

A
PRELIMINARY PROJECT REPORT
ON

**MODERN LOGISTICS VEHICLE SYSTEM USING
DYNAMIC SCHEDULING,TRACKING AND SECURITY**

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FOR THE AWARD OF THE DEGREE

OF

BACHELOR OF ENGINEERING (COMPUTER ENGINEERING)

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SCHEDULING,TRACKING AND SECURITY**

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ABSTRACT

The Movers and Packers systems have emerged recently with the development of Global Positioning System (GPS), mobile communication technologies, sensor and wireless networking technologies. The Movers and Packers systems are very important as they can contribute to several benefits such as suggesting right places for getting customers, increasing revenue of truck drivers, reducing waiting time, traffic jams as well as minimizing fuel consumption and hence increasing the number of trips the drivers can perform.

The main purpose of this system would be supplying required vehicles that would be used to meet customer demands through the planning, control and implementation of the effective movement and storage of related information and services from origin to destination. We have to provide end to end security for customer and provider data by using QR code concept. We are recommendation of nearest best service provider according to user interest and detect spam service provider. Logistics management refers to the responsibility and management of design and administer systems to control the movement and geographical positioning of raw materials, work-in-process, and finished inventories at the lowest total cost. Logistics involves the management of order processing, inventory, transportation, and the combination of warehousing, materials handling, and packaging, all integrated throughout a network of facilities.

List of Abbreviation

ABBREVIATION	ILLUSTRATION
GPS	Global Positioning System
QR	Quick Response
CF	Collaborative Itering
ED	Euclidean distance
ST	Stop word Removal

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Chapter 1

INTRODUCTION

1.1 Overview

Logistics refers to the responsibility to design and administer systems to control movement and geographical positioning of raw materials, work-in-process, and finished inventories at the lowest total cost. Logistics involves the management of order processing, inventory, transportation, and the combination of warehousing, materials handling, and packaging, all integrated throughout a network of facilities.

According to the logistical characters, logistics information management systems include modules such as system management, resources management, customer management, contract management, exceptional management, storage management, transaction management and invoicing management. Each subsystem has different functionality and the logistical information systems are the thread that links logistics activities into an integrated process. Logistical information systems initiate activities and track information regarding processes, and assist in management decision making.

The main thing in our system is, we have to provide end to end security for customer and provider data by using QR code concept.in QR code binary image we have to hide customer and provider data. Only authorized customer can view data. For customer interest mining we used collaborative filtering method. The main principle

of this method is recommendation of vehicle according to provider service. Recommendation is used to find user interest and provide related event. We are recommendation of nearest best service provider according to user interest and detect spam service provider. Customer Advice is a term which is used in the sense to interest mining. One can give advice for the problem or can simply give a solution. Advice seems to be an opinion with command or control and even manipulation. Suggestion is like, a customer interest opening about service is used for new user to use service provider vehicle.

1.2 Motivation

The Transportation logistics systems have emerged recently with the development of Global Positioning System (GPS), mobile communication technologies and wireless networking technologies. These are very important as they can contribute to several benefits such as suggesting right places for getting customer, increasing revenue to drivers, reducing waiting time hence increasing the number of trips the drivers can perform. The main purpose of this system is to supply transportation vehicles that are used to meet customer demands through the planning, control and implementation of the effective movement and storage of related information and services from origin to destination and also maintain information of user in the form of QR code. The proposed system focuses on delivery of goods, raw materials, shifting home appliances, furniture while relocation.

1.3 Problem Definition and Objective

To solve the issues of the traditional transportation logistics systems, a web based solution has been proposed that will allow both the customers and the service providers to track the vehicles while transportation and also helps to provide

best services to the customers at lowest cost by recommending only available service providers at preferred cost.

Objectives

The objective of the proposed system is to provide best possible logistics services to the customer at lowest cost.

- Allowing the customer to trace the current location of vehicle on the map.
- We have to provide end to end security for customer and provider data by using QR code concept.
- We are recommendation of nearest best service provider according to user interest.
- Detection of spam service provider with the help of review of customers.

1.4 Project Scope and Limitation

In Logistic systems focused scope on public transportation services have been studied extensively. Generally, these logistic management systems can be divided roughly into two categories. The first category showing vehicles according to the dynamic requests. The second category showing vehicles according to historic trajectories of the mobility patterns of customers using GPS.

Limitation

- Internet is required.
- QR scanner is required.

1.5 Methodologies of Problem solving

In the traditional system for movers and packers, customers need to search for providers and the required vehicles to make transportation successful. This leads to increase in waiting time for customer and also the customer is unable to trace out the current location of transported material. The main thing in our system is, we have to provide end to end security for customer and provider data by using QR code concept. In QR code binary image we have to hide customer and provider data. only authorized customer can view data. For customer interest mining we used collaborative filtering method. The main principle of this method is recommendation of vehicle according to provider service. Recommendation is used to find user interest and provide related event. Customer Advice is a term which is used in the sense to interest mining. One can give advice for the problem or can simply give a solution. Advice, seems to be an opinion with command or control and even manipulation. Suggestion is like, an customer interest opening about service is used for new user to use service provider vehicle. We have to provide end to end security for customer and provider data by using QR code concept.

Chapter 2

LITERATURE SURVEY

Seri al No	Paper Title	Paper concept	Advantage	Disadvant age
1	J. J. Q. Yu and A. Y. S. Lam, “Autonomous vehicle logistic system: Joint routing and charging strategy,” <i>IEEE Transport Intelligence Transport System</i> , to be published. 2016	We aim to make the imminent changes more tangible. We start from the general consensus that the industry is transforming and going further to specify	1. Within a more complex and diversified mobility industry landscape, incumbent players will be forced to simultaneously compete on multiple fronts and cooperate	The automotive industry presents many challenges like replace country or region but also many new opportunities

		<p>and quantify the magnitude of change.</p>	<p>with company. 2. City type will replace country or region as the most relevant segmentation dimension that determines mobility behavior.</p>	
2	<p>A. Holzapfel, H. Kuhn, and M. G. Sternbeck, “Product allocation to different types of distribution center in retail logistics networks,” <i>Eur. J. Oper. Res.</i>, vol. 264, no. 3, pp. 948–966, Feb. 2016.</p>	<p>A novel solution approach is developed and applied to a real-life case of a leading European grocery retail chain.</p>	<p>In-depth analyses of the results and sensitivity analyses provide insights into the solution structure and the major related</p>	<p>A further aspect arises from assuming identical store delivery frequencies in outbound transportation from all DC types</p>

			issues.	
3	R. A. Vasco and R. Morabito, "The dynamic vehicle allocation problem with application in trucking companies in Brazil," <i>Comput. Oper. Res.</i> , vol. 76, pp. 118–133, Dec. 2016	This paper deals with the dynamic vehicle allocation problem (DVAP) in road transportation of full truckloads between terminals.	The DVAP involves multi-period resource allocation and consists of defining the movements of a fleet of vehicles that transport goods between terminals with a wide geographic al distribution.	The results of a practical validation of the model and solution methods proposed, is not clearly mentioned.
4	L. C. Coelho, J. Renaud, and G. Laporte,	This paper provides a survey of	1. It reviews papers in	Another promising area of

	<p>“Road-based goods transportation: A survey of real-world logistics applications from 2000 to 2015,” <i>Inf. Syst. Oper. Res.</i>, vol. 54, no. 2, pp. 79–96, 2016.</p>	<p>the main real-life applications of road-based goods transport over the past 15 years.</p>	<p>the areas of oil, gas and fuel transport, retail, waste collection and management over the past 15 years.</p> <p>2. Solve Integration of routing problems with other components of the supply chain.</p>	<p>research is the integration of vehicle routing with other transportation modes such as ships and trains is not mentioned.</p>
5	Albara Awajan, “An Automated	This proposed system	The system provides a convenient,	For more customers are the in

	<p>Taxi Booking and Scheduling System”, Conference 12 January 2015</p>	<p>introduces an Automate d Taxi Booking and Schedulin g System with safe booking</p>	<p>assured and safe bookin g for both taxi drivers and registered customers through mobile devices.</p>	<p>the time are arrived then problems occurred ,there are no taxi parking, central offices or a booking system for the large number of taxis</p>
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Chapter 3

SOFTWARE REQUIREMENT SPECIFICATION

3.1 ASSUMPTIONS AND DEPENDENCIES

Assumptions:- In this proposed Logistic system consist of tracking of logistic system and dynamic request of user. Detection of spam service provider and recommendation of best service provider.

Dependencies:- For tracking of logistic system internet is required without internet we cannot tracking the system and dynamic request accept by the user. Detection of spam service provider and recommendation of best service provider admin need review and rating of user without review and rating admin cannot detect spam service provider as well as recommendation of best service provider.

3.2 FUNCTIONAL REQUIREMENTS

3.2.1 System Feature 1(Functional Requirement)

- In this system tracking of logistic vehicle Google key is required.
- Provide security in form of QR code, for scanning QR code application is needed
- For detect best service provider need rating and review.

- For detect spam service provider need rating and review.

3.2.2 System Feature 2(Functional Requirement)

Database Requirements

- Database - MySQL

Software Requirements (Platform Choice)

- Operating System - Windows 7
- Programming Language - Java/J2EE
- Software Version - JDK 1.7 or above
- IDE - Eclipse

3.3 EXTERNAL INTERFACE REQUIREMENTS(IF ANY)

3.3.1 User Interface

Login, registration of user and service provider and Login of Admin and Driver.

Homepage-User, Admin, Service provider and Driver

- Admin Login with authentication, View user and Service Provider, Accept Payment, View rating and review, Detect spam service provider, Recommendation of best service provider.
- Service Provider Registration and login with authentication, Add vehicle and driver, Accept Request, Accept Payment, View History
- User Registration and login with authentication, Search Vehicle, Request Vehicle, Tracking of Vehicle, Give rating and review, Give payment, View best service provider, View History

- Driver Login with authentication, View request from service provider.

3.3.2 Hardware Interfaces

- The entire software requires completely equipped computer system including monitor, keyboard.20 GB ram for storing data.

3.3.3 Software Interfaces

- The system can use Microsoft as the operating system platform. System also makes use of certain GUI tools. To run this application we need JDK 1.7 and above as java platform and Apache tomcat as server. To store data we need MYSQL database .QR code scanner for scan the information.

3.3.4 Communication Interfaces

- JSP
- Chrome or Mozilla Firefox

3.4 NONFUNCTIONAL REQUIREMENTS

3.4.1 Performance Requirements

In identifying and quantifying performance requirements, it is important to identify the reasoning behind a particular requirement. This is part of the general capacity planning process. Users might be basing their statements of requirements on assumptions about the logic of the program that do not match the programmers assumptions.

In order to assess the performance of a system the following must be clearly specified:

- **Response time-** Response time is for searching the image is less as compare to existing system. View time for all information is also less. Fast searching time in proposed system.

- **Workload-**The workload is often described as the scenarios that the users are likely to execute. How much search images in this system also find out which image is most trending in proposed system. Find out how much user are used this system.
- **Scalability-** In one respect scalability is simply specified as the search more relevant searching in the systems workload that the system should be able to process.
- **Platform-** Java Platform is used for development of the system and ECLIPSE IDE is used for it. For storing the data MYSQL is used.

3.4.2 Safety Requirements

Software System Safety upgrades framework safety in the configuration, improvement, use and maintenance of software frameworks and their incorporation with security basic equipment frameworks in an operational. Only authorized admin and user access this system.

- The failure of system to search of images shall be detected, isolated , and recovered.
- Software shall perform Automatic Failure detection, isolation and Recovery.
- Only authorized person can access the system data

3.4.3 Security Requirements

- Secure Functional Requirements; this is a security related description that is integrated into each functional requirement. Typically this also says what shall not happen. This requirement artifact can for example be derived from misuse cases. Only authorized user can search using hashing value technique

3.4.4 Software Quality Attributes

Capacity

Capacity of project according to data it is very less.

Availability

Proposed system will available on java application.

Reliability

System is reliable for Recommendation while customer want vehicle for transportation.

Security

- User when login to system that time users name and password match accurately.
- **Correctness :-** Searching of service provider is correct.
- **Maintainability:-** It is easy to maintain data or information.

3.5 SYSTEM REQUIREMENTS

3.5.1 Database Requirements

- Database - MySQL

3.5.2 Software Requirements (Platform Choice)

- Operating System - Windows 7
- Programming Language - Java/J2EE
- Software Version - JDK 1.7 or above
- IDE - Eclipse

3.5.3 Hardware Requirements

- Processor - Pentium IV/Intel I3 core
- Speed - 1.1 GHz
- RAM - 2 GB(min)
- Hard Disk - 20GB
- Keyboard - Standard Keyboard
- Mouse - Two or Three Button Mouse
- Monitor - LED Monitor

3.6 ANALYSIS MODELS: SDLC MODEL TO BE APPLIED

Waterfall Model

The waterfall model is a sequential model that is used in the software development processes, where the process is seen flowing steadily downwards through the phase of Requirement Gathering and Analysis, Design, Implementation, Testing, Deployment and Maintenance.

1) Requirement Gathering and analysis:

Here requirements are gathered means which kind of dataset is required. Then what are functional requirement of system. Document is prepared, and then use cases are designed. In our system we gather all information of user, admin, and service provider and driver module.

2) System Design:

In this stage, hardware and software requirement to design the system is decided. It uses above mentioned hardware and software requirements. We design the of user,

admin, and service provider and driver module according to functionality of each module.

3) Implementation:

In this stage, system is developed module wise. In this system consist of mainly 4 modules that is

1. Admin
2. Customer
3. Service Provider
4. Driver

4) Testing:

In this stage, all developed softwares are installed and they are tested in different ways against the system requirements. In this stage we check all this module is working properly or not with proper authentication. Testing the tracking system is working properly or not.

5) Development:-

In this development stage we developed the new functionality of each module like detect spam service provider and recommendation of best service provider. We develop all system with proper functions.

6) Maintenance:-

According to softwares new version and their use, they need to be updated. In our system, some browsers are not supportive to our web pages for that only specific browsers need to be used. This logistic system is easy to maintain.

