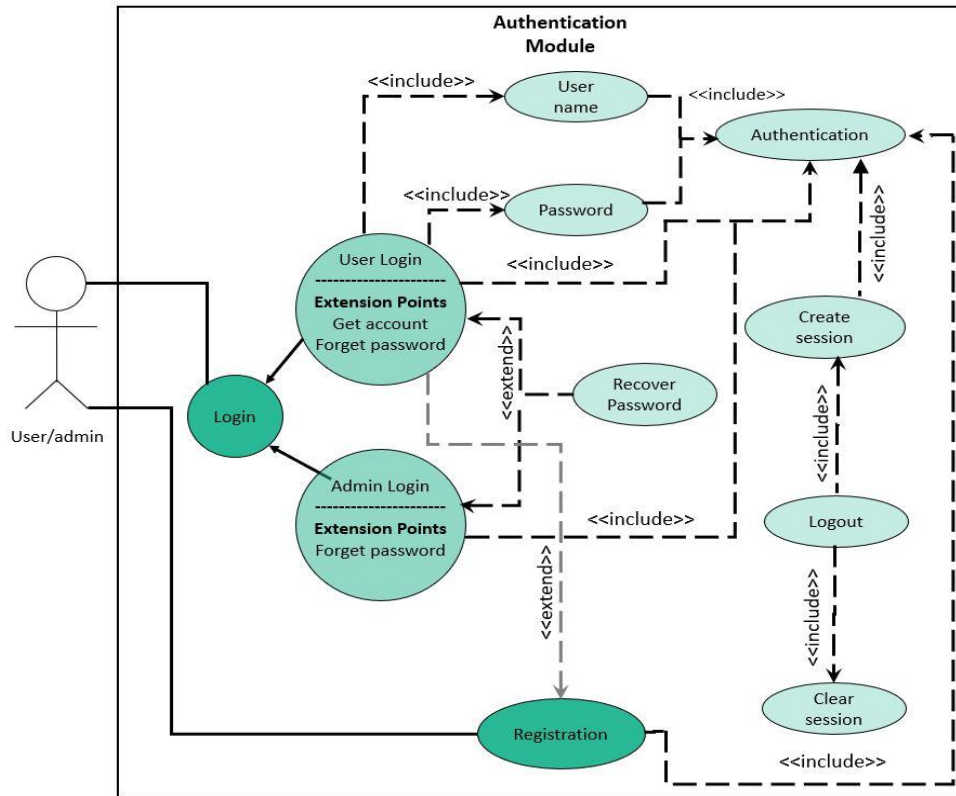
## **UML Usecase Diagrams**

### **Diagrams contains:**

- I. User Authentication Module
- II. Accounts Settings Module
- III. Hiring Module
- IV. Offered Premium Features Modules

