

Course code: CSE-314

Course Title: Object-oriented analysis and design (OOAD)

3rd Year 1st Semester Examination 2022

Assignment No. 03

Title: Project Proposal Submission

Date of Submission: 22/06/2023



Submitted by –

Name	Roll
Sunirmol Mollik	386
Md. Nafees Zaman	406

Submitted to-

Sarnali Basak

Associate Professor

Nadia Afrin Ritu

Lecturer

Department of Computer Science and Engineering

Jahangirnagar University, Savar, Dhaka-1342

Project Title: JU Transport Requisition System

Description: The JU Transport Requisition System is a database project will be develop using HTML, CSS, PHP, and Bootstrap to facilitate the management of a transport rental service located in the JU,Savar,Dhaka-1342 region of Bangladesh. The project aims to provide an efficient and user-friendly system that can help the transport rental service manage its operations more effectively. The system is designed to store all the necessary information about the transports, customers, bookings, and payments in a centralized database. The project includes various features such as transport rental booking, payment management, and staff management. The Jahangirnagar University transport requisition system project aims to develop a streamlined system for managing transportation requests within the university campus. This system is designed to facilitate the process of requesting and allocating vehicles for various purposes, such as official meetings, conferences, field trips, and other university-related activities.

Functional requirements

- 1.**Registration Section** (Users should be able to register with the system by providing their basic information such as name, email, contact number, and address.)
- 2.**Login Section** (Registered users should be able to log in to the system using their credentials to access the features and functionalities.)
- 3.**Sign Out section** (User should be able to sign out after completing his task)
- 4.**Approval Section** (Users request should be approved by the authority/admin)
- 3.**Transport maintenance section** (Add vehicle,update vehicle,delete vehicle)
- 4.**Customer Management** (Add Customer,Update Customer,delete Customer)
- 5.**Booking Management** (Making Booking, Manage Booking, Cancel booking)
- 6.**Payment Management** (Accept payment,Generate Invoice)
- 7.**Staff Management** (Add stuff,assign roles, Update stuff,Remove stuff)
- 8.**Making user able to see available Trips .**
- 9.**Making user able to change or update his trip.**
- 10.**Dashboard for maintaining profile.**
- 11.**Customer profile for showing their details information .**

○ Non-functional requirements

- 1.**Usability from user-end** (The system should be user-friendly and easy to navigate, with a responsive and intuitive user interface.)
- 2.**Providing enough security** (The system should ensure the confidentiality and integrity of user data. User passwords should be securely stored using encryption techniques.)
- 3.**Providing High performance** (The system should be able to handle a large volume of data and concurrent users without significant performance degradation.)
- 4.**Reliability for the user** (The system should be reliable and available for use 24/7, with minimal downtime for maintenance and upgrades.)
- 5.**Scalability** (The system should be scalable to accommodate future growth in terms of car inventory, customer base, and overall usage.)
- 6.**The system should be Compatible** (The system should be compatible with modern web browsers and accessible from various devices such as desktops, laptops, tablets, and smartphones.)
- 7.**Reporting and Analytics** (The system should provide reporting and analytics capabilities to generate various reports and insights, such as car availability, booking trends, and revenue analysis.)
- 8.**Localization** (The system should support multiple languages and currency options to cater to users from different regions.)
- 9.**Documentation** (The system should have comprehensive documentation that includes user manuals, system architecture, and technical specifications to assist users and developers in understanding and maintaining the system.)
10. **User complain or Suggestion section.**(User can complain or give any suggestion)
11. **Refund/review section.**(Users feedback should be taken)
- 12.**Special trip discount for special customer.**(For improving user interaction/reachness of system.)
- 13.**Recheck options for the user.**(Keeping recheck options before confirming submission)
- 14.**Limitations about booking a trip.**(for how much time user can book(optional)).
15. **Booking Confirmation/cancellation via mail/SMS.**

○ User Story

As a university staff member, I want to be able to request a vehicle for official purposes easily and efficiently. I should be able to access the system using my university credentials.

As a staff member, I want to be able to view the availability of vehicles for a specific date and time so that I can plan my transportation accordingly.