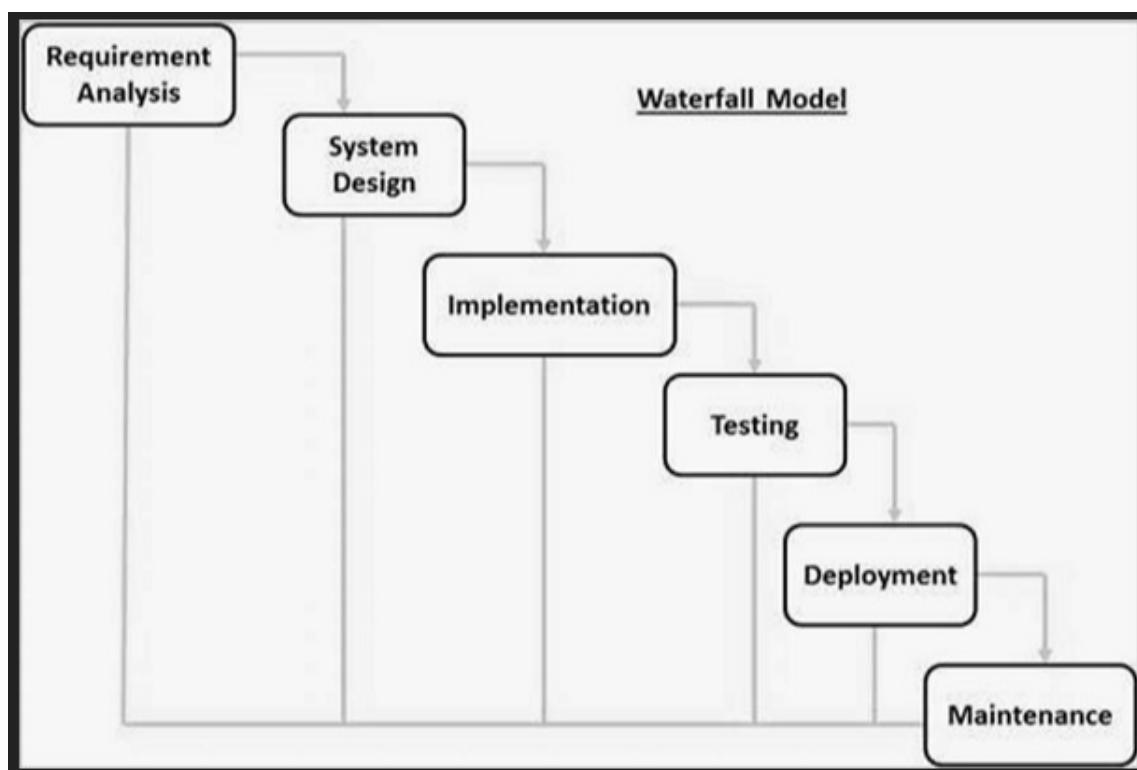


Figure 3.1: Waterfall module

Chapter 4

SYSTEM DESIGN

4.1 SYSTEM ARCHITECTURE

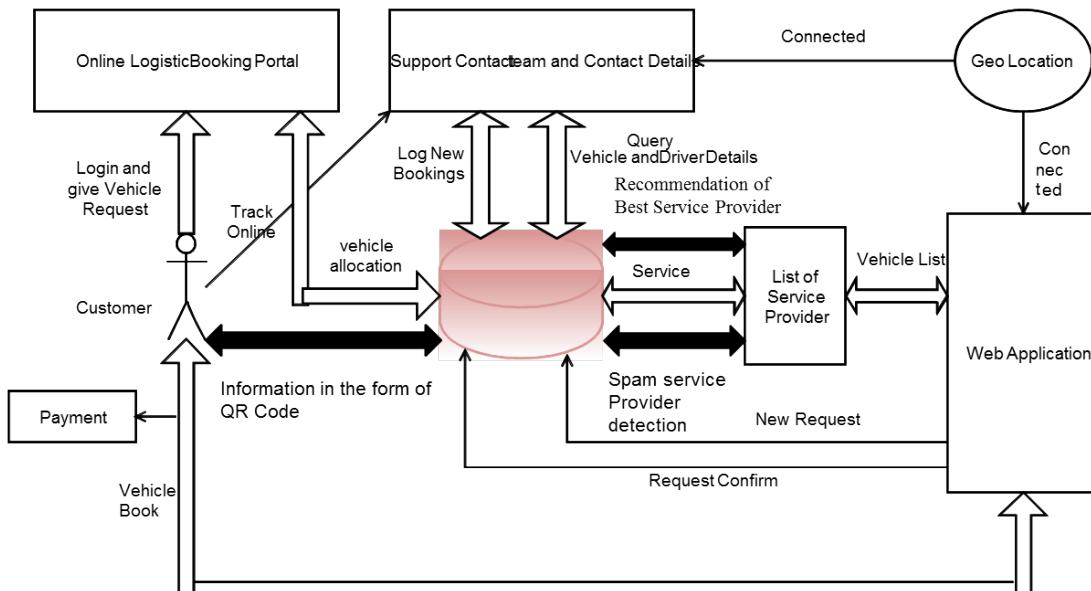


Figure 4.1: : Proposed Architecture

In the traditional system for movers and packers, customers need to search for providers and the required vehicles to make transportation successful. This leads to increase in waiting time for customer and also the customer is unable to trace out the current location of transported material. The main thing in our system is, we have to provide end to end security for customer and provider data by using QR code concept. In QR code binary image we have to hide customer and provider data. only authorized

customer can view data. For customer interest mining we used collaborative filtering method. The main principle of this method is recommendation of vehicle according to provider service. Recommendation is used to find user interest and provide related event. Customer Advice is a term which is used in the sense to interest mining. One can give advice for the problem or can simply give a solution. Advice seems to be an opinion with command or control and even manipulation. Suggestion is like, a customer interest opening about service is used for new user to use service provider vehicle. We have to provide end to end security for customer and provider data by using QR code concept.

4.2 MATHAMATICAL MODEL

Let us consider S as a system for automatically recommends vehicle to customer.

$$S = \{F, I, O, e\}$$

- **INPUT:** Identify the inputs $F = f_1, f_2, f_3 \dots, f_n$ F as set of functions to execute commands.
- $I = i_1, i_2, i_3$ Sets of inputs to the function set $O = o_1, o_2, o_3$ Set of outputs from the function sets,
- $e =$ End of the program.

$$S_1 = I, F, O$$

- $I =$ Query submitted by the Customer, i.e. query
- $O =$ Output of desired query, i.e. vehicle recommendation
- $F =$ Functions implemented to get the output, i.e. collaborative ltering

A] Mapping Diagram

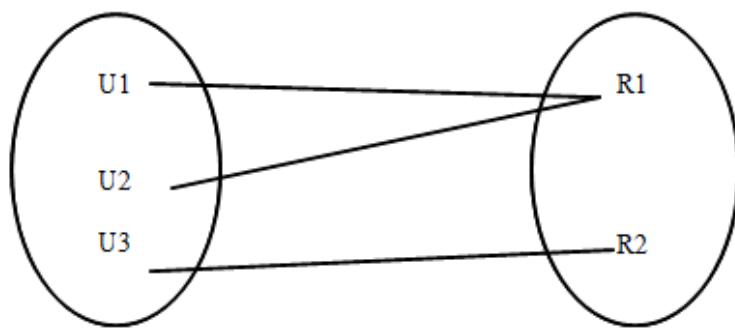


Figure 4.2: Mapping Diagram

Where,

U=users

R=location query.

U1=Right location query (R1)

U2= Right Location Query (R2)

U3=Wrong Location Query (R3)

4. Set Theory

S={s, e, X, Y,}

Where,

s = Start of the program.

1. Log in with webpage.
2. View vehicle recommendation as per location, track vehicle location. Do payment and give ratings for the service.

e = End of the program.

Retrieve all vehicle details from service provider. User can view booking vehicle details about driver and vehicles.

Recommend vehicle according to cost and place.

X = {V}

X = Input of the program.

Where, V = vehicles.

Y = Output of the program.

First the user will enter query for viewing the vehicle, then they will get all vehicle list from providers database. According to warehouse material, place order and mention cost per km and distance. At final stage provider will accept request and assign vehicle for given time period.

X, Y U

Where, U= {customer, V}

Where, customer and V are the elements of the set.

customer =service provider, customer

V=Vehicle

Failures and Success conditions.

Success:

Search the required information from available data in the database.

Customer gets result very fast according to their needs.

Failures:

1. Huge database can lead to more time consumption to get the information.
2. Hardware failure.
3. Software failure.

Mathematical model in equation form for Logistic System:-

Given:

Xq= Request q Q will be served vehicle or not

Tr= Time for request of vehicle

Cv=Cost Of Vehicle type

Dr=Distance of Route

Ct=Cost of Trip

Fu=Fuel Used

Equation:-

If Xq is accepted with Tr then Ct is calculated by following equation

$$Ct = Dr * Cv$$

After calculating the cost of trip calculate fuel of trip, using following equations

$$Fu = Ct * Dr$$

4.3 DATA FLOW DIAGRAMS

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system, modeling its process aspects. A DFD is often used as a preliminary step to create an overview of the system without going into great detail, which can later be elaborated. DFDs can also be used for the visualization of data processing (structured design).

A DFD shows what kind of information will be input to and output from the system, how the data will advance through the system, and where the data will be stored. It does not show information about process timing or whether processes will operate in sequence or in parallel, unlike a traditional structured flowchart which focuses on control flow, or a UML activity workflow diagram, which presents both control and data flows as a unified model.