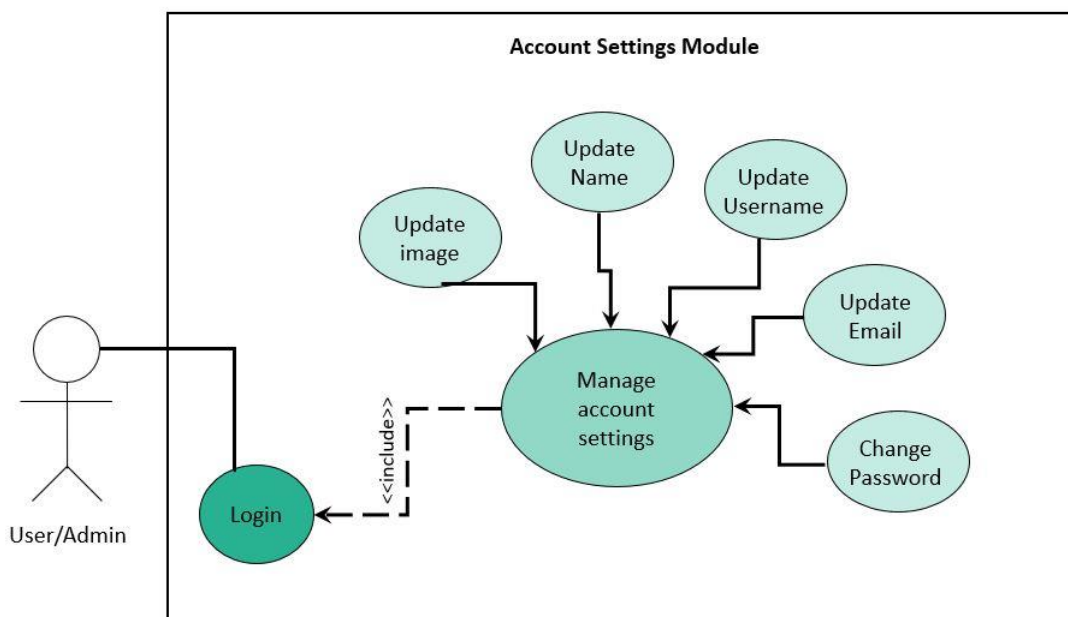
## Use case diagram

Mashuk Khan | November 27, 2020



## Use case diagram

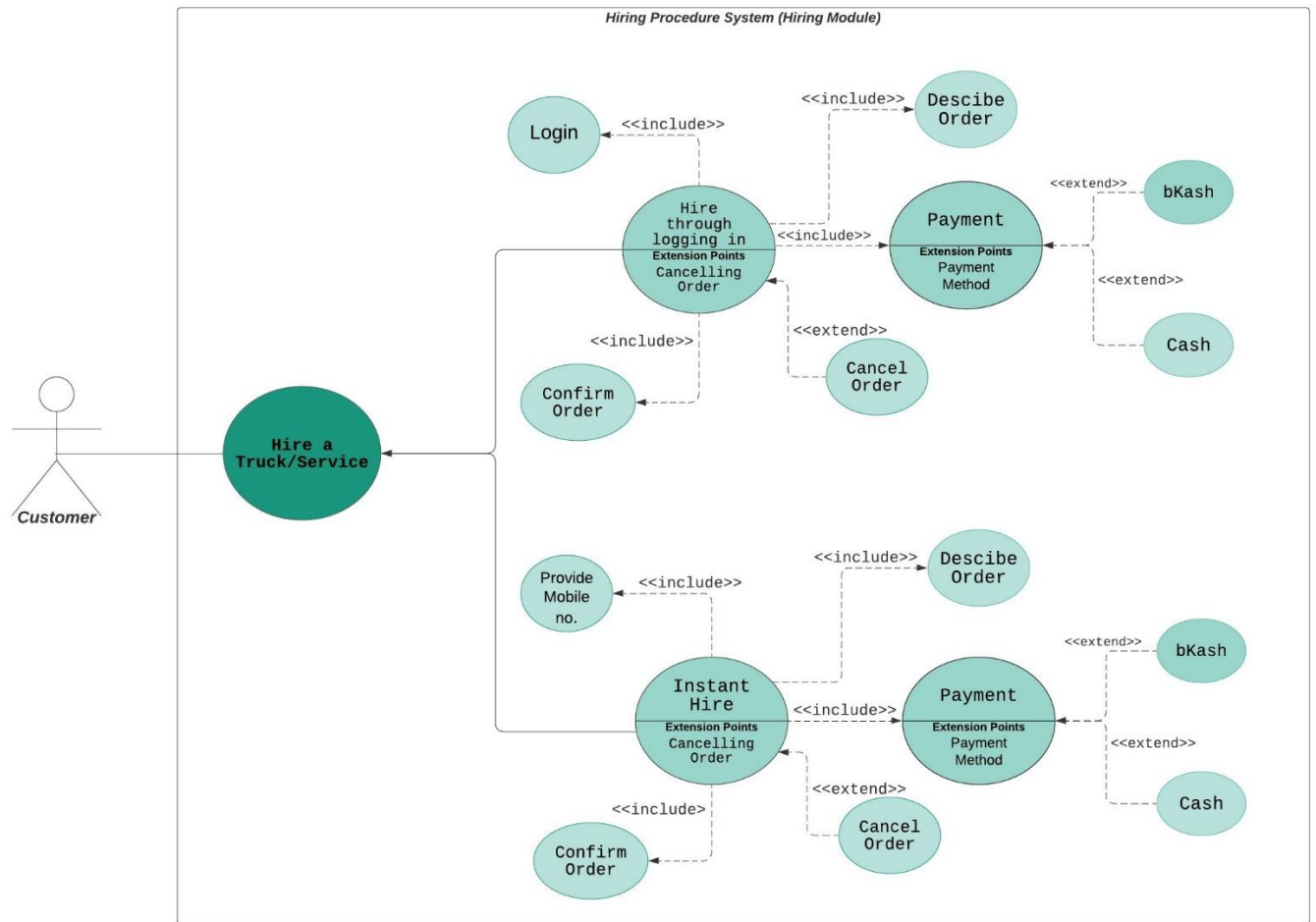