As a staff member, I want to be able to specify the purpose and destination of my trip when making a transport requisition, providing any necessary details or requirements.

As a staff member, I want to receive confirmation and notification of my transport requisition, including the assigned vehicle and driver details, as well as the estimated time of arrival.

As a staff member, I want to be able to modify or cancel my transport requisition if there are any changes or if the trip is no longer required.

As an administrator, I want to be able to view and manage all transport requisitions, including approving or rejecting them based on availability and priority.

As an administrator, I want to be able to assign vehicles and drivers to approved transport requisitions, ensuring efficient allocation of resources.

As an administrator, I want to be able to generate reports and statistics about transport requisitions, including the number of requests, usage patterns, and any relevant financial information.

As a driver, I want to be able to view my assigned transport requisitions, including the pickup and drop-off locations, as well as any special instructions.

As a driver, I want to be able to update the status of a transport requisition, such as "En Route," "Arrived," or "Completed," to keep everyone informed about the progress of the trip.

As a customer, I want to be able to provide feedback or rate the service after the completion of a transport requisition, helping the transport rental service to improve its quality.

○ Use Case Diagram:

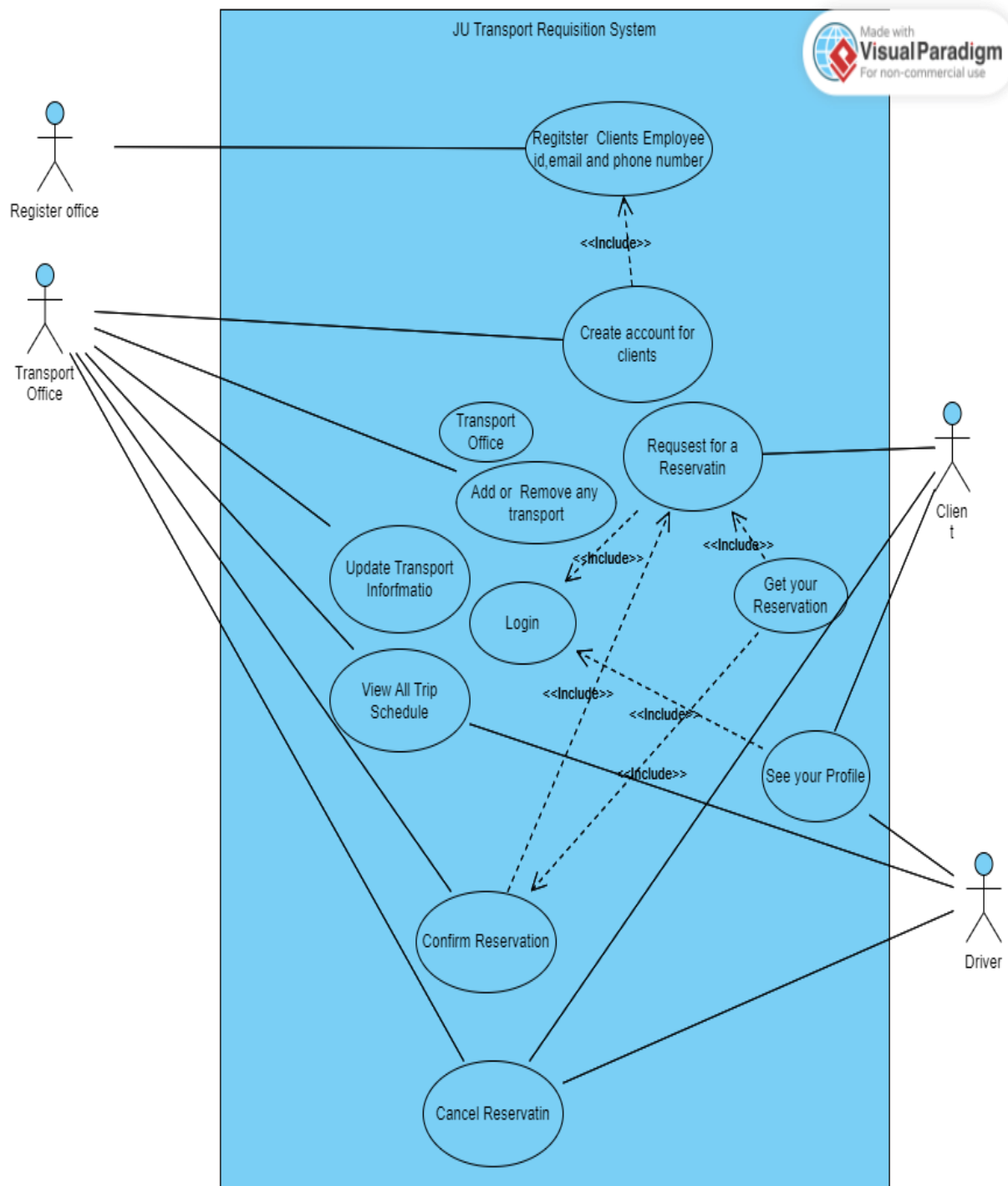


Figure: Use Case Diagram

○ Use Case Specification:

Use case ID: UC1.1
Use case Name: Register clients employee id,email and phone number
Actor: Registration office
Description: <ul style="list-style-type: none">1. Take Employee name, ID,email.3. Save Employee name, ID,emai
Exception: <ul style="list-style-type: none">1. Page not found.2. No database connection.
Precondition: <ul style="list-style-type: none">1. URL of login page from web browser.
Post Condition: <ul style="list-style-type: none">1. Successful account creation – Logging in to system.2. Unsuccessful creation – Stay in same page.3. Exception - Stay in same page if possible.

Use case ID: UC1.2
Use case Name: Creates account for client
Actor: Transport office
Description: <ul style="list-style-type: none">1. Input employee ID,email and password.2. Check User ID and password (User authentication).3. Save ID and Password (Cookies).4. Remember Password.