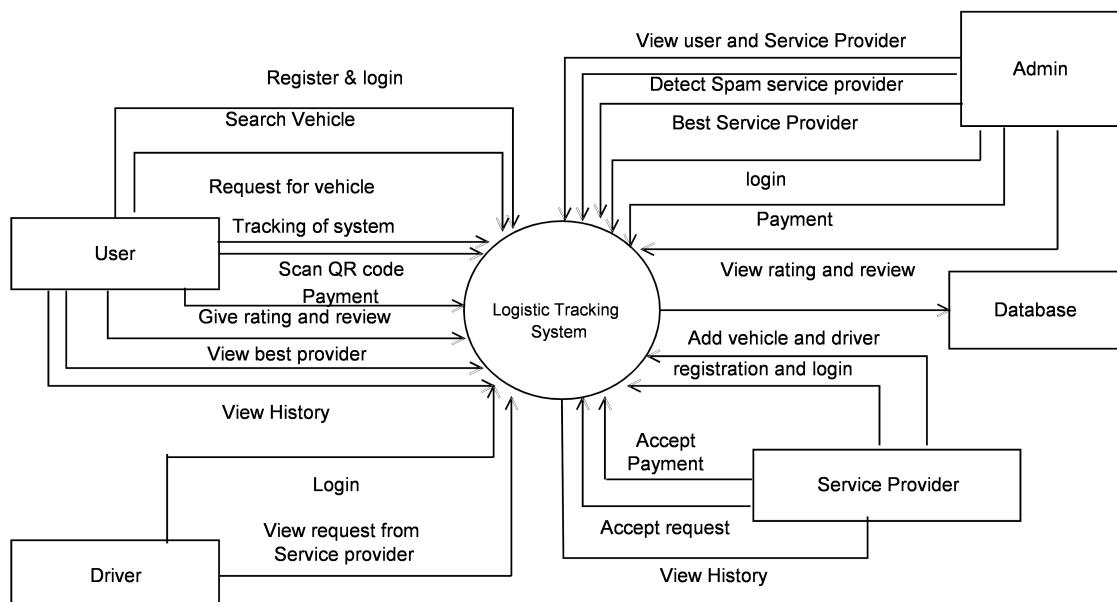


Figure 4.3: DFD 0

DFD Level 1

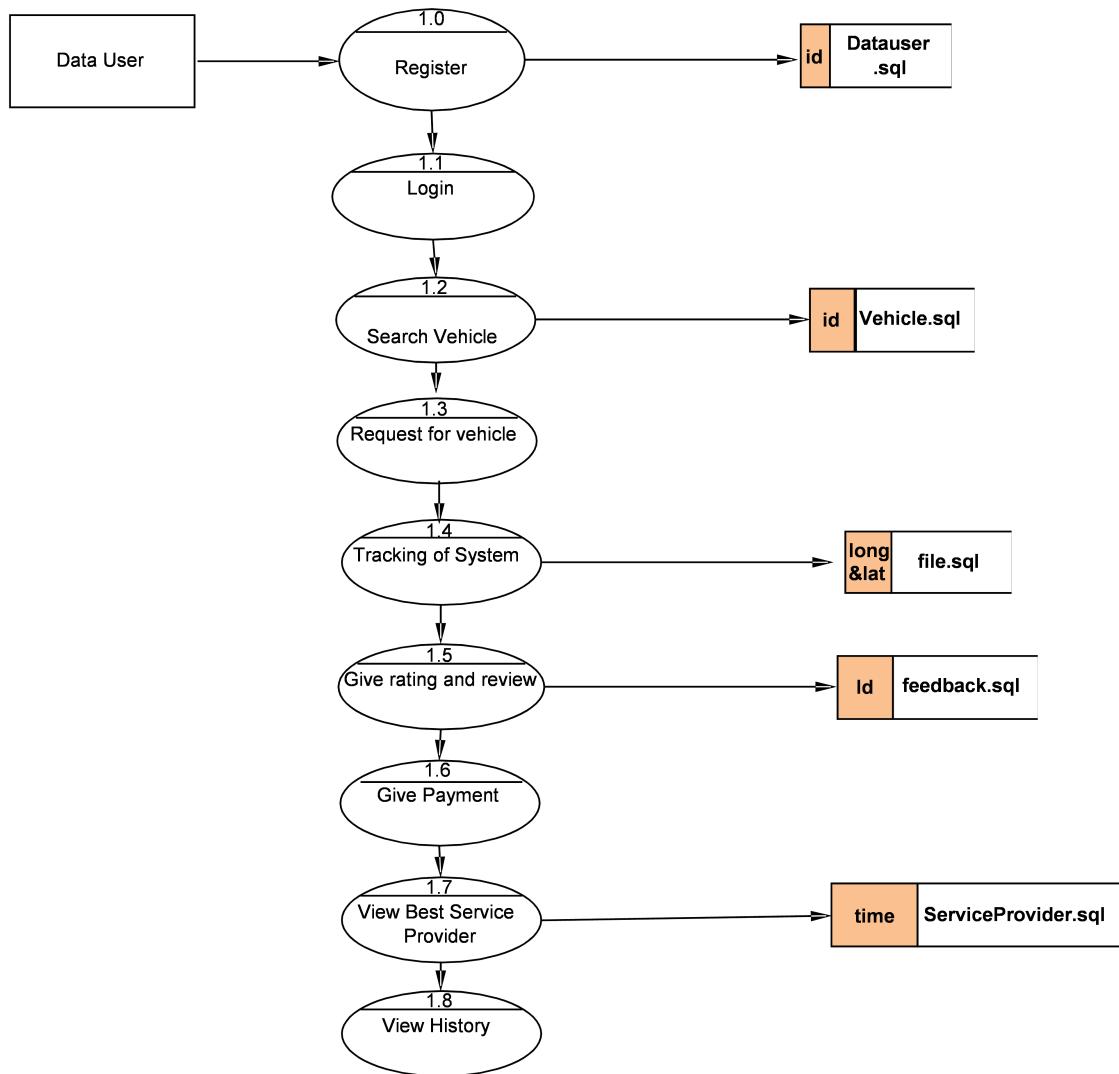


Figure 4.4: DFD Lvel 1

DFD Level 2

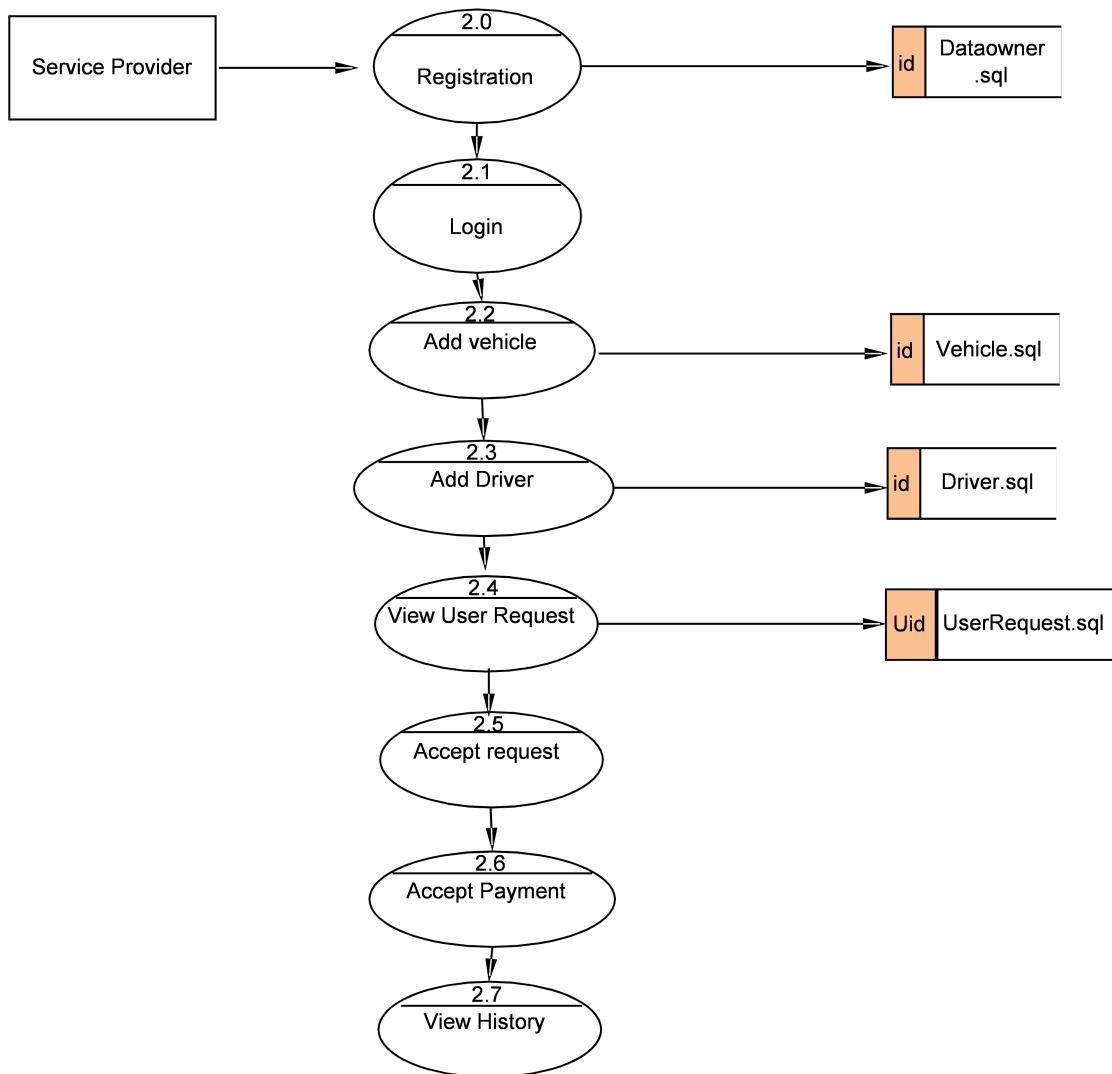


Figure 4.5: DFD Level 2

4.4 ENTITY RELATIONSHIP DIAGRAMS

An entityrelationship model (ER model for short) describes interrelated things of interest in a specific domain of knowledge. A basic ER model is composed of entity types (which classify the things of interest) and specifies relationships that can exist between instances of those entity types. In software engineering, an ER model is commonly formed to represent things that a business needs to remember in order to perform business processes. Consequently, the ER model becomes an abstract data model that defines a data or information structure which can be implemented in a database, typically a relational database.

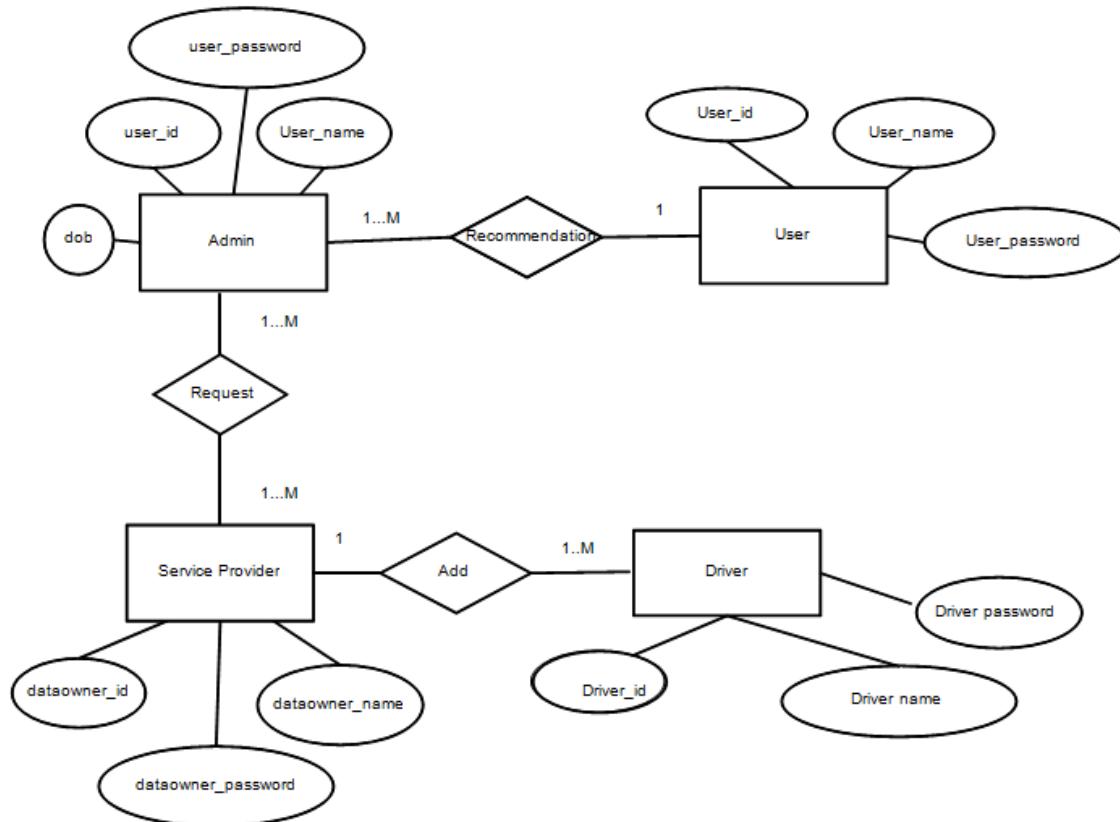


Figure 4.6: ER Diagram

4.5 UML DIAGRAM

4.5.1 Use case diagram:-

A use case diagram is a graphical representation of a user's interaction with the system and depicting the specifications of a use case. A use case diagram can show the different types of users of a system and the various ways in which they interact with the system. Use case diagrams are used to gather the requirements of a system including internal and external influences. These requirements are mostly design requirements. So when a system is analyzed to gather its functionality use cases are prepared and actors are identified. The purposes of use case diagrams can be as follows:

- Used to gather requirements of a system.
- Used to get an outside view of a system.
- Identify external and internal factors influencing the system.
- Show the interaction among the actors.

Use Case Diagram

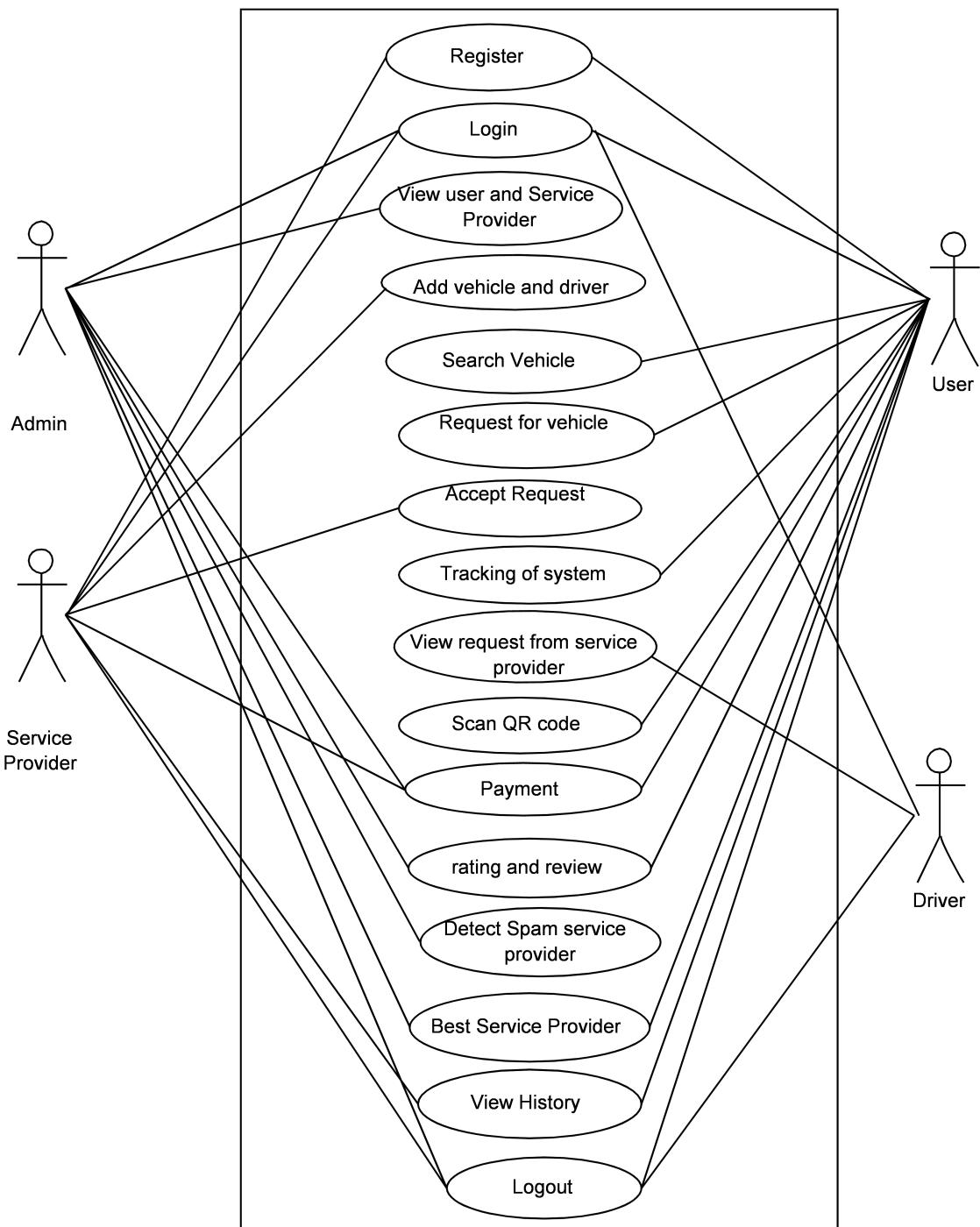


Figure 4.7: Use case Diagram

4.5.2 Activity diagrams

Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency. In the Unified Modeling Language, activity diagrams are intended to model both computational and organizational processes (i.e. workflows). Activity diagrams show the overall flow of control. Activity diagrams are constructed from a limited number of shapes, connected with arrows. The most important shape types:

- Rounded rectangles represent actions;
- Diamonds represent decisions;
- Bars represent the start (split) or end (join) of concurrent activities;
- A black circle represents the start (initial state) of the workflow;
- An encircled black circle represents the end (final state).

Arrows run from the start towards the end and represent the order in which activities happen. Hence they can be regarded as a form of flowchart. Typical flowchart techniques lack constructs for expressing concurrency. However, the join and split symbols in activity diagrams only resolve this for simple cases; the meaning of the model is not clear when they are arbitrarily combined with decisions or loops.