Mashuk Khan | November 27, 2020





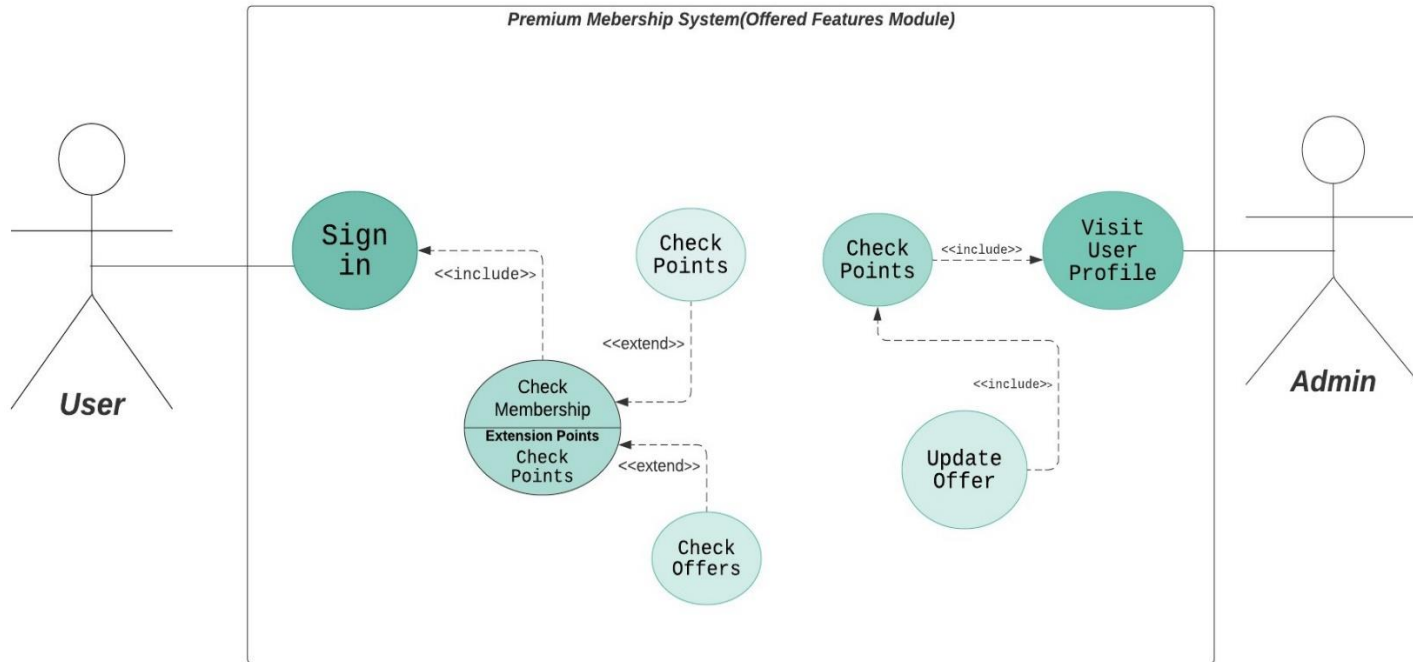
Use case diagram 'Hire a Truck/Service'

