Course Code   :   CSE 404

Course Title   :   Software Engineering and ISD Laboratory

Project name :   Bus ticket booking management system

Experiment no: 02

Experiment name: **Requirements Specification Analysis of the project**

Submitted To

Dr. Mohammad Zahidur Rahman
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Group No   :   02

Group members   :

Sl	Class Roll	Name
01	342	Tama Shil
02	370	Prokash Maitra
03	374	Mubasher adnan jihad
04	375	Pritam Saha

Name : Tama Shil

Id :342

Objective:

The purpose of this document is to provide a comprehensive analysis of the requirements for a Bus Ticket Booking System. This technology intends to promote quick and easy ticket purchasing for customers while optimizing bus company processes. The analysis includes comprehensive reports on each of the system's functional and non-functional requirements.

Functions or services list:

1. Functional requirements
    1.1.   User registration specifications
        - User registration authentications specifications
    1.2.   Login specifications
        - Login verification specifications
    1.3.   Bus scheduling specifications
        ➢ Add bus schedule
        ➢ Edit bus schedule
        ➢ Delete bus schedule
        ➢ View bus schedule
    1.4.   Reservation specifications
        ➢ Reservation specification
        ➢ Payment specification
        ➢ Cancelation specification

2. Performance specifications
    2.1.   Speed and Latency requirements
    2.2.   Precision and accuracy requirements

3. Dependency Requirements
    3.1.   Reliability requirements
    3.2.   Availability requirements

4. Maintenance and Supportability Requirements
    4.1.   Maintenance Requirements
    4.2.   Supportability Requirements
    4.3.   Security Requirements
    4.4.   Accessibility Requirements

1. Functional requirements
    1.1.   User registration specifications
- The user must register to the system
- The user need to fill important information fields like user-id,email,name,phone number gender etc to register
- The user will have to email authentication to confirm the information

    1.2.   Login specifications
- User will insert his username or email and password to login
- The information will be verified
- The user will reenter the information in case of wrong information

1.3.   Bus scheduling specifications

➢ Add bus schedule

- .The system has a function that allow administrator to add the new schedule and the destination to the driver.
- The system will check on the same time, same day and same driver that already have the schedule or not, if yes then the system will not allow the administrator to add the new schedule for the particular driver on the same time, day and place.
- If not then the administrator can assign the new schedule for the particular driver.

➢ Edit bus schedule

- The system has a function that allows the administrator to edit the schedule that already assigned.
- If have any happen occur so that the administrator need to reassign the schedule for the driver.

➢ Delete bus schedule

- The system has a function that allows the administrator to delete a schedule for the particular driver if they feel that the schedule not suitable for this particular driver on that time

➢ View bus schedule

- The system has a function that allow the driver to view the schedule that assign by the administrator according to their name so the driver can know when and what time they should driver the bus from one destination to another destination.

1.4.   Reservation specifications

➢ Reservation specification

- The system has a function to allow the member to add reservation via online.
- When the member click the next button then will go to online payment form to make payment.

➢ Payment specification

- When the member click the next button then will go to the online payment form and the member will key in all the information in the payment form then the system will check the credit card no and the credit card expired date whether is valid or not

➢ Cancelation specification

- The user will be able to cancel the reservation if he wants

Name: Prokash Maitra

Class Roll: 370

Exam Roll: 191372

Project: Bus Ticket Managing System

2. Operation Specification

2.1 Performance

2.1.1 Speed and Latency Requirements

- Proper database use
- Query result reaction

2.1.2 Precision or Accuracy Requirements

- Effective Login
- No Signup without Email
- All input field should insert exact and valid information to the database.

3. Dependency Requirements

3.1 Reliability Requirements

- Only authentic user access to the system
- New user should login
- Only admin can manage bus details

3.2 Availability Requirements

- Available on internet
- Platform independent
- Perform quickly on client demand

4. Maintainability and supportability Requirement
    4.1. Maintenance Requirements
    - Alter framework applications when they need to change depending on various conditions.
    - Databases are used to maintain information in a systematic way
    - Fixed bugs when the application will be corrupted on crash.

    4.2. Supportability Requirements
    - The user will be provided a user manual with full documentation to make the application more effective.

    4.3. Security Requirements
    - Since the registration process will handle the admin of the company, no one other than the company's employer can access the system
    - Administrator cord will be default accounts which will be usable for investigate the issue and notice the authenticate employees activity

    4.4. Ease of use Requirements
    - User Interface of the application is user friendly and easy to use for all types of users.
    - The user manual is available for easy access to new users.