Admin Activity Diagram

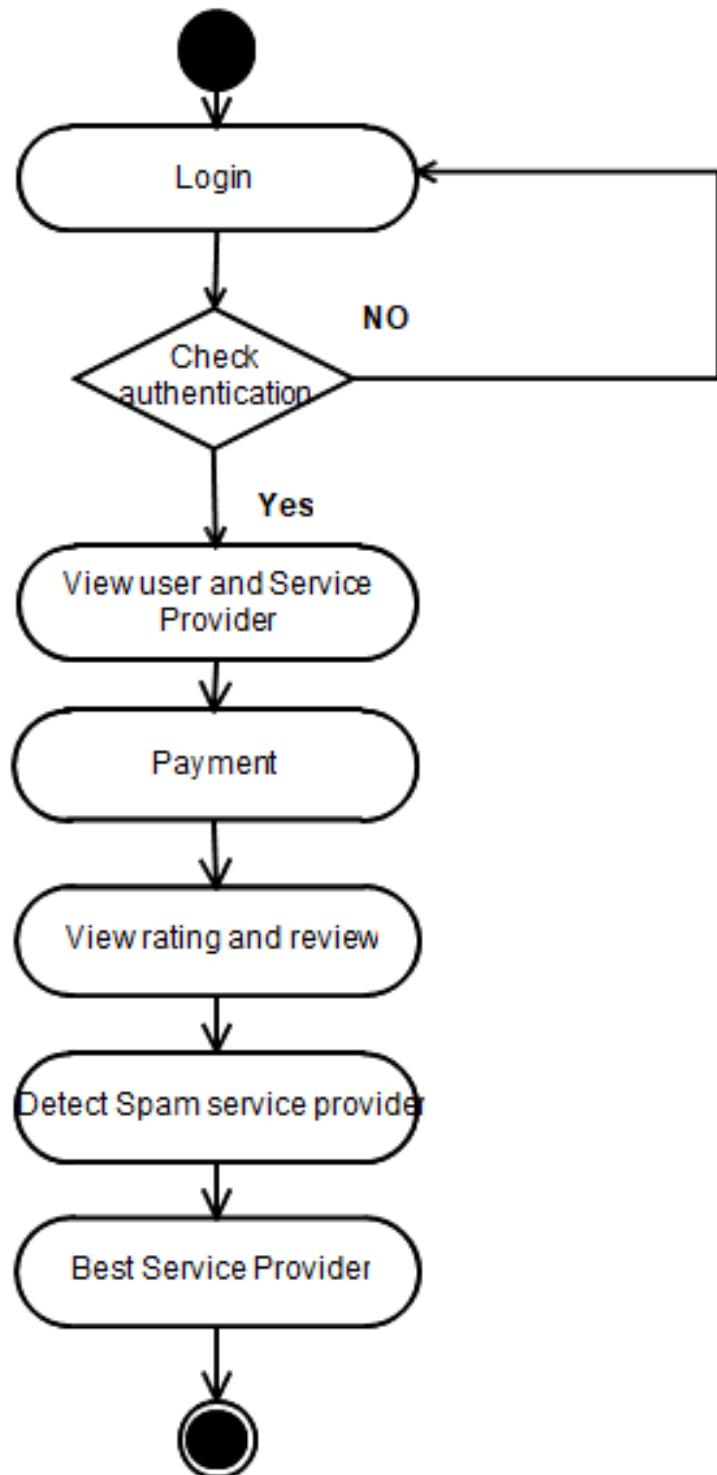


Figure 4.8: Admin Activity Diagram

User Activity Diagram

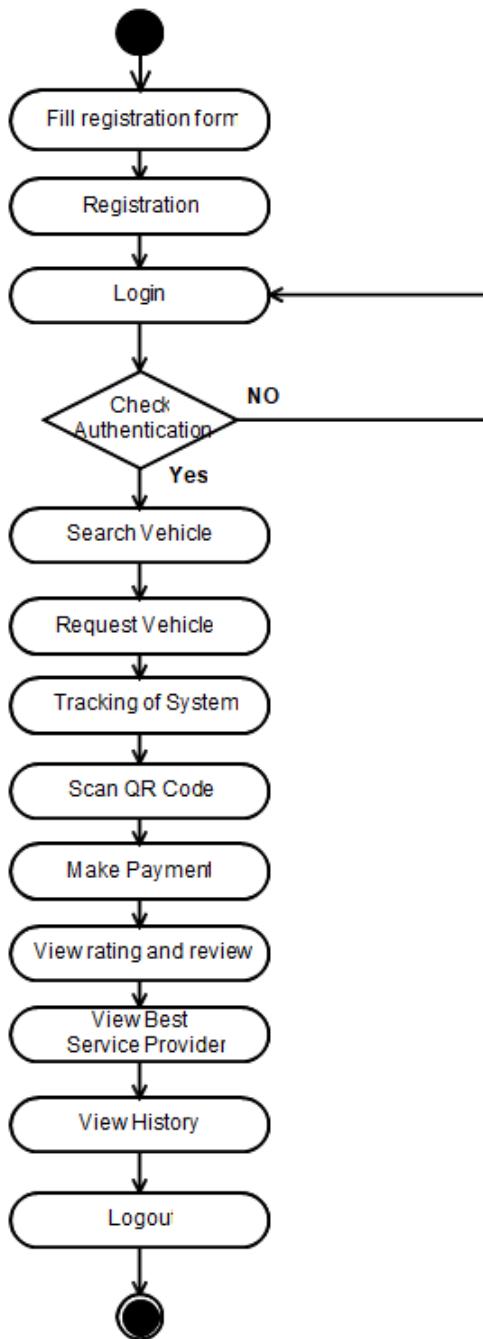


Figure 4.9: User Activity Diagram

Service Provider Activity Diagram

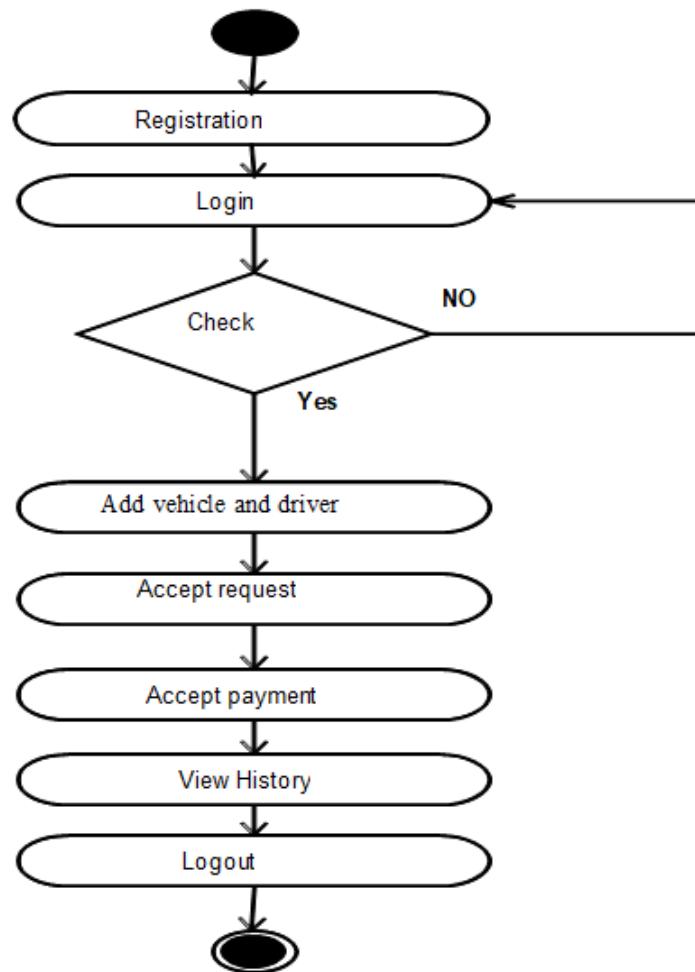


Figure 4.10: Service Provider Activity Diagram

4.5.3 Sequence diagram

A Sequence diagram is an interaction diagram that shows how processes operate with one another and in what order. It is a construct of a Message Sequence Chart. A sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario. Sequence diagrams are typically associated with use case realizations in the Logical View of the system under development. Sequence diagrams are sometimes called event diagrams or event scenarios.

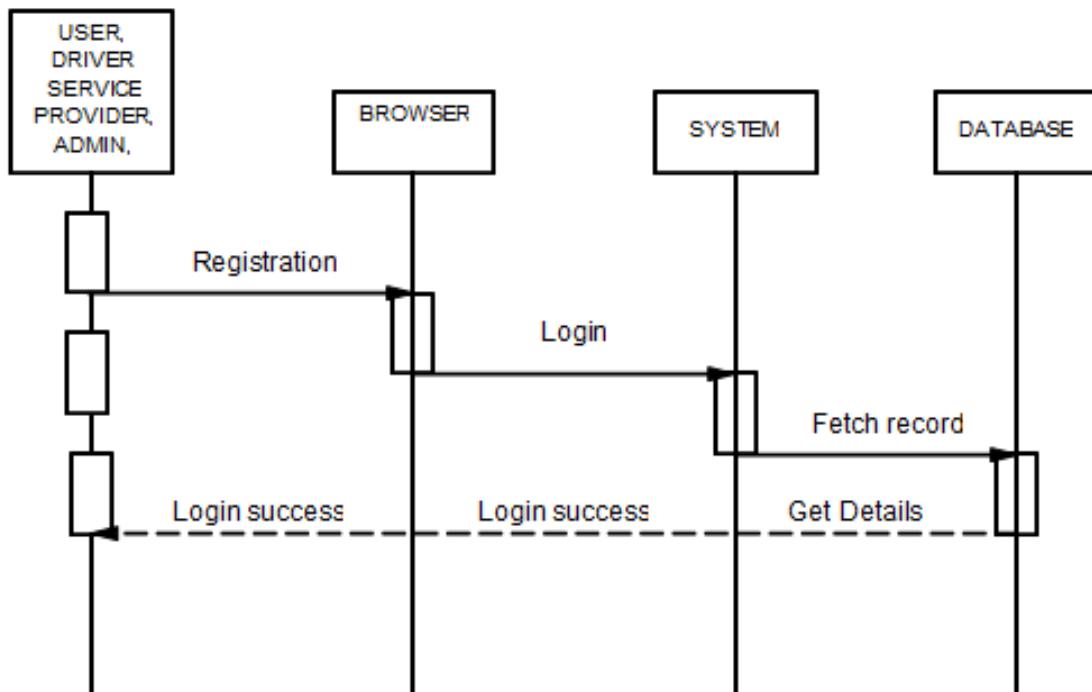


Figure 4.11: Registration Sequence Diagram

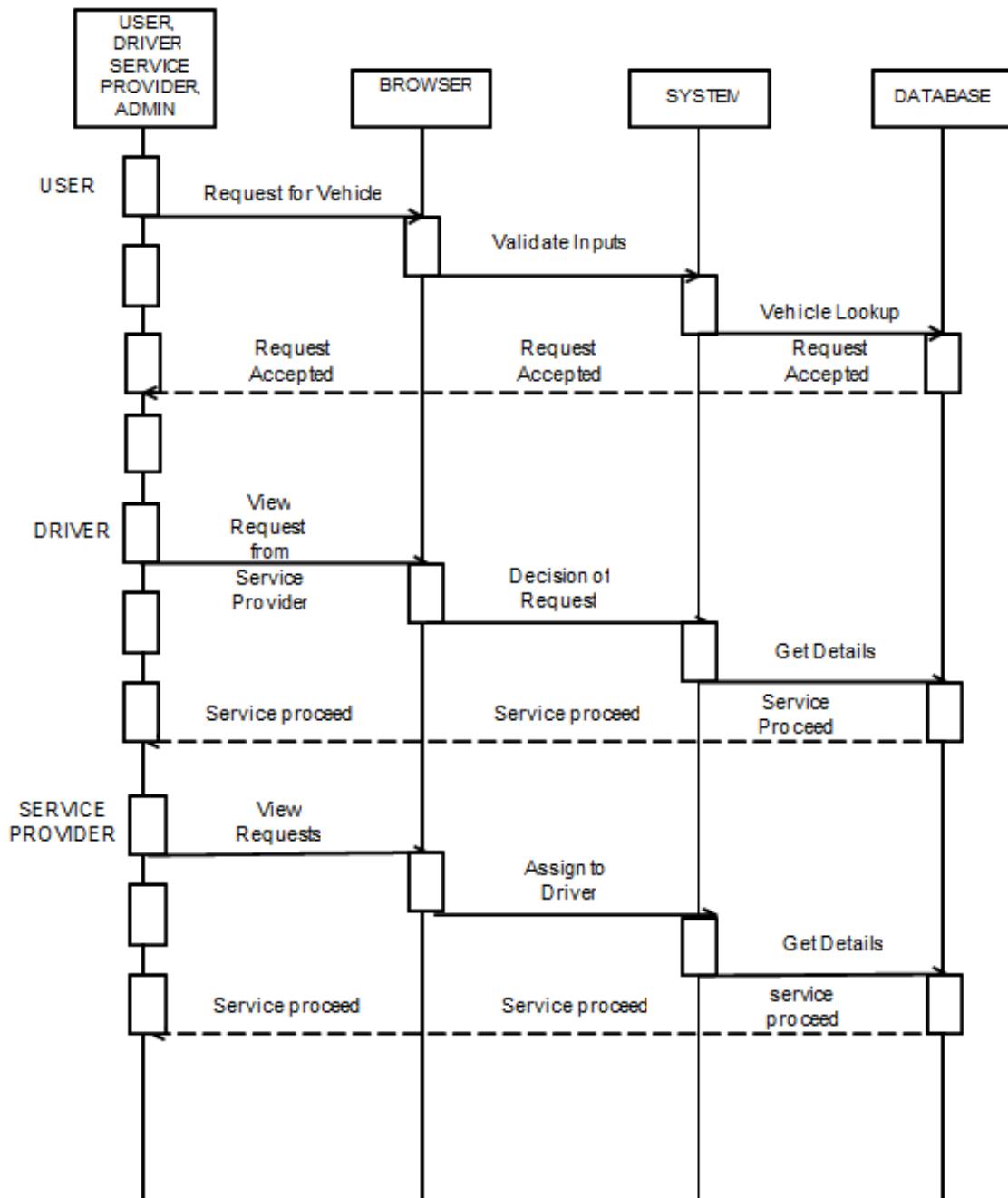


Figure 4.12: Scheduling Sequence Diagram

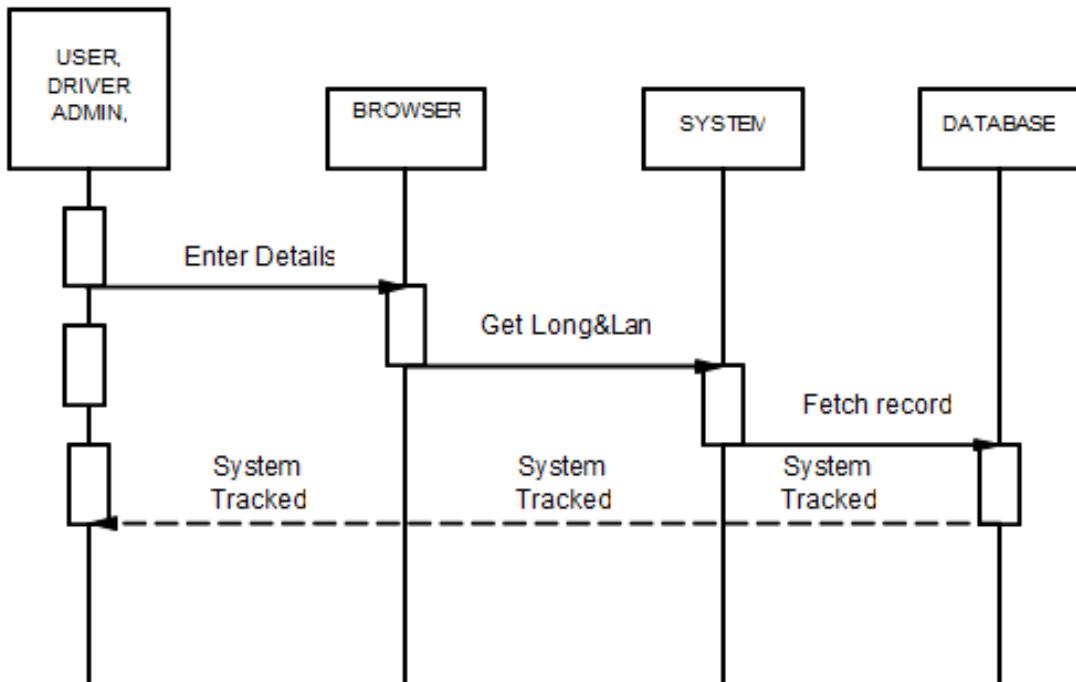


Figure 4.13: Tracking Sequence Diagram

4.5.4 Collaboration diagram

A collaboration diagram is a type of visual presentation that shows how various software objects interact with each other within an overall IT architecture and how users can benefit from this collaboration. A collaboration diagram often comes in the form of a visual chart that resembles a flow chart.

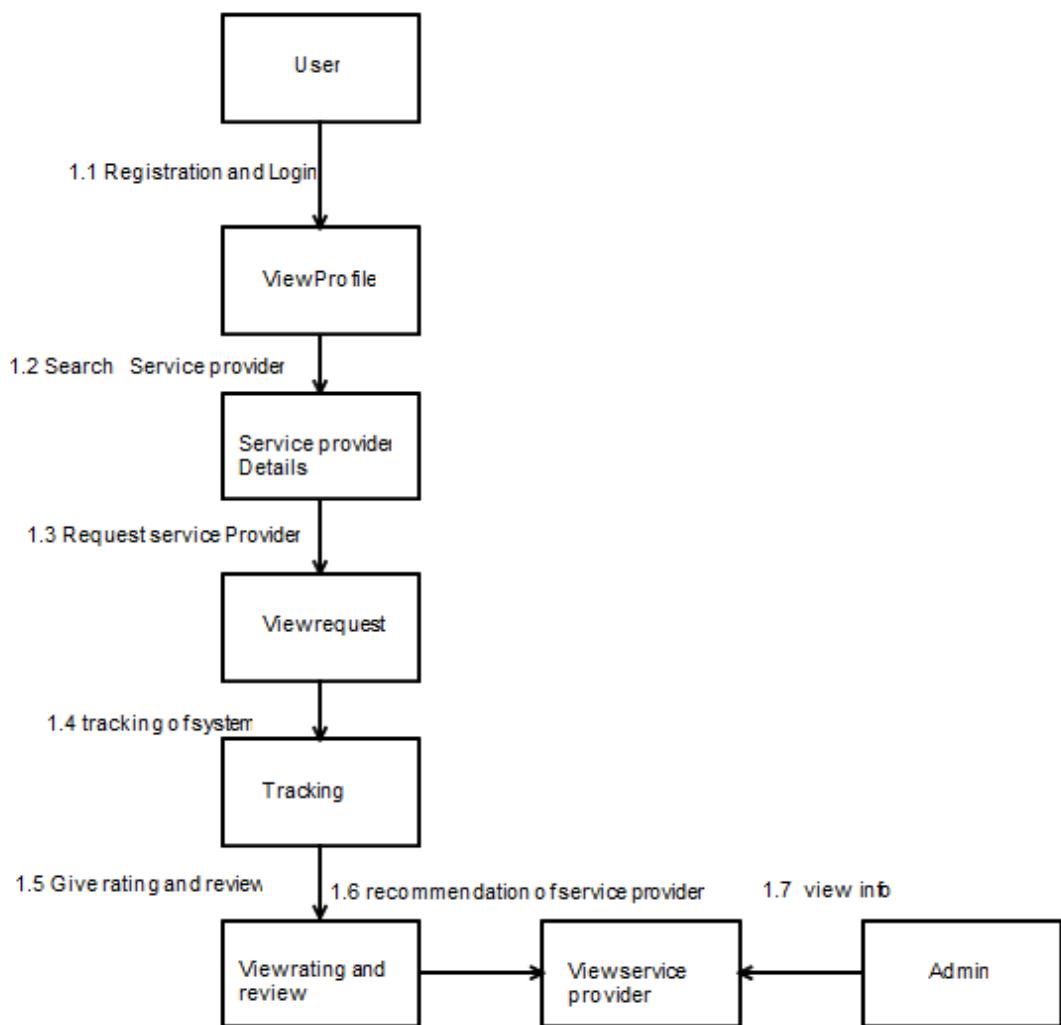


Figure 4.14: : Collaboration Diagram

4.5.5 Class Diagram:

The class diagram is a static diagram. It represents the static view of an application.