Noureen Alam Meem | November 28, 2020

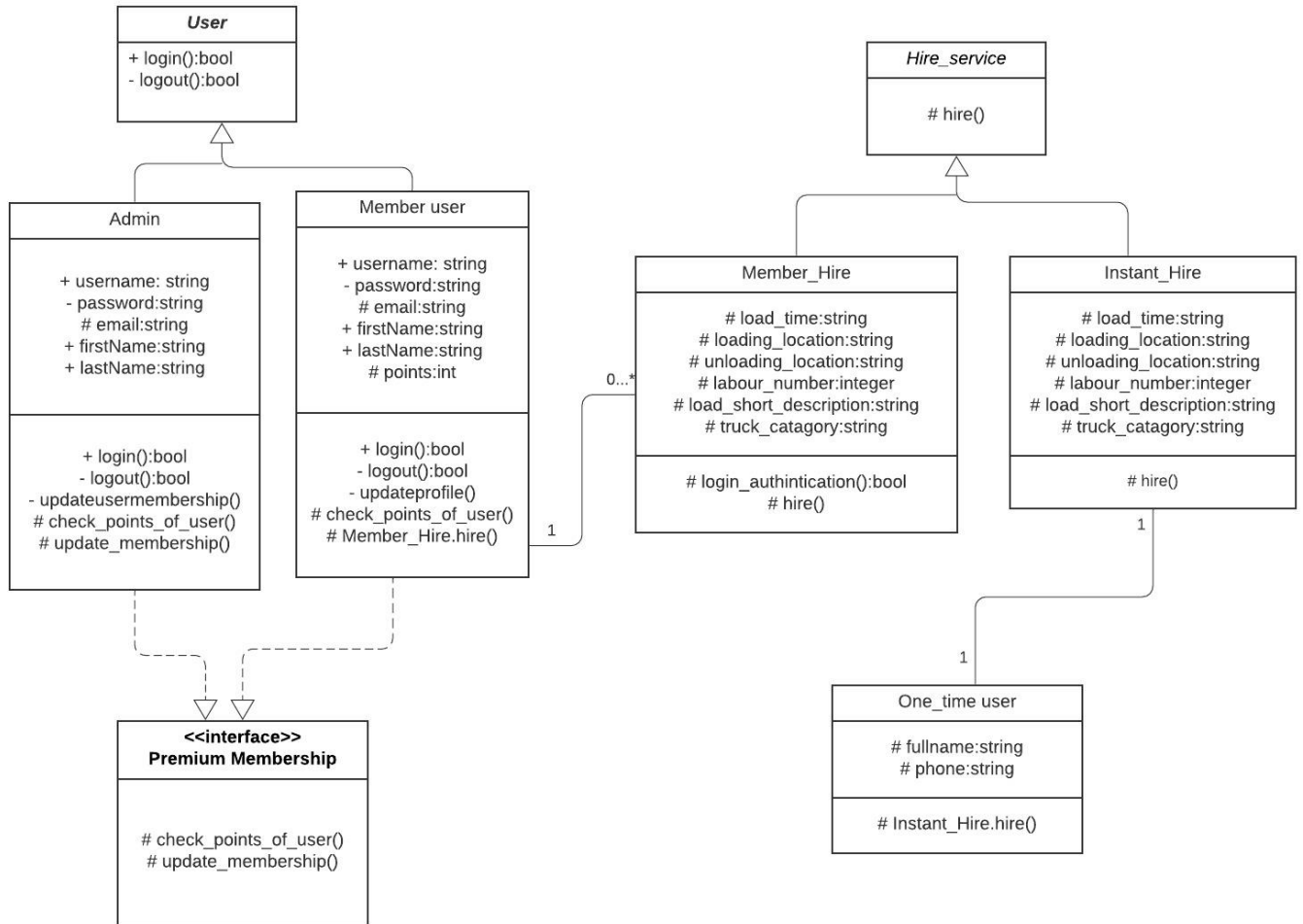


## Use case diagram