Exception: <ul style="list-style-type: none">1. Page not found.2. No database connection.
Precondition: <ul style="list-style-type: none">1. URL of login page from web browser.
Post Condition: <ul style="list-style-type: none">1. Successful stored information– Logging in to system.2. Unsuccessful didn't store – Stay in same page.3. Exception - Stay in same page if possible.

Use case ID: UC1.3 Use case Name: Add or remove car
Actor: Transport Office Description: <ol style="list-style-type: none"> 1. Input user ID and password 2. Add and remove any trip/transport 3. Save status Exception: <ol style="list-style-type: none"> 1. Page not found. 2. No database connection. Precondition: <ol style="list-style-type: none"> 1. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 1. Successful login – Logging in to system. 2. Unsuccessful login – Stay in same page. 3. Exception - Stay in same page if possible.

Use case ID: UC1.4 Use case Name: Update Transport Information
Actor: Transport Office Description: <ol style="list-style-type: none"> 1. Input ID and password 2. Add and remove any trip/transport. Add customer/driver information 3. Save status Exception: <ol style="list-style-type: none"> 3. Page not found. 4. No database connection. Precondition: <ol style="list-style-type: none"> 2. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 4. Successful login – Updating system. 5. Unsuccessful login – Stay in same page. 6. Exception - Stay in same page if possible.

Use case ID: UC1.5 Use case Name: View all Trip schedule
Actor: Transport Office Description: <ol style="list-style-type: none"> 1. Input ID and password to login 2. View information with all Trip information. 3. Save status Exception: <ol style="list-style-type: none"> 5. Page not found. 6. No database connection. Precondition: <ol style="list-style-type: none"> 3. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 7. Successful login –All the trip schedule viewed succefully.. 8. Unsuccessful login – Stay in same page. 9. Exception - Stay in same page if possible.

Use case ID: UC1.6 Use case Name: Confirm Reservatoin
Actor: Transport Office Description: <ol style="list-style-type: none"> 1. Input ID and password to login 2.If Available then Confirm The reservation. 3. Save status Exception: <ol style="list-style-type: none"> 7. Page not found. 8. No database connection. Precondition: <ol style="list-style-type: none"> 4. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 10. Successful login – Reservation Confirmed. 11. Unsuccessful login – Stay in same page. 12. Exception - Stay in same page if possible.