Class diagram is not only used for visualizing, describing and documenting different aspects of a system but also for constructing executable code of the software application. The class diagram describes the attributes and operations of a class and also the constraints imposed on the system. The class diagrams are widely used in the modeling of object oriented systems because they are the only UML diagrams which can be mapped directly with object oriented languages. The class diagram shows a collection of classes, interfaces, associations, collaborations and constraints. It is also known as a structural diagram. The purpose of the class diagram is to model the static view of an application.

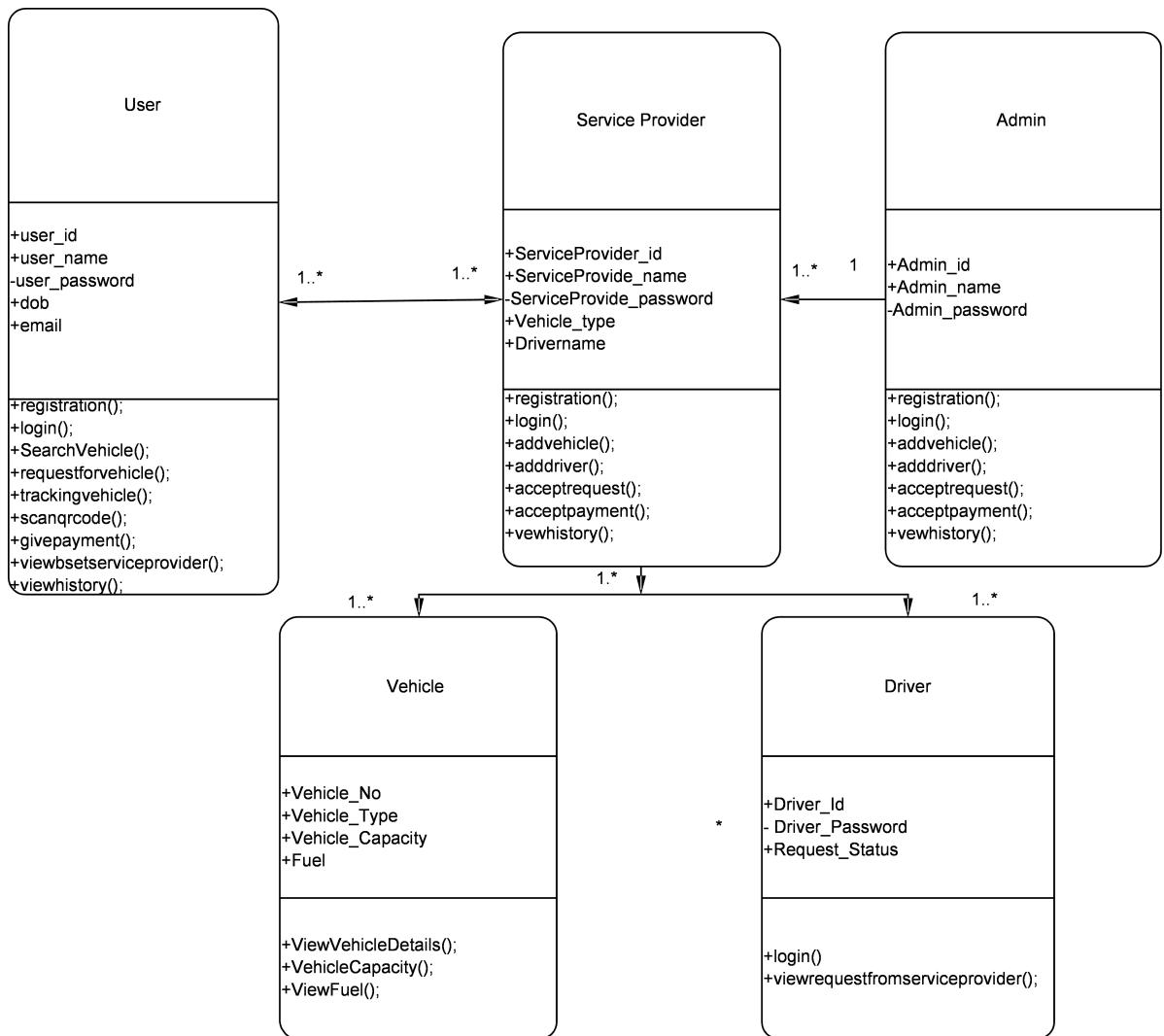


Figure 4.15: : Class Diagram

4.5.6 Component Diagram:

A Component Diagram displays the structural relationship of components of a software system. These are mostly used when working with complex systems that have many components. Components communicate with each other using interfaces. The interfaces are linked using connectors.

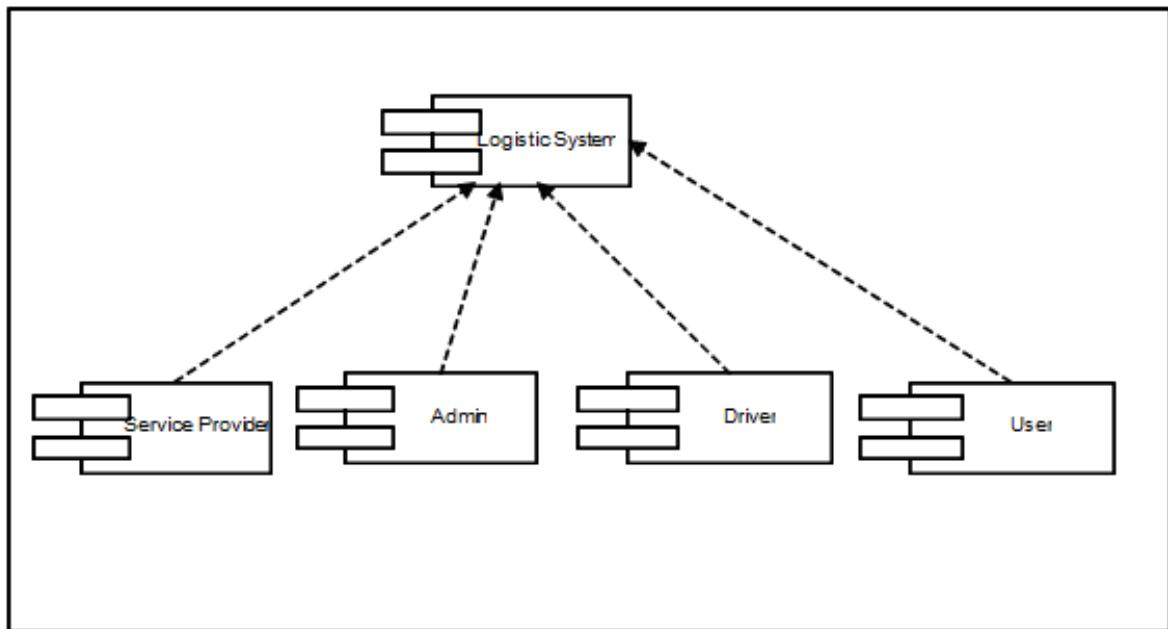


Figure 4.16: : Component Diagram

4.5.7 Deployment Diagram:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed. So deployment diagrams are used to describe the static deployment view of a system. Deployment diagrams consist of nodes and their relationships.

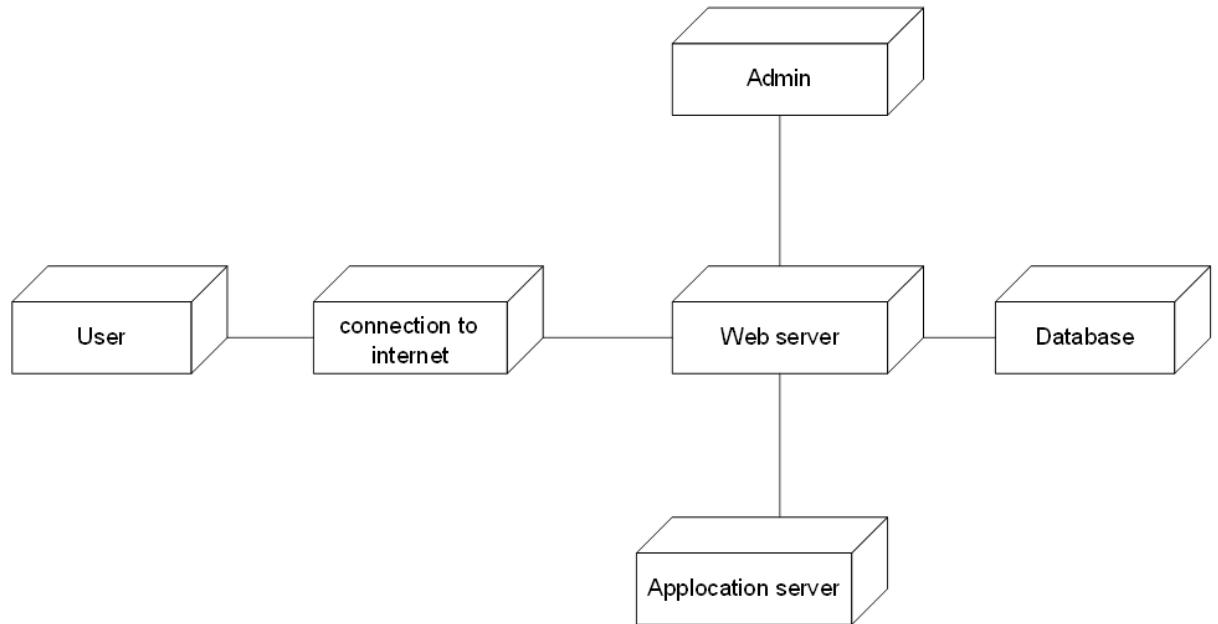


Figure 4.17: : Deployment Diagram

Chapter 5

PROJECT PLAN

5.1 PROJECT ESTIMATES

5.1.1 Reconciled Estimates :

5.1.1.1 Cost Estimate

- Line Of code (LOC) is 3500 (Appr.)
- LOC in KLOC (Kiloes LOC) is 3.5 KLOC.

Effort:

The Effort is calculated by formula.

$$E=2.4*(\text{KLOC})^{1.05}$$

$$E = 2.4 * (3.5)^{1.05}$$

$$E = 8.94 \text{ Appr.}$$

5.1.1.2 Time Estimates

The Development Time is calculated by formula.

$$D = 2.5 * (E)^{0.38}$$

$$D = 2.5 * (8.94)^{0.38}$$

$$D = 5.75 \text{ Appr.}$$

5.1.2 Project Resources:

Hardware Resources Required

- Processor - Pentium IV/Intel I3 core
- Speed - 1.1 GHz
- RAM - 512 MB (min)
- Hard Disk - 20GB
- Keyboard - Standard Keyboard
- Mouse - Two or Three Button Mouse
- Monitor - LED Monitor

Software Resources Required:

- Operating System - Window
- Application Server - Tomcat5.0/6.X
- Front End - Java, SDK
- Database - SQL
- IDE - Eclipse

5.2 RISK MANAGEMENT

The identification of Risk is central to the success and failure of the project, hence I have made a concentrated effort to minimize and even eliminate certain risk related. Software risk could be classified into categories. Internal and External risk, those risk which arise from the risk factor within the organization can be defined internal risk

and the risk coming from outside is called external risk. Internal risk avoidance can be done by clear picturing the process, product risk.

5.2.1 Risk Identification

For risks identification, review of scope document, requirements specifications and schedule is done. Answers to questionnaire revealed some risks. Please refer table for all the risks. You can refer following risk identification questionnaire.

1. Have top software and customer managers formally committed to support the project?
2. Are end-users enthusiastically committed to the project and the system/product to be built?
3. Are requirements fully understood by the software engineering team and its customers?
4. Have customers been involved fully in the definition of requirements?
5. Do end-users have realistic expectations?
6. Does the software engineering team have the right mix of skills?
7. Are project requirements stable?
8. Is the number of people on the project team adequate to do the job?
9. Do all customer/user constituencies agree on the importance of the project and on the requirements for the system/product to be built?

5.3 Risk Analysis

The risks for the Project can be analyzed within the constraints of time and quality

ID	Risk Description	Probability	Impact		
			Schedule	Quality	Overall
1	System Failure	Low	Low	High	High
2	Connection Failure	Low	Low	Low	Low

Table 5.1: Risk Table

Probability	Value	Description
High	Probability of occurrence is	> 75%
Medium	Probability of occurrence is	26 - 75%
Low	Probability of occurrence is	< 25%

Table 5.2: Risk Probability definitions

Impact	Value	Description
Very high	> 10%	Schedule impact or Unacceptable quality
High	5 - 10%	Schedule impact or Some parts of the project have low quality
Medium	< 5%	Schedule impact or Barely noticeable degradation in quality Low Impact on schedule or Quality can be incorporated

Table 5.3: Risk Impact definitions

5.3.1 Overview of Risk Mitigation, Monitoring, Management

The identification of Risk is central to the success and failure of the project, hence I have made a concentrated effort to minimize and even eliminate. Certain risk related. Software risk could be classified into categories. Internal and External risk, those risk which arise from the risk factor within the organization can be defined internal risk and the risk coming from outside is called external risk. Internal risk avoidance can be done by clear picturing the process, product risk. Following are the details for each risk:

Risk ID	1
Risk Description	System failure
Category	Requirements
Source	This was identified during early development and testing
Probability	Low
Impact	High
Response	Accept
Strategy	Better Internet connection will solve this
Risk Status	Occurred

Table 5.4: Risk 1 overview

Risk ID	2
Risk Description	Connection failure
Category	Requirements
Source	This was identified during early development and testing
Probability	Low
Impact	High
Response	Mitigate
Strategy	Proper authentication will resolve this issue.
Risk Status	Identified

Table 5.5: Risk 2 overview

5.4 PROJECT SCHEDULE

5.4.1 Project task set

Major Tasks in the Project stages are:

- Task 1: Requirement Analysis (Base Paper Explanation).
- Task 2: Project Specification (Paper Work).
- Task 3: Technology Study and Design.
- Task 4: Coding and Implementation (Module Development).

5.4.2 Task network

Individual tasks and subtasks have interdependencies based on their sequence. A task network is a graphic representation of the task flow for a project. Project tasks and their dependencies are noted.