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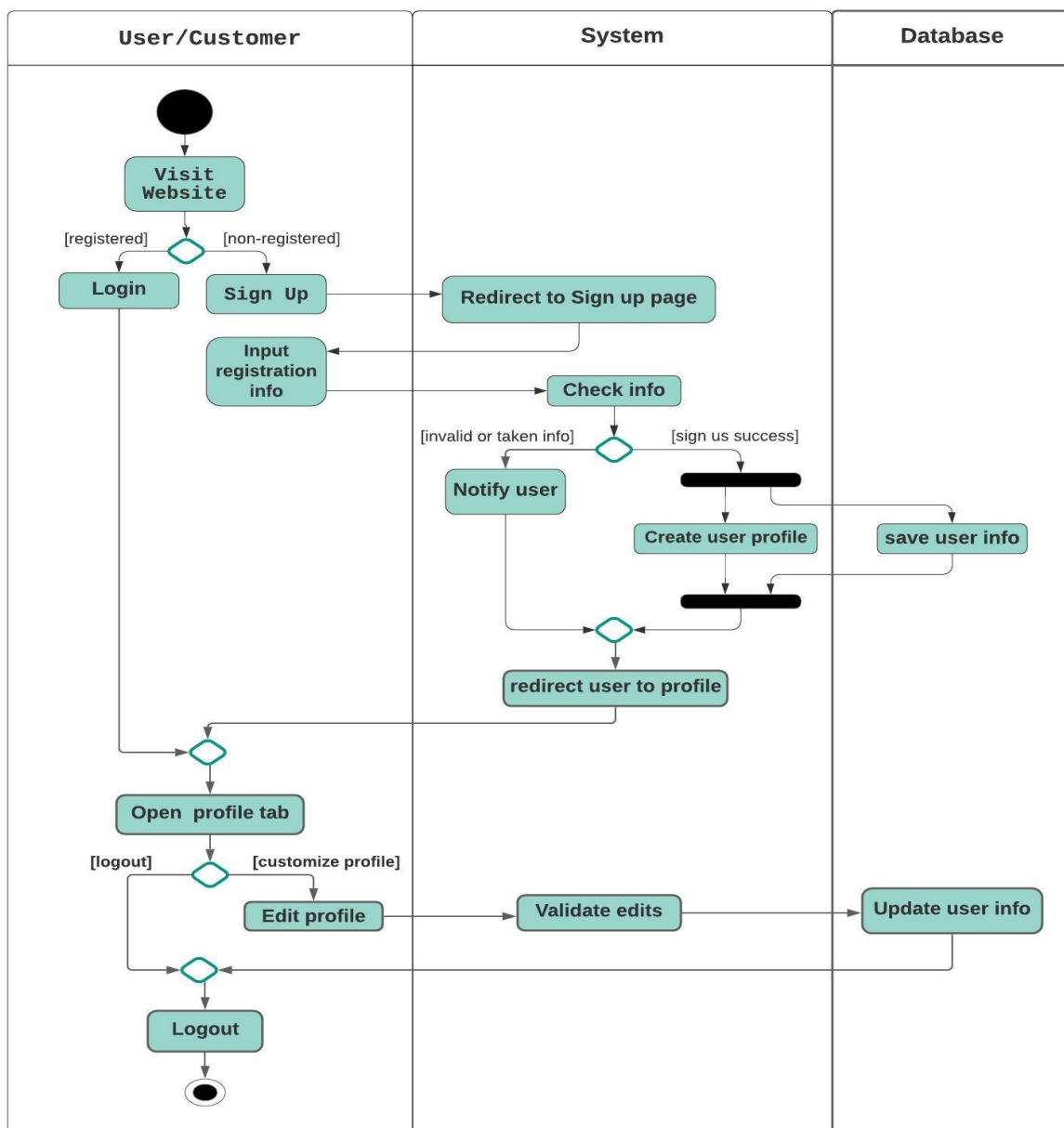
## UML Class Diagram