Use case ID: UC1.7 Use case Name: Cancel Reservation
Actor: Transport Office Description: <ol style="list-style-type: none"> 1. Input user ID and password 2. Cancel any reservation. 3. Save status Exception: <ol style="list-style-type: none"> 9. Page not found. 10. No database connection. Precondition: <ol style="list-style-type: none"> 5. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 13. Successful login – Reservation cancelled. 14. Unsuccessful login – Stay in same page. 15. Exception - Stay in same page if possible.

Use case ID: UC1.8 Use case Name: Login
Actor: Client Description: <ol style="list-style-type: none"> 1. Input user ID and password 2. Save the ID and Password. Exception: <ol style="list-style-type: none"> 11. Page not found. 12. No database connection. Precondition: <ol style="list-style-type: none"> 6. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 16. Successful login – Logging in to system. 17. Unsuccessful login – Stay in same page. 18. Exception - Stay in same page if possible.

Use case ID: UC1.9 Use case Name: Request for a Reservation
Actor: Transport Office Description: <ol style="list-style-type: none"> 1. Input user ID and password to login 2. Check if any available trip 3. Save status Exception: <ol style="list-style-type: none"> 13. Page not found. 14. No database connection. Precondition: <ol style="list-style-type: none"> 7. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 19. Successful login – Successfully requested. 20. Unsuccessful login – Stay in same page. 21. Exception - Stay in same page if possible.

Use case ID: UC1.10 Use case Name: Get Your reservation
Actor: client Description: <ol style="list-style-type: none"> 1. Input user ID and password 2. Got a reservation after confirmation 3. Save status Exception: <ol style="list-style-type: none"> 15. Page not found. 16. No database connection. Precondition: <ol style="list-style-type: none"> 8. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 22. Successful login –Getting a new reservation. 23. Unsuccessful login – Stay in same page. 24. Exception - Stay in same page if possible.

Use case ID: UC1.11 Use case Name: See Your profile
Actor: Client Description: <ol style="list-style-type: none"> 1. Input user ID and password 2. View Profile 3. Save status Exception: <ol style="list-style-type: none"> 17. Page not found. 18. No database connection. Precondition: <ol style="list-style-type: none"> 9. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 25. Successful login – Viewing Profile 26. Unsuccessful login – Stay in same page. 27. Exception - Stay in same page if possible.

Use case ID: UC1.12 Use case Name: See Your profile
Actor: Client Description: <ol style="list-style-type: none"> 1. Input user ID and password 2. View Profile 3. Save status Exception: <ol style="list-style-type: none"> 19. Page not found. 20. No database connection. Precondition: <ol style="list-style-type: none"> 10. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 28. Successful login – Viewing Profile 29. Unsuccessful login – Stay in same page. 30. Exception - Stay in same page if possible.

Use case ID: UC1.13 Use case Name: Login
Actor: Driver Description: <ol style="list-style-type: none"> 1. Input user ID and password 2. Save status Exception: <ol style="list-style-type: none"> 21. Page not found. 22. No database connection. Precondition: <ol style="list-style-type: none"> 11. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 31. Successful login – Logging in the system. 32. Unsuccessful login – Stay in same page. 33. Exception - Stay in same page if possible.

Use case ID: UC1.14 Use case Name: View all Trip schedule
Actor: Driver Description: <ol style="list-style-type: none"> 1. Input user ID and password 2. Successful Login 3. View all trip schedule. 3. Save status Exception: <ol style="list-style-type: none"> 23. Page not found. 24. No database connection. Precondition: <ol style="list-style-type: none"> 12. URL of login page from web browser. Post Condition: <ol style="list-style-type: none"> 34. Successful login – Viewing Profile 35. Unsuccessful login – Stay in same page. 36. Exception - Stay in same page if possible.

Use case ID: UC1.15

Use case Name: See Your profile

Actor: Driver

Description:

1. Input user ID and password
2. View Profile
3. Save status

Exception:

25. Page not found.
26. No database connection.

Precondition:

13. URL of login page from web browser.

Post Condition:

37. **Successful login** – viewing profile
38. **Unsuccessful login** – Stay in same page.
39. **Exception** - Stay in same page if possible.