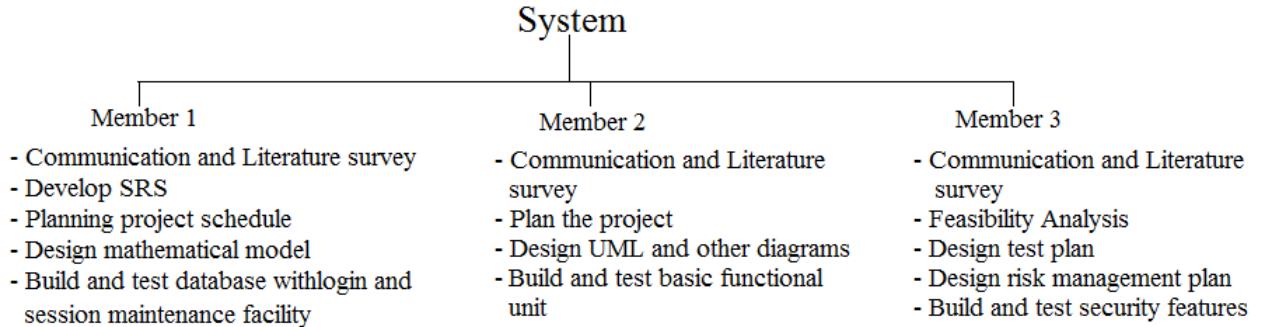
5.4.3 Timeline Chart

Schedule		Date	Project Activity
July	1 st Week	01/07/2018	Formation Of Project Group
	2 nd Week	08/07/2018	Project Topic Selection
	3 rd Week	15/07/2018	Synopsis Submission
August	1 st Week	05/08/2018	Presentation On Project Ideas
	2 nd Week	12/08/2018	Submission Of Literature Survey
	3 rd Week	19/08/2018	Feasibility Assessment
September	1 st Week	02/09/2018	Middle Semester Presentation
	3 rd Week	16/09/2018	Design Of Mathematical Model
	4 th Week	23/09/2018	End Semester Presentation.
October	1 st Week	07/10/2018	Report Preparation And Submission
December	3 rd Week	19/12/2018	1 st module presentation
	4 th Week	26/12/2018	Discussion and implementation of 2 nd module
January	1 st Week	02/01/2019	Preparation for ANEC conference
	2 nd Week	09/01/2019	Study of implementation of user module
	3 rd Week	16/01/2019	Discussion about modification to Improve in of user result module.
	4 th Week	23/01/2019	1 st and 2 nd module presentation
	5 th Week	30/01/2019	Discussion on flow of project and designing new module
February	1 st Week	06/02/2019	Modification of modules.
	2 nd Week	13/02/2019	Designed test cases for our module.
	3 rd Week	20/02/2019	Worked on user interface.
March	1 st Week	06/03/2019	Integration of all modules.
	3 rd Week	20/03/2019	Final Report and presentation.

Table 5.6: Time Line Chart

5.5 TEAM ORGANIZATION

5.5.1 Team structure



5.6 Management reporting and communication

Mechanisms for progress reporting and inter/intra team communication are identified as per assessment sheet and lab time table

Sr No.	Month	Description
1	June	Discussion with guide regarding domain. Searching for IEEE paper for domain.
2	July	Short listing of IEEE papers within domain. Selection of IEEE paper.
3	August	Deciding Project name. Submission of Synopsis.
4	September	Requirement analysis. Designing of models.
5	October	Report preparation. Stage-I report submission.

Table 5.7: Management plan

Chapter 6

PROJECT IMPLEMENTATION

6.1 OVERVIEW OF PROJECT MODULES

In the traditional system for movers and packers, customers need to search for providers and the required vehicles to make transportation successful. This leads to increase in waiting time for customer and also the customer is unable to trace out the current location of transported material. The main thing in our system is, we have to provide end to end security for customer and provider data by using QR code concept. In QR code binary image we have to hide customer and provider data. Only authorized customer can view data. For customer interest mining we used collaborative filtering method. The main principle of this method is recommendation of vehicle according to provider service. Recommendation is used to find user interest and provide related event. Customer Advice is a term which is used in the sense to interest mining. One can give advice for the problem or can simply give a solution. Advice seems to be an opinion with command or control and even manipulation. Suggestion is like, a customer interest opening about service is used for new user to use service provider vehicle. We have to provide end to end security for customer and provider data by using QR code concept.

Admin :-

- In this system admin have to provide authentication permission to provider and

can view vehicle, customer, provider, Spam service provider detection as well as ranking of service provider.

Service Provider :-

- In this system provider can add vehicle and driver, also view customer request and send notification to driver. provider can view schedule vehicle as well as history .

Customer:-

- In this system customer can view vehicle and search vehicle , customer can request vehicle and track vehicle on map, Payment to service provider . Customer can review on the system. View or send information in form of QR code.

Driver:-

- In this system driver can view request as schedule the vehicle.

6.2 TOOLS AND TECHNOLOGY USED

Tools and Technologies Used:

Software Requirements (Platform Choice)

- Operating System - Windows 7
- Programming Language - Java/J2EE
- Software Version - JDK 1.7 or above
- IDE - Eclipse

Hardware Requirements

- Processor - Pentium IV/Intel I3 core

- Speed - 1.1 GHz
- RAM - 2 GB (min)
- Hard Disk - 20GB
- Keyboard - Standard Keyboard

6.3 ALGORITHM DETAILS

1. Euclidean distance:

- Euclidean distance is the straight line distance between two points. Euclidean space becomes a metric space. This algorithm is used for finding optimal distance on map.
- **Input:-**Source and destination location name.
- **Output:-**Shortest path on map

2. Collaborative Filtering:-

- This algorithm is used to filter the stored records according to users request query.
- **Input:** - Location, Cost.
- **Output:** - Query result

3. Stop-word-removal:-

- A stop word is a commonly used word that (the, is, a, about, more etc.) a search engine has been programmed to ignore, both when indexing entries for searching and when retrieving them as the result of a search query. This algorithm is used in search engine, Natural language processing (NLP)

- **Input:-**The vehicle should be truck
- **Output:-**Display the list of truck ignoring other words in sentence.

4. QR Code:-

- Quick Response Code is a type of 2D barcode that is used to provide easy access to information through a smartphone. It also provide security to the customer details.
- **Input :-** Barcode image with customer details.
- **Output :-** Customer details displayed after barcode scan.

Chapter 7

SOFTWARE TESTING

7.1 TYPE OF TESTING

1. Unit Testing

- Unit testing concentrates verification on the smallest element of the program the module. Using the detailed design description important control paths are tested to establish errors within the bounds of the module.
- In this system each sub module is tested individually as per the unit testing such as campaign, lead, contact etc. are tested individually. Their input field validations are tested.

2. Integration testing

- Once all the individual units have been tested there is a need to test how they were put together to ensure no data is lost across interface, one module does not have an adverse impact on another and a function is not performed correctly. After unit testing each and every sub module is tested with integrating each other.
- Functional Testing
- Functional testing is the testing to ensure that the specified functionality

required in the system requirements works. It falls under the class of black box testing.

3. System Testing

- System testing is the testing to ensure that by putting the software in different environments (e.g., Operating Systems) it still works. System testing is done with full system implementation and environment. It falls under the class of black box testing.

4. Stress Testing

- Stress testing is the testing to evaluate how system behaves under unfavorable conditions. Testing is conducted at beyond limits of the specifications. It falls under the class of black box testing.

5. Performance Testing

- Performance testing is the testing to assess the speed and effectiveness of the system and to make sure it is generating results within a specified time as in performance requirements. It falls under the class of black box testing.

6. Usability Testing

- Usability testing is performed to the perspective of the client, to evaluate how the GUI is user-friendly? How easily can the client learn? After learning how to use, how proficiently can the client perform? How pleasing is it to use its design? This falls under the class of black box testing.

7. Acceptance Testing

- Acceptance testing is often done by the customer to ensure that the delivered product meets the requirements and works as the customer expected. It falls under the class of black box testing

8. System testing for the current system:

- In this level of testing we are testing the system as a whole after integrating all the main modules of the project. We are testing whether system is giving correct output or not. All the modules were integrated and the flow of information among different modules was checked. It was also checked that whether the flow of data is as per the requirements or not. It was also checked that whether any particular module is non-functioning or not i.e. once the integration is over each and every module is functioning in its entirety or not.

In this level of testing we tested the following: -

- Whether all the forms are properly working or not.
- Whether all the forms are properly linked or not.
- Whether all the images are properly displayed or not.
- Whether data retrieval is proper or not.

Test Case ID	1
Test Case Description	Checking the functionality of Login Button
Steps	1.Enter valid User name 2 .Enter valid Password 3. Click on Login Button
Test Case Result	Login page should be displayed
Action Result	Login page displayed
Status	Pass

MODERN LOGISTICS VEHICLE SYSTEM USING DYNAMIC SCHEDULING, TRACKING AND SECURITY

Test Case ID	2
Test Case Description	Checking the functionality of Login Button
Steps	1.Enter invalid User name 2 .Enter Invalid Password 2. Click on Login Button
Test Case Result	Login page should be displayed
Action Result	Login page not displayed
Status	Pass

Test Case ID	3
Test Case Description	Checking the functionality of registration Button
Steps	1.Fill all the correct data
Test Case Result	Registration Successfully message display
Action Result	Display message
Status	Pass

Test Case ID	4
Test Case Description	Checking the functionality of registration Button
Steps	1.Some field are blank
Test Case Result	Error message display
Action Result	Display message
Status	Pass

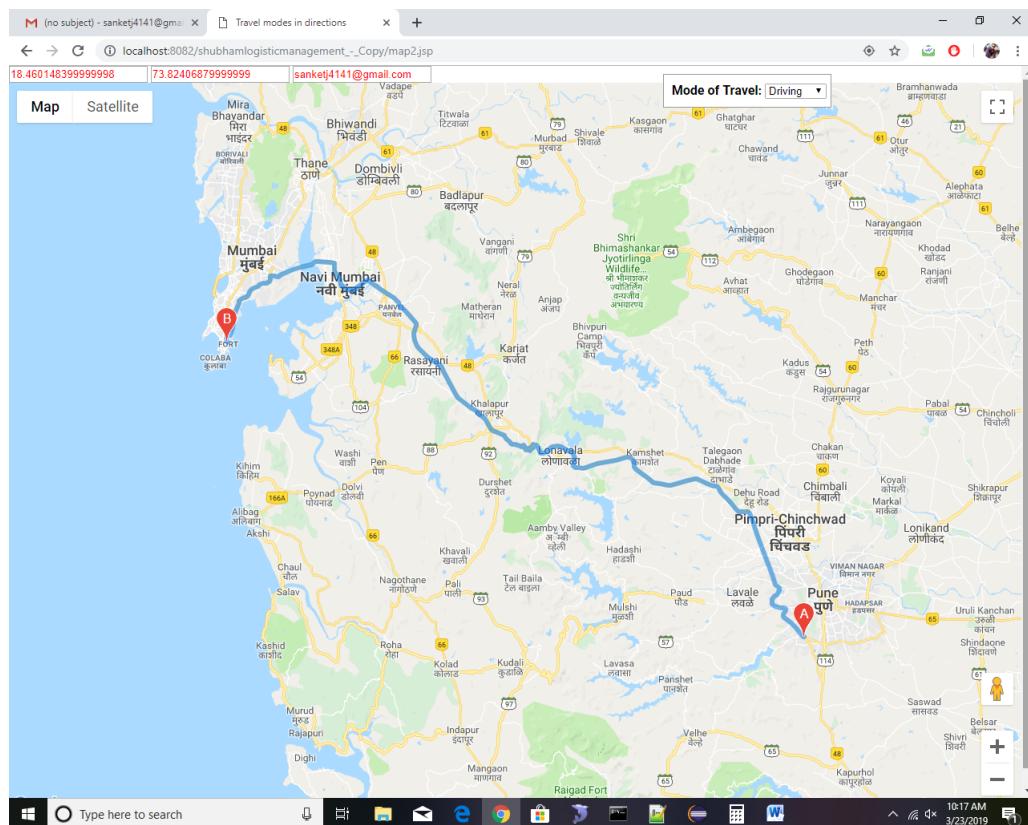
Test Case ID	5
Test Case Description	Searching the vehicle
Steps	1. Enter the keyword
Test Case Result	File name should displayed on screen
Action Result	File name display
Status	Pass

Test Case ID	6
Test Case Description	Book Vehicle
Steps	1.Book vehicle 2. Secret key generated
Test Case Result	Book vehicle successfully
Action Result	Book vehicle successfully display
Status	Pass

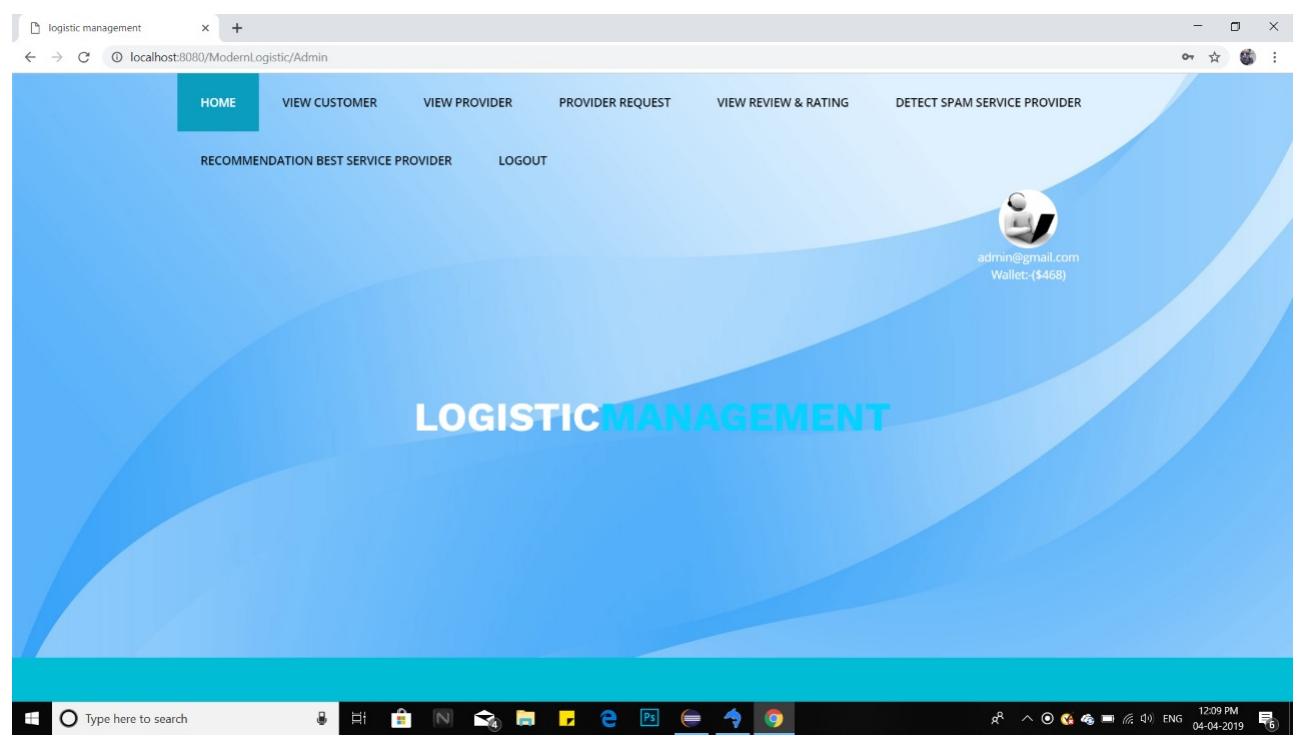
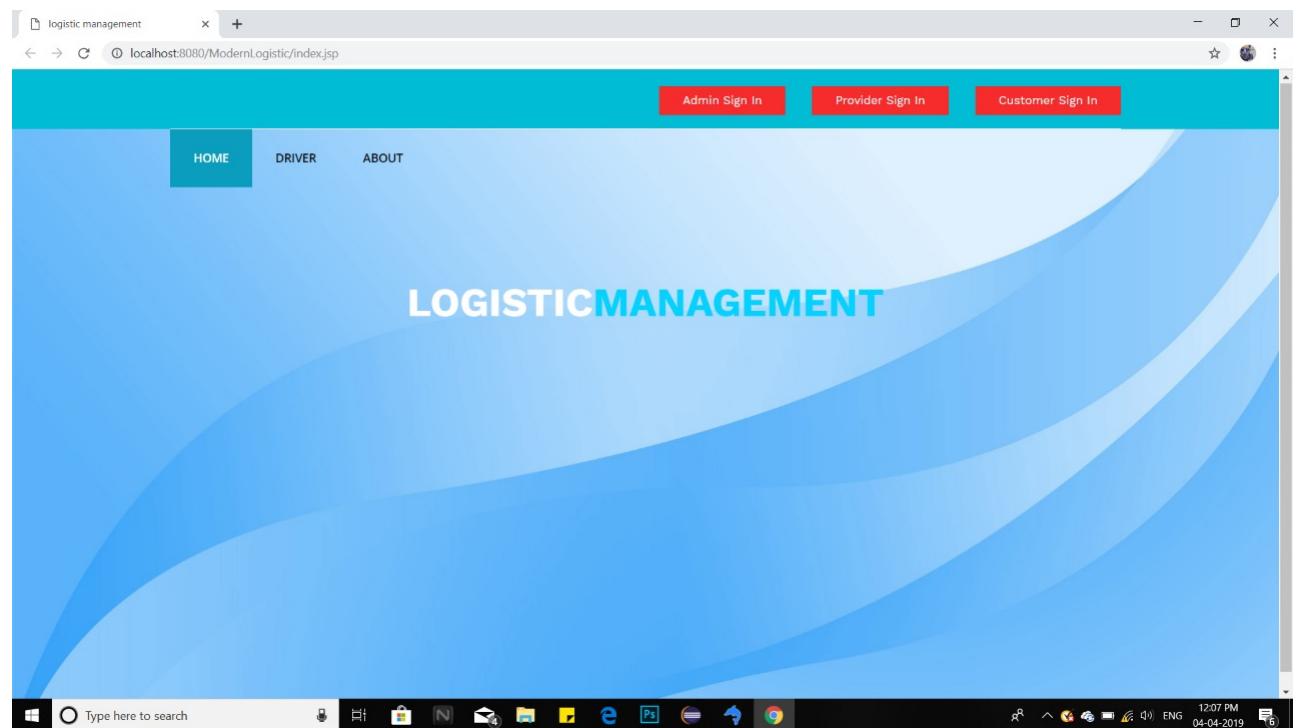
Chapter 8