## UML Activity Diagram

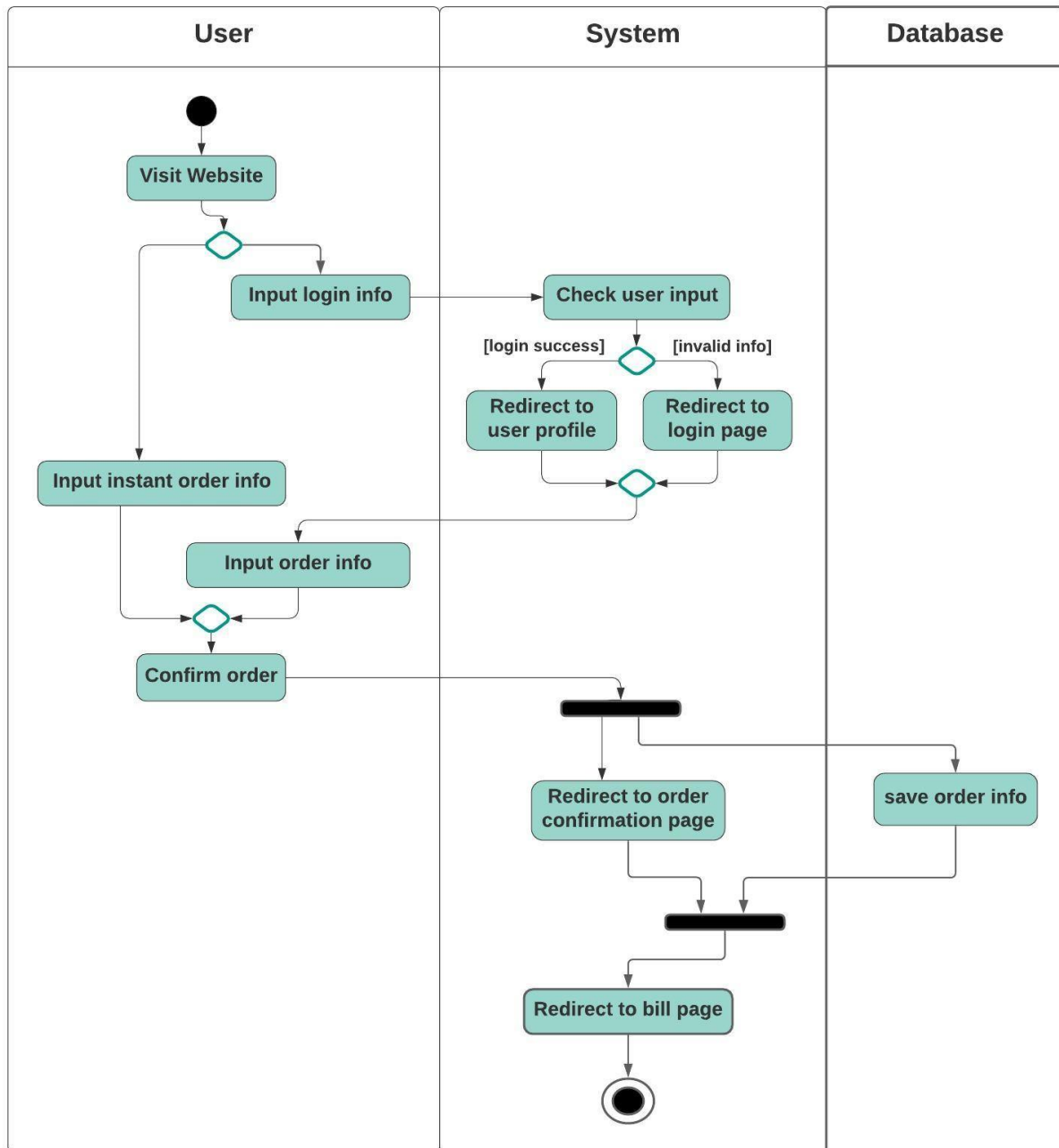
**Scenario:** When someone visits our website, she/he either logs in (if registered user) or registers for an account (non-registered user). In case of sign up, the user will be redirected to a sign-up page. There, he has to input some information. After he submits, the system checks whether the info is valid or already taken by any registered user. In that case, the system notifies the user. Otherwise, the user is able to sign up successfully. The user can customize profile if he wants. He can update certain information. The system validates the updated information and database saves the updated information. The user can logout afterwards.