    4.5 Accessibility Requirement
    - This is a web application so it can be accessed from any internet connected device.
    - Only after login, the user will be able to access his/her account

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04	375	Pritam Saha

Objective

The purpose of this document is to provide a comprehensive analysis of the requirement analysis specifications fore Bus ticket Booking management system. Specification should include -

- The context of Compile board System and software

- A set of graphical models

- a formal, mathematical model

- A collection of user see scenarios

- A combination of data.

The provided services or function

1) Usere Registration sep specification
2) Usere login specification
3) Bus scheduling specification
4) Performance specification
5) Speed and latency requirments

6) Reservation specifications

7) Dependency requirements

8) Availability requirements

9) Maintainability and supportability Requirements

10) Security requirements

11) Accessibility requirements

Lets see some detailed system requir-ments specifications -

Registration specifications -

- The user must register to use the service.

- The user need to fill important fields like user-id, email, name, number, gender to register.

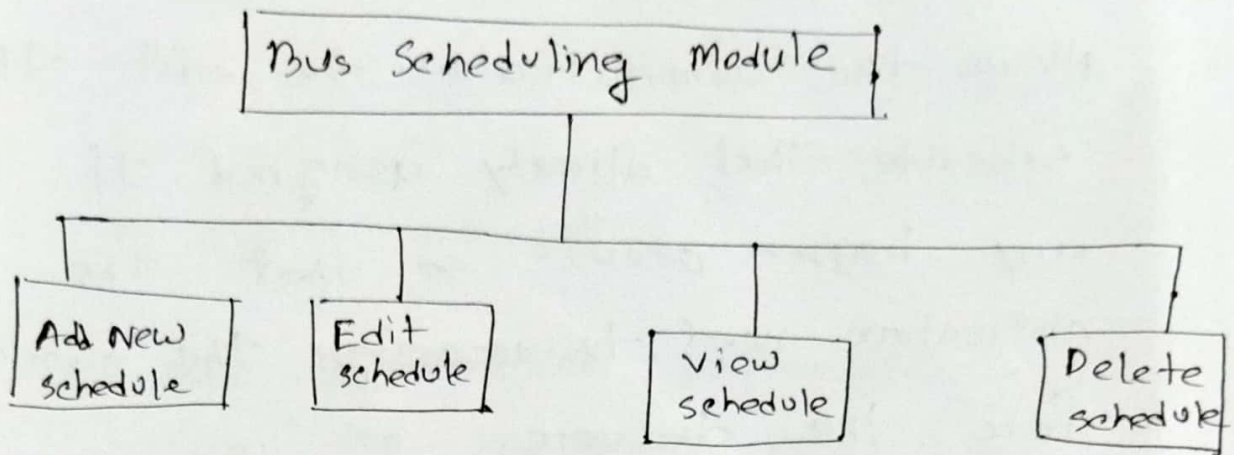- The user will have to email authentification to confirm login.

Login Specification

- User will insert right user id or email and password.

- The user information will be verified.

- The user can change info if he forgot password

- User will reenter information in case of wrong information.

Pritam Saha
ID: 375

Functional Requirements:

```
        ┌─────────────────────────────┐
        │  Bus Scheduling Module      │
        └──────────────┬──────────────┘
     ┌──────────┬───────┴──────┬──────────────┐
┌─────────┐ ┌─────────┐   ┌─────────┐   ┌─────────┐
│ Add New │ │ Edit    │   │ View    │   │ Delete  │
│ Schedule│ │ schedule│   │ schedule│   │ schedule│
└─────────┘ └─────────┘   └─────────┘   └─────────┘
```

* Add New schedule :

The system has a function that allow administrator to add the new schedule and the destination to the driver.

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* Delete schedule Details:

The system has a function that allows the administrator to delete a schedule for the particular driver if they feel that the schedule not suitable for this particular driver on that time

Reservation module:

1. Add Reservation

when the member click the next button then will go to online payment form to make payment.

2. Add Reservation payment:

when the member click the next button then will go to online payment form and the member will key in all the information in the payment form then the system will check the credit card no and the credit card expired date whether is valid or not

Name : Prokash Maitra

Roll : 370

Exam Roll : 191372

Project : Bus Ticket Managing System.

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   - Only admin can manage bus details.

   3.2 Availibility Requirements

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   - Platform independent.

   - Perform quickly on client demand

Name: Mubasher Adnan Jihad

Roll: 374

4. Maintability and Supportability Requirement

[4.1] maintenance Requirements

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