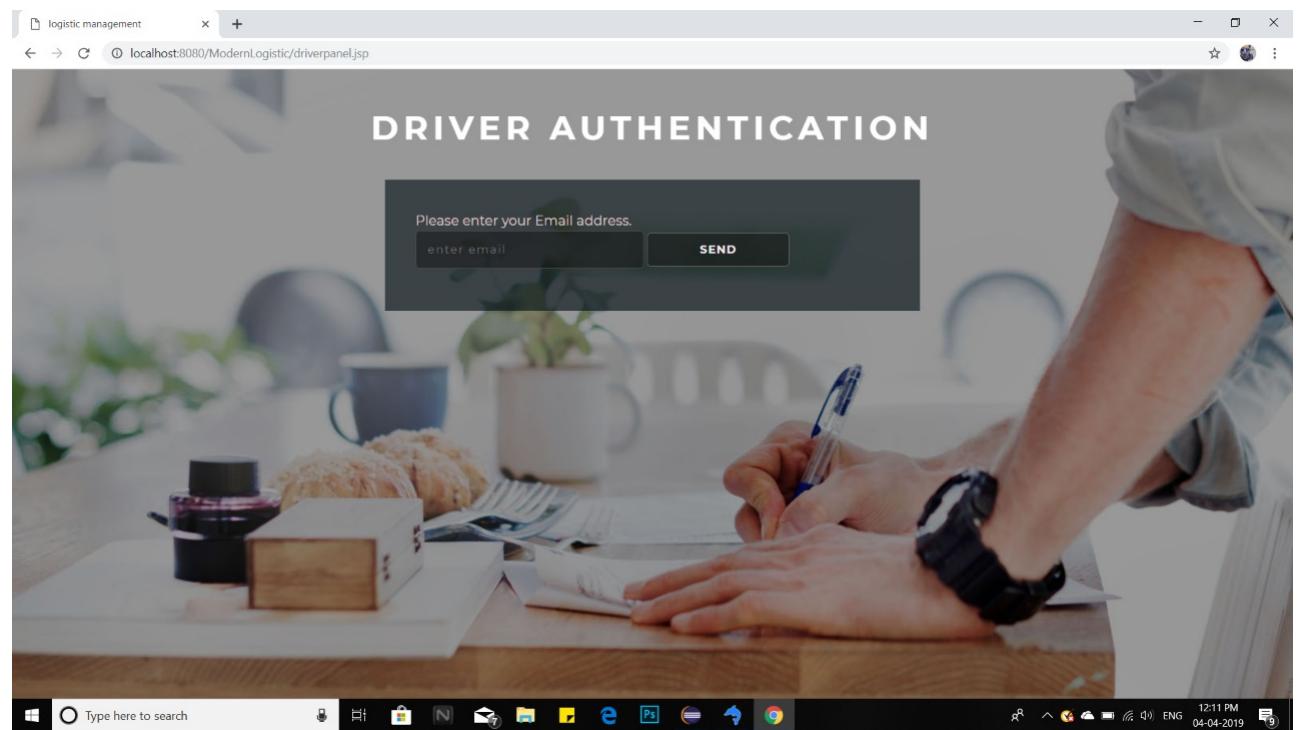
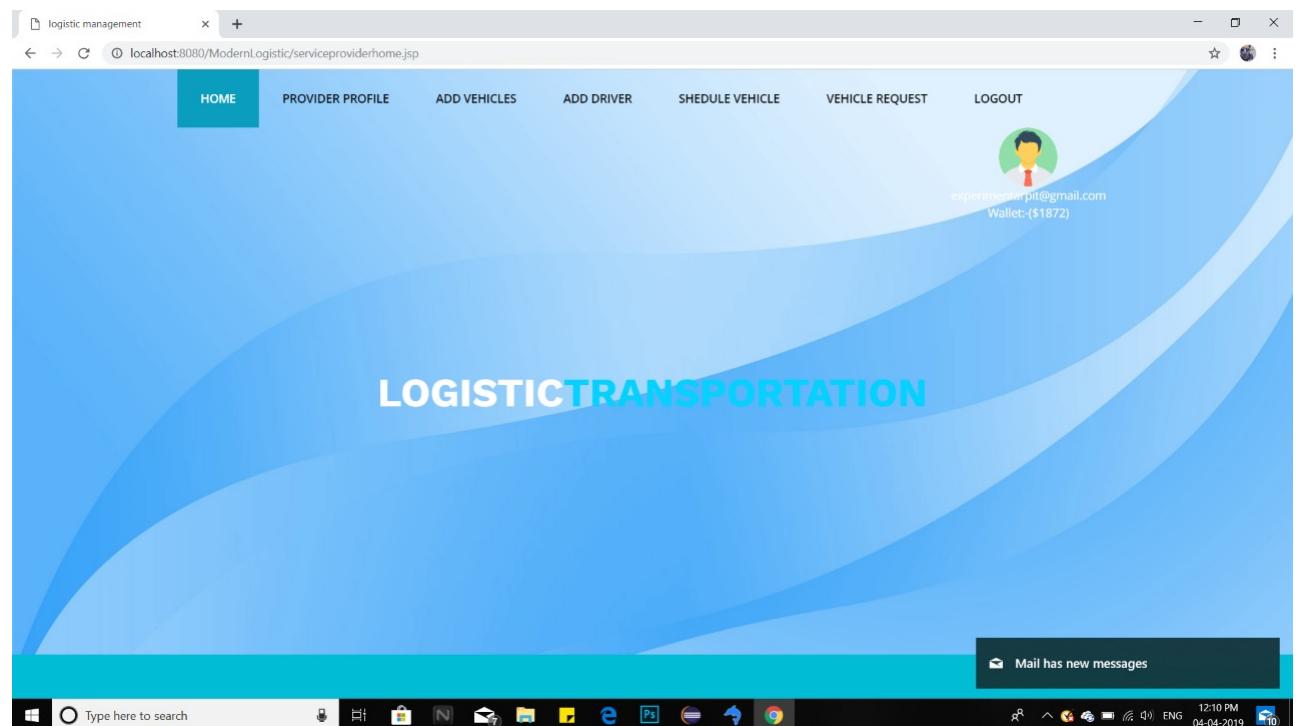
RESULTS

8.1 Outcomes



8.2 Screen Shots





MODERN LOGISTICS VEHICLE SYSTEM USING DYNAMIC SCHEDULING, TRACKING AND SECURITY

This screenshot shows the 'DRIVER CONFIRM REQUEST' page of the logistics management system. At the top, there is a navigation bar with 'HOME', 'DRIVER CONFIRM REQUEST', and 'LOGOUT' buttons. The main content area displays a table header for tracking requests:

ID	Vehicle_id	Provider_id	User_id	Time & Date	Location	Request
----	------------	-------------	---------	-------------	----------	---------

The background features a blue abstract design. In the top right corner, the email address 'bakulrangari@gmail.com' is displayed. The bottom of the screen shows a Windows taskbar with various icons and system status.

This screenshot shows the 'Registration' page of the logistics management system. The top navigation bar includes 'HOME', 'VIEW PROFILE' (highlighted in yellow), 'VIEW VEHICLES', 'VIEW SCHEDULE VEHICLE', and 'LOGOUT'. On the right side, there is a user profile icon and the email address 'rohitwalekar@gmail.com'. A prominent message 'Stop Looking. Start Vehicle Booking!' is centered above a form. The form consists of five input fields: 'Source Location', 'Destination Location', 'Time', 'dd-mm-yyyy', and 'Load in Ton', followed by a 'SEARCH VEHICLE' button. The background has a blue abstract design. The bottom of the screen shows a Windows taskbar with various icons and system status.

Chapter 9

CONCLUSIONS AND FUTURE WORK

9.1 CONCLUSIONS

The proposed system consists of service provider, customer and admin, driver where admin is one of the most important parts in system. Here customer will book the vehicle and trace the current location using GPS tracking. Logistics refers to the responsibility to design and administer systems to control movement and geographical positioning of raw materials, work-in-process, and finished inventories at the lowest total cost. The proposed system focuses on delivery of goods, raw materials, shifting home appliances, furniture while relocation. It also includes management of order processing, inventory, transportation, and the combination of warehousing, materials handling, and packaging, all integrated throughout a network of facilities. We have to provide end to end security for customer and provider data by using QR code concept. We are recommendation of nearest best service provider according to user interest.

9.2 FUTURE WORK

- Make android application.

9.3 APPLICATION

1. This application is used for transportation of warehouse.
2. This application is used for transportation of automobile company

Appendix A: Problem statement feasibility assessment using, satisfiability analysis and NP Hard, NP-Complete or P type using modern algebra and relevant mathematical models.

Theory:

WHAT IS P?

- P is set of all decision problems which can be solved in polynomial time by a deterministic.
- Since it can be solved in polynomial time, it can be verified in polynomial time.
- Therefore P is a subset of NP.

WHAT IS N?

- "N" in "NP" refers to the fact that you are not bound by the normal way a computer works, which is step-by-step. The "N" actually stands for "Non-deterministic". This means that you are dealing with an amazing kind of computer that can run things simultaneously or could somehow guess the right way to do things, or something like that.
- So this "N" computer can solve lots more problems in "P" time - for example it can just clone copies of itself when needed.
- So, programs that take dramatically longer as the problem gets harder (i.e. not in "P") could be solved quickly on this amazing "N" computer and so are in "NP".
- Thus "NP" means "we can solve it in polynomial time if we can break the normal rules of step-by-step computing".

WHAT IS NP?

- ”NP” means ”we can solve it in polynomial time if we can break the normal rules of step-by-step computing”.

PROJECT STATUS

- **Problem:** Here problem is to give logistics based on customer location also provide security to information.
- **Solution:** Here the problem is decision making.
- The proposed system works on customer entered query places to order vehicle. The system automatically mines customer and vehicle, routes topical preferences including the topical cost, time. It provides transportation to customer by considering load and cost and time and using QR code provide security to the system. On the basis of the above definitions, our problem statement is solvable in using GPS tracking system and QR code, all these are feasible in real time, so
- **This project is NP-Complete.**

MATHAMATICAL MODEL

Let us consider S as a system for automatically recommends vehicle to customer.

$$S = \{F, I, O, e\}$$

- **INPUT:** Identify the inputs $F = f_1, f_2, f_3 \dots, f_n$ as set of functions to execute commands.
- $I = i_1, i_2, i_3$ Sets of inputs to the function set $O = o_1, o_2, o_3$ Set of outputs from the function sets,
- $e =$ End of the program.

$$S_1 = I, F, O$$

- $I =$ Query submitted by the Customer, i.e. query
- $O =$ Output of desired query, i.e. vehicle recommendation
- $F =$ Functions implemented to get the output, i.e. collaborative ltering

A] Mapping Diagram

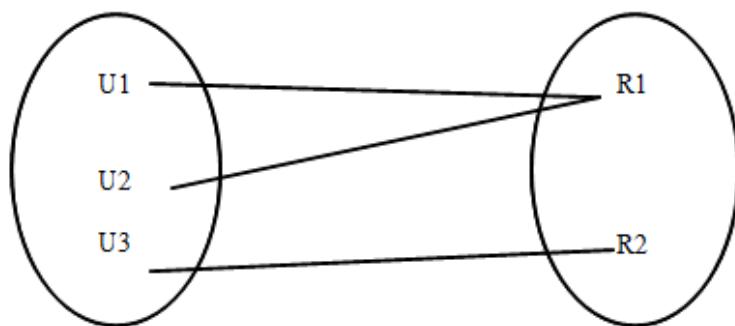


Figure 9.1: Mapping Diagram

Where,

U=users

R=location query.

U1=Right location query (R1)

U2= Right Location Query (R2)

U3=Wrong Location Query (R3)

4. Set Theory

S={s, e, X, Y,}

Where,

s = Start of the program.

1. Log in with webpage.
2. View vehicle recommendation as per location, track vehicle location. Do payment and give ratings for the service.

e = End of the program.

Retrieve all vehicle details from service provider. User can view booking vehicle details about driver and vehicles.

Recommend vehicle according to cost and place.

X = {V}

X = Input of the program.

Where, V = vehicles.

Y = Output of the program.

First the user will enter query for viewing the vehicle, then they will get all vehicle list from providers database. According to warehouse material, place order and mention cost per km and distance. At final stage provider will accept request and assign vehicle for given time period.

X, Y U

Where, $U = \{\text{customer}, V\}$

Where, customer and V are the elements of the set.

customer =service provider, customer

V=Vehicle

Failures and Success conditions.

Success:

Search the required information from available data in the database.

Customer gets result very fast according to their needs.