**Activity Diagram | Sign up/Login**

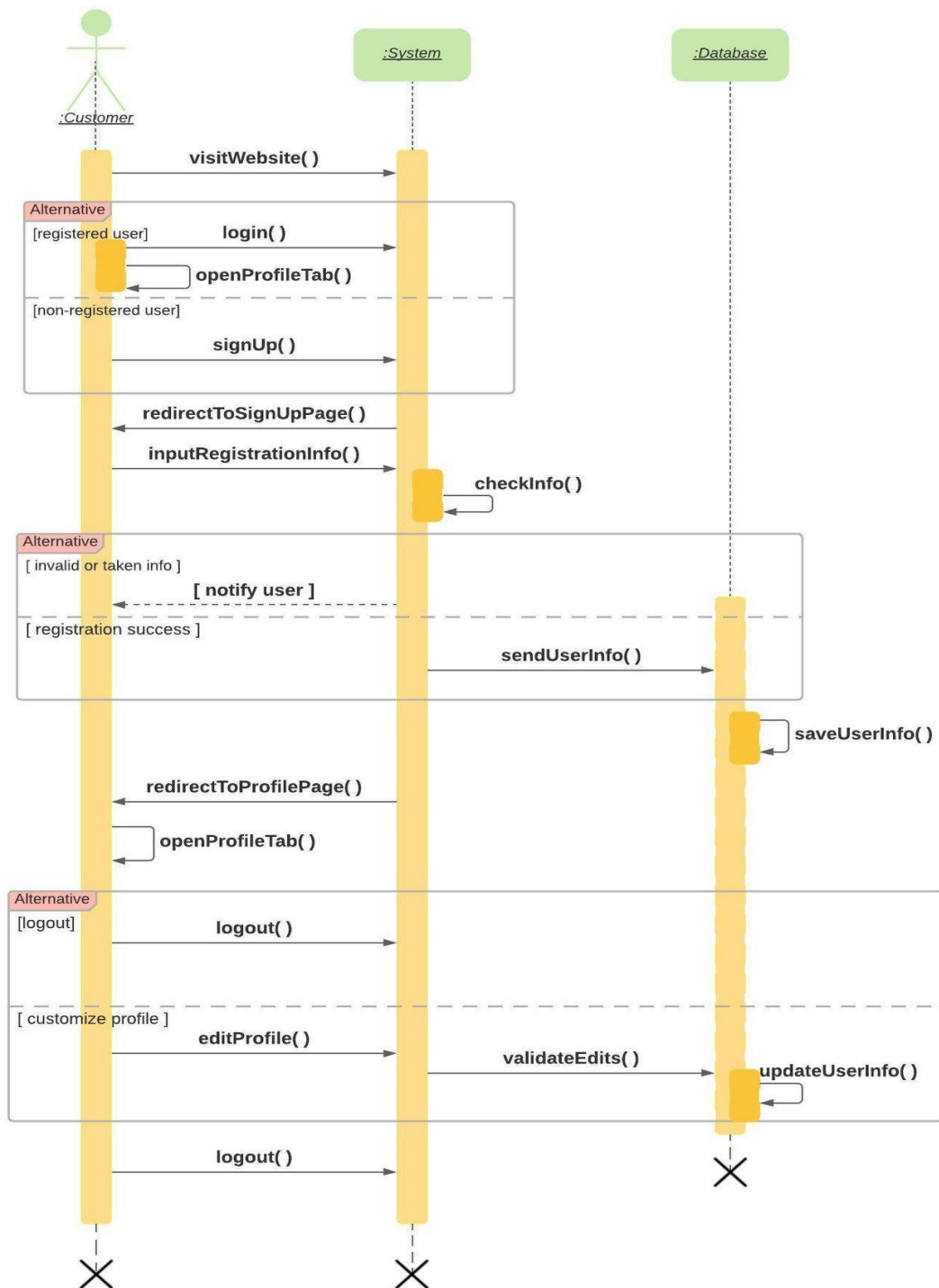


**Scenario:** If someone wants to use our service, she/he has to login first. The system will check login information provided by the user. If the info is invalid, the user is redirected to login page again. In case of correct information, the user is redirected to order page. He has to input information regarding the order. Unregistered user can use the service as one-time users too. After providing order information, they have to confirm the order. The system sends the information to database. The database saves the information. The customer/user is provided a bill in the billing page.

