

TRANSPORT MANAGEMENT SYSTEM

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This Report Presented in Partial Fulfillment of the Requirements for
the Degree of Bachelor of Science in Computer Science and
Engineering.

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APPROVAL

This Project/internship titled “**Transport Management System**”, submitted by Tajul Islam, ID No: 151-15-5247, Abdus Samad , ID No:151-15-5360 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 4th May 2019.

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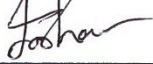
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DECLARATION

We hereby declare that this project has been done by us under the supervision of **A.S.M Farhan Al Haque**, **Lecturer, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for the award of any degree or diploma.

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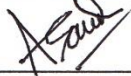


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ABSTRACT

A big company who are maintaining their own Transport Business or use their employee. Company organizer has donemuchworks manually then it makes very difficult to maintain their work . Nowadays it is easier by using the software. Our Software is one of them where The organizer saves their all required data.To manageall these activities we have developed this software. To get success in the transport management sector, the user should have strong network contacts of the service provider. These contacts are essential providers of specific services who can be mobilized quickly Driver, Helper and so on. So this system gives him all the detail of those providers and makes the plan successful to participate in any given schedules. To make a schedule successful transport manager needs different service provider like.When system will developed user can see their bus status where request from user .So By using this technology a company can operate his Transport business easily .

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CHAPTER 1

INTRODUCTION

1.1 Introduction:

We are living in the age of modern science and technology. Technology has become an integral part of our day to day life. One of those technological advancements is Management System. Transport Company needs more manpower. As the user has to do many works manually then it is very difficult to stop irregularities. Transport management system is used to manage all the activity related to transports. In any transport sector of a company or organizations, many service providers work simultaneously and it is very hard to manage these providers. It is also important for transport organizer that he has all the contacts details of these service providers so that he can contact them any time to plan a schedule. The old transport system is also less secure because this old transport system does not generate each and every record maintaining the record. And the company needs very intelligent and diligent employee to keep the records. To manage all these activities we have developed this software. To get success in the transport management sector, the user should have strong network contacts of the service provider. These contacts are essential providers of specific services who can be mobilized quickly. Driver, Helper and so on. So this system gives him all the detail of those providers and makes the plan successful to participate in any given schedules. To make a schedule successful transport manager needs different service provider like.

1.2 Motivation:

Transport Company needs more manpower. As the user has to do many works manually then it is very difficult to stop irregularities. Transport management system is used to manage all the activity related to transports. In any transport sector of a company or organizations, many service providers work simultaneously and it is very hard to manage these providers. It is also important for transport organizer that he has all the contacts details of these service providers so that he can contact them any time to plan a schedule. The old transport system is also less secure because this old transport system does not generate each and every record maintaining the record. And the company needs very intelligent and diligent employee to keep the records. To manage all these activities we have developed this software. To get success in the transport management sector, the user should have strong network contacts of the service provider.

1.3 Project Overview:

Transport Company needs more manpower. As the user has to do many works manually then it is very difficult to stop irregularities. Transport management system is used to manage all the activity related to transports. In any transport sector of a company or organizations, many service providers work simultaneously and it is very hard to manage these providers.

1.4 Problem Statements:

The old transport system is also less secure because this old transport system does not generate each and every record. Transport Company needs more manpower. As the user has to do many works manually then it is very difficult to stop irregularities in maintaining the record. And the company need very intelligent and diligent employee to keep the records.

1.5 Objectives:

This system generates new schedules with details of the service provider. System very efficiently stores, maintain and retrieve data from its database and can be used for further analysis. This system provides the latest notification to its user. Time-saving activity. The data in a centralized way which is available to the user.

1.6 Expected Outcome:

- This Web App system is very secure.
- All the Field info like as driver, helper, and Transport related information can save update and delete.
- The user can see the transport schedule and request for a vehicle.

CHAPTER 2

BACKGROUND

2.1 Introduction

Everyday we face many problems. Nowadays People wants their job by using technology. Depends on our demand Technological uses are increasing. Programming is one of the technological parts which gives the solution of our daily life web application now is more popular.

2.2 Related Work

When we decided to build this web app as our project, we looked through many sites where we did find that is like ours. Our concept of this Web app is really different. Our web app is totally unique tried to give our best effort and made it different outlook.

2.3 Comparative Studies

We have visited many sources and websites to compare our work with other websites. There is no similar Web app like ours. There is a web app in Google which features and idea are not the same. We are sure enough to say that our app is unique and very different.

2.4 Our Project Work

Our System can use a company or any organization who has Own Transport It is ERP based Software but it is not a desktop app. It is a web-based Application. The user can store all data by using host.

2.5 Challenge

Day by day people are using technology and they want usable technology which they can carry. The user uses the internet from mobile so we have to ensure that the user can operate their web app by using mobile or anything easily.

CHAPTER3

DOMAIN ANALYSIS

3.1 Customer

-Admin.

-Common people who permitted by us.

3.2 Stakeholders



Stakeholder	Role in system
❖ Transport Organizer/Manager	<ul style="list-style-type: none">• transport organizer is responsible for planning events and ensuring that they run as smoothly as possible;• Produce detailed schedule (for example, time-lines, from location to location, driver, helper, etc.
❖ Transport administrator	Key responsibilities are <ul style="list-style-type: none">• Processing conference and transports bookings• Chasing up calls• Liaising with other departments about user requirements
❖ Drivers and Helpers	Following are the responsibilities of Drivers and Helpers. <ul style="list-style-type: none">• Be punctual and reliable• Respect confidentiality• Carry out the duties listed in your helper description• Be accountable• Give notice if your availability changes or you



CHAPTER 4

REQUIREMENT ANALYSIS

4.1 Requirements

4.1.1 Functional Requirement

1. Create User

-User Account and Password will create by super Admin.

2. User Login

-The System provides the facility to login into the system.

-Enter username and password.

-User Profile page.

3. Forgot Password

-If the user forgot the password then reset the password by clicking forgot email or password.

-Can send reset link to the mail id to reset the password.

-Input: Email id.

-Output: Reset link send to Email id.

4. Log Out

-The system provides the facility to log out from the site.

-Input: Select the logout option.

-Output: Logout from the system.

-Processing: User will log out.

5. Transport Scheduling:

-The transport slot for the availability of a schedule on which one is going too held.

6. Transport Information

-All vehicle information can save this field.

7. Transport Requisition

-The user can request for usable transport for their personal uses.

8.Transport Approve and Assign

- The Approve or reject the requisition and assign the transport as per requirement.

4.2 Use Case Modelling

Use case modeling is to understand the relationship between user and admin with the system of the working process. In this system, admin and user must log to their features.



Figure 4.2: Use Case Model

4.3 System Design

Business process modeling (or) process modeling, is the analytical representation or put simply an illustration of an organization's business processes. Modeling processes is a critical component for effective business process management. Process modeling software gives an analytical representation of 'as-is' processes in an organization and contrasts it with 'to-be' processes for making them more efficient.