Failures:

1. Huge database can lead to more time consumption to get the information.
2. Hardware failure.
3. Software failure.

Mathematical model in equation form for Logistic System:-

Given:

X_q = Request q Q will be served vehicle or not

T_r = Time for request of vehicle

C_v =Cost Of Vehicle type

D_r =Distance of Route

C_t =Cost of Trip

F_u =Fuel Used

Equation:-

If X_q is accepted with T_r then C_t is calculated by following equation

$$C_t = D_r * C_v$$

After calculating the cost of trip calculate fuel of trip, using following equations

$$F_u = C_t * D_r$$

Appendix B

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Modern Logistics Vehicle system using Dynamic Scheduling, Tracking and Security

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ABSTRACT: The Movers and Packers frameworks have risen as of late with the improvement of Global Positioning System (GPS), mobile communication technologies, sensor and remote systems administration advances. The Movers and Packers frameworks are imperative as they can add to a few advantages, for example, recommending right places for getting clients, expanding income of truck drivers, decreasing holding up time, automobile overloads just as limiting fuel utilization and subsequently expanding the quantity of treks the drivers can perform. The main purpose of this system would be supplying required vehicles that would be used to meet customer demands through the planning, control and execution of the successful development and capacity of related data and administrations from root to goal. We need to give start to finish security to client and supplier information by utilizing QR code idea. We are proposal of closest best specialist organization as per client intrigue and recognize spam specialist co-op. Coordinations the executives alludes to the obligation and the board of structure and manage frameworks to control the development and topographical situating of crude materials, work-in-process, what's more, completed inventories at the most reduced all out expense. Collaborations incorporates the organization of solicitation getting ready, stock, transportation, and the mix of warehousing, materials managing, and packaging, all fused all through an arrangement of workplaces.

KEYWORDS: Intelligent Transportation, Logistic system, QR Code, Solicitation distribution, Vehicle routing

I.INTRODUCTION

Collaborations implies the commitment to design and direct structures to control improvement and land arranging of harsh materials, work-in-process, and completed inventories at the most decreased total cost. Collaborations incorporates the organization of demand getting ready, stock, transportation, and the mix of warehousing, materials giving, and packaging, all consolidated all through an arrangement of workplaces. As demonstrated by the determined characters, collaborations information the officials systems join modules, for instance, structure the administrators, resources the board, customer the board, get the board, exceptional organization, amassing the officials, trade the board and invoicing the board. Each subsystem has particular helpfulness and the determined information structures are the string that joins collaborations practices into a fused technique. Vital information structures begin activities and track information as for methodology, and help the administrator's essential authority. The essential worry in our system is, we have to offer end to end security to customer and provider data by using QR code concept.in QR code two-fold picture we have to cover customer and provider data. simply endorsed customer can see data. For customer energy mining we used aggregate filtering technique. The crucial principle of this system is proposition of vehicle as shown by provider advantage. Proposition is used to find customer interest and give related event. We are proposition of nearest best pro association as shown by customer interest and recognize spam authority center. Customer Advice is a term which is used in the sense to energy mining. One can give direction for the issue or can simply give an answer. Direction, is apparently a supposition with course or control and even control. Proposition looks like, a customer eagerness opening about organization is used for new customer to use master association vehicle.



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ILLITERATURE SURVEY

Cheng Qiao et.al[1] proposed presented a systematic study of driver and passenger preference. A developmental amusement approach to optimise the drivers' revenue and passengers' cost. An efficient dispatch model is proposed. The dispatch model could reduce time consumption to located passengers from 2% to as much as 46%. The Game model could increment in any event 18% of driver benefit. Lower the passengers' holding up time.

L. C. Coelho et.al[2] approach is the vehicle steering issue has been broadly contemplated from a specialized perspective for over 50 years. A large number of its variations are established in pragmatic settings. This paper gives an overview of the fundamental genuine utilizations of road based items transportation in the course of recent years. It audits papers in the zones of oil, gas and fuel transportation, retail, squander gathering and the executives, mail and bundle conveyance and nourishment appropriation. A few viewpoints on future research and applications are talked about. The use of tasks explore procedures to the field of vehicle directing is profoundly fruitful and can produce considerable investment funds, regularly in overabundance of 10%. J. Renaud, and G. Laporte Since vehicle steering choices must be actualized much of the time, regularly once a day, this can convert into huge totals of cash on a yearly premise. Since genuine VRPs incorporate a wide assortment of imperatives, they can once in a while be unraveled through the execution of off-the-rack programming.

A. Holzapfel et.al[3] consider the issue of doling out stockkeeping units to conveyance focuses (DCs) having a place with different DC types of are tall arrange, e.g., central, regional, and local DCs. The issue is roused by the genuine circumstance of a retail organization and understood by a MIP arrangement approach. H. Kuhn, and M. G. Sternbeck The MIP demonstrate reflects the interdependencies between inbound transportation, outbound transportation and instore coordinations and also capital tied up in inventories and contrasts in picking costs between the stockrooms. A tale arrangement approach is created and connected to a genuine instance of a main European basic supply retail chain. The use of the new methodology results in cost reserve funds of 6% of aggregate operational expenses contrasted with the present task. These reserve funds add up to a few million euros for each year. Top to bottom investigations of the outcomes and affectability examinations give bits of knowledge in to the arrangement structure and the major related issues.

R. A. Vasco and R. Morabito states[4] to manages the dynamic vehicle distribution issue (DVAP) in street transportation of full truckloads between terminals. The DVAP includes multi-period asset designation and comprises of defining the developments of a fleet of vehicles that vehicle merchandise between terminals with a wide geological dispersion. These developments might be of completely loaded vehicles, unladen vehicles for repositioning or vehicles held at a terminal to meet future requests. Accentuation is given to the portrayal of the issue in genuine circumstances, the scientific demonstrating of the issue and the utilization of correct and heuristic techniques to tackle it, including GRASP and reenacted toughening metaheuristics. Results dependent on a contextual analysis of a transportation organization in Brazil are introduced and investigated, demonstrating that the methodology can be effective in supporting handy choices.

Huanyang Zheng and Jie Wu, proposed [5] Online to Offline (O2O) taxi business (e.g., Uber), the interests in of voyagers, taxi drivers, and the association may not agree with one another, since taxis don't have a place with the association. To modify these interests, this paper considers the taxi dispatch issue for the O2O taxi business. The interests of explorers and cabbies are illustrated. For non-sharing taxi dispatches (various explorer requests can't share a taxi), an unfaltering marriage approach is proposed. It can oversee unequal amounts of voyager requests and taxis through planning them to trick accessories. Given trick accessories, stable matchings are exhibited to exist. Three precepts are acquainted with find out all possiblestable matchings. For sharing taxi dispatches (different voyager requesting can share a taxi), explorer requests are squeezed through handling a most outrageous set problem that needs to be addressed. Squeezed explorer requests are seen as a lone interest for planning cabs. Expansive certified data driven examinations show how well our strategy performs. The proposed estimations have an obliged execution



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opening to the composition to the extent the dispatch delay and the explorer satisfaction, anyway they significantly upgrade existing computations to the extent the taxi satisfaction.

C. Tian [6] et.al states In the Online to Offline (O2O) taxi business (e.g., Uber), the interests of travelers, cab drivers, and the organization may not line up with each other, since taxicabs don't have a place with the organization. To adjust these interests, this paper contemplates the taxi dispatch issue for the O2O taxi business. The interests of travelers and cab drivers are displayed. For non-sharing taxi dispatches (different traveler demands can't share a taxi), a steady marriage approach is proposed. It can manage unequal quantities of traveler demands and cabs through coordinating them to sham accomplices. Given sham accomplices, stable matchings are demonstrated to exist. Three principles are introduced to find out all conceivable stable matchings. For sharing taxi dispatches (various traveler solicitations can share a taxi), traveler demands are pressed through taking care of a most extreme set pressing issue. Stuffed traveler demands are viewed as a solitary demand for coordinating cabs. Broad genuine information driven analyses show how well our methodology performs. The proposed calculations have a restricted execution hole to the writing regarding the dispatch delay and the traveler fulfillment, yet they significantly enhance existing calculations as far as the taxi fulfillment.

J. J. Q. Yu and A. Y. S. Lam [7] proposed an Standard purpose of this structure to reveal the unavoidable enhancements increasingly generous. Start from the general assertion that the business is changing and go further to demonstrate and quantify the degree of advancement. Inside an additionally confusing and extended adaptability industry scene, tenant players will be constrained to in the meantime battle on various fronts and take an interest with association. City create will override country or area as the most huge division estimation that chooses adaptability direct.

T. Huth et.al states [8] stable matchings are demonstrated to exist. Three tenets are exhibited to find out all conceivable stable matchings. For sharing taxi dispatches (numerous traveler solicitations can share a taxi), traveler demands are stuffed through taking care of a greatest set pressing issue. Pressed traveler demands are viewed as a solitary solicitation for coordinating cabs. Broad genuine information driven trials show how well our methodology performs. The proposed calculations have a restricted act hole to the writing regarding the dispatch delay and the traveler fulfillment, yet they significantly enhance existing calculations as far as the taxi fulfillment.

S. Erdo.gan and E. Miller-Hooks [9] states a Green Vehicle Routing Problem (G-VRP) is planned and arrangement methods are created to help associations with elective fuel-controlled vehicle armadas in beating troubles that exist because of restricted vehicle driving extent related to constrained refueling foundation. The G-VRP is defined as a blended whole number straight program. Two development heuristics, the Adjusted Clarke and Wright Reserve funds heuristic and the Thickness Based Bunching Calculation, and a tweaked improvement procedure, are created. Consequences of numerical investigations demonstrate that the heuristics perform well. Also, issue practicality relies upon client and station area setups. Ramifications of innovation appropriation on tasks are talked about.

III. METHODOLOGY USED IN PROPOSED SYSTEM

➤ METHODOLOGY

- **Euclidean distance:**
- Euclidean separation is the straight line remove between two points. Euclidean space becomes a metric space. This algorithm is used for finding optimal distance on map.
- **Input:-**Source and destination location name.



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- **Output:**-Shortest path on map.
- **Collaborative Filtering:-**
- This algorithm is used to filter the stored records according to user's request query.
- **Input:** - Location, Cost.
- **Output:** - Query result
- **Stop-word-removal:-**
- A stop word is an ordinarily utilized word that (the, is, an, about, more and so forth.) a web index has been customized to disregard, both when ordering sections for seeking and while recovering them as the aftereffect of an inquiry question. This algorithm is used in search engine, Natural language processing (NLP)
- **Input:-**"The vehicle should be truck"
- **Output:-**Display the list of truck ignoring other words in sentence.

➤ QR Code:

- Fast Reaction Code is a sort of 2D standardized tag that is utilized to give simple access to data through a smartphone. It also provide security to the customer details.
- **Input :-**Barcode image with customer details.
- **Output :-** Customer details displayed after barcode scan.

IV.PROPOSED SYSTEM

In the traditional system for movers and packers ,customers need to search for providers and the required vehicles to make transportation successful. This leads to increase in waiting time for customer and also the customer is unable to trace out the current location of transported material.The main thing in our system is,we need to give start to finish security to client and supplier information by utilizing QR code idea.In QR code binary image we have to hide customer and provider data. only authorized customer can view data. For customer interest mining we used collaborative filtering method. The main principle of this method is recommendation of vehicle according to provider service. Recommendation is used to find user interest and provide related event. Customer Advice is a term which is used in the sense to interest mining. One can give advice for the problem or can simply give a solution. Advice, seems to be an opinion with command or control and even manipulation. Suggestion is like, an customer interest opening about service is used for new user to use service provider vehicle. we need to give start to finish security to client and supplier information by utilizing QR code idea.



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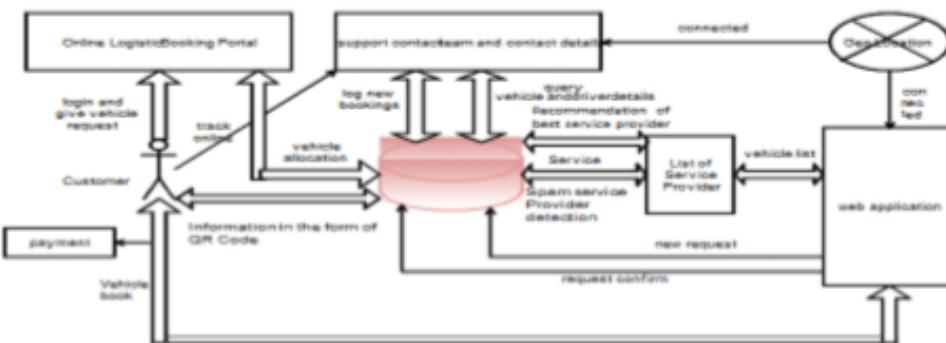


Fig 1. Proposed System Architecture

To solve the issues of the traditional transportation logistic systems, a web based solution has been proposed that will allow both the customers and the service providers to track the vehicles while transportation and also helps to provide best services to the customers at lowest cost by recommending only available service providers at preferred cost. In an Hypothesis, allocation of send any user dynamic request and response from service provider tracking the logistic vehicle system also provide information in form of QR code. The proposed work consist of mainly 4 module Admin, Customer ,Driver and Service Provider, The functionality of this modules are follows:-

- **Admin :-**
- In this system admin have to provide authentication permission to provider and can view vehicle, customer, provider, Spam service provider detection as well as ranking of service provider.
- **Service Provider :-**
- In this system provider can add vehicle and driver, also view customer request and send notification to driver. Provider can view schedule vehicle as well as history.
- **Customer:-**
- In this system customer can view vehicle and search vehicle, customer can request vehicle and track vehicle on map, Payment to service provider. Customer can review on the system. View or send information in form of QR code.
- **Driver:-**
- In this system driver can view request as schedule the vehicle.

V.RESULTS AND DISCUSSION

In our experimental setup, as shown in table, total numbers of positive review were 10 and among negative review are 5 to service provider.

Sr. No	Category	Number of Review
1	Positive Review	15
2	Negative Review	5

Table 1 4.1: Number of Review



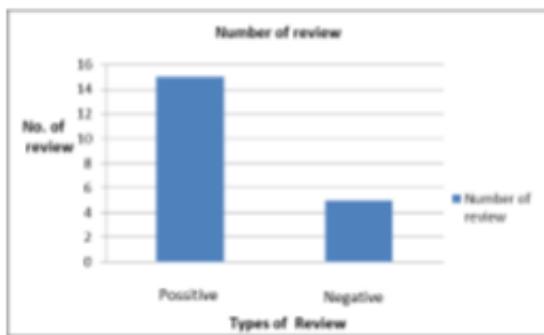
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From above data, as shown in graph 1, the numbers of positive review found to be 15 and number of negative review is 5.



Graph 4.1 Number of Review

VI.CONCLUSION

The proposed system consists of service provider, customer and admin, driver where admin is one of the most important part in system. Here customer will book the vehicle and trace the current location using GPS tracking. Logistic alludes to the duty to plan and oversee frameworks to control development and land situating of crude materials, work-in-process, and completed inventories at the least aggregate expense. The proposed system focuses on delivery of goods, raw materials, shifting home appliances, furniture while relocation. It also incorporates the executives of solicitation getting ready, stock, transportation, and the mix of warehousing, materials taking care of, and bundling, all coordinated all through a system of offices. We need to give start to finish security to client and supplier information by utilizing QR code idea. We are suggestion of closest best specialist organization as indicated by client intrigue.

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Appendix C: PLAGIARISM REPORT OF PROJECT REPORT

RESULTS



Completed: 100% Checked



Plagiarism



Unique



Sentence Wise Result



Matched Sources



Document View

UNIQUE	The Movers and Packers systems have emerged recently with the development of Glo...
UNIQUE	The Movers and Packers systems are very important as they can contribute to several ...
UNIQUE	waiting time, traffic jams as well as minimizing fuel consumption and hence increas...
UNIQUE	The main purpose of this system would be supplying required vehicles that would be ...

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