### Activity Diagram | Order Page



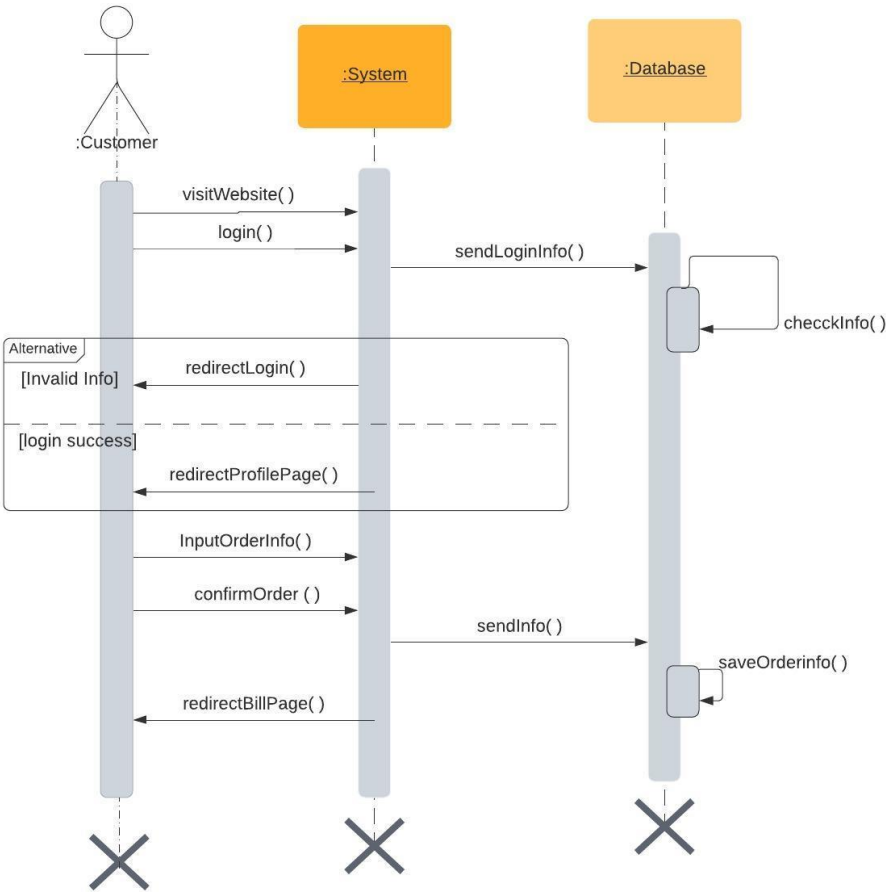
## UML Sequence Diagram



# Order Page

Sequence diagram

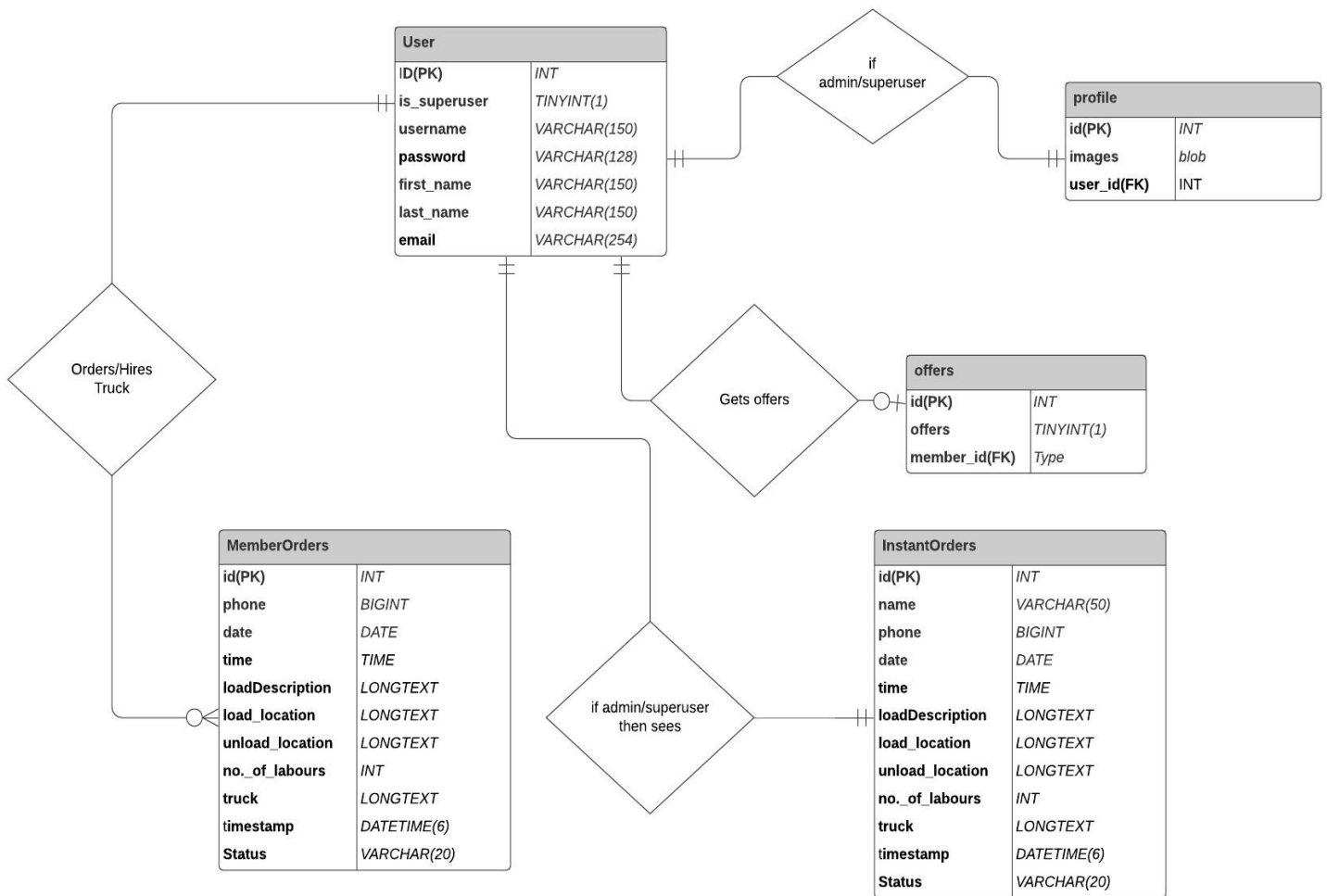
Mashuk Khan | January 4, 2021.



# Entity Relationship Diagram

Database ER diagram (crow's foot)

Mashuk Khan | January 3, 2021.






## User Interface Screenshots:

### Home page:



## Login page:



Home Services Sign up/Log in ▾

**Username**

**Password**


Login

Not a Member? [Sign up](#)

Forgot Password? [Reset Password](#)

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## Order page:



Home Services Sign up/Log in ▾

**Mobile Number**

**Date**

**Time**

**Select Truck Category**

**Number of Labours**

**Product Description**

**Loading Location**

**Unloading Location**

Hire

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**Conclusion:** In Bangladesh hiring truck is a tiresome work. Looking for truck contractor or drivers wastes most of our time. Moreover, people have to bargain for the price and often get cheated. So, our truck service website helps people to hire trucks with needed laborers through us in a fast and easy way. No looking around, no bargaining is needed. We also give services to companies or people like factory owners, wholesalers etc. who need to trucks in a regular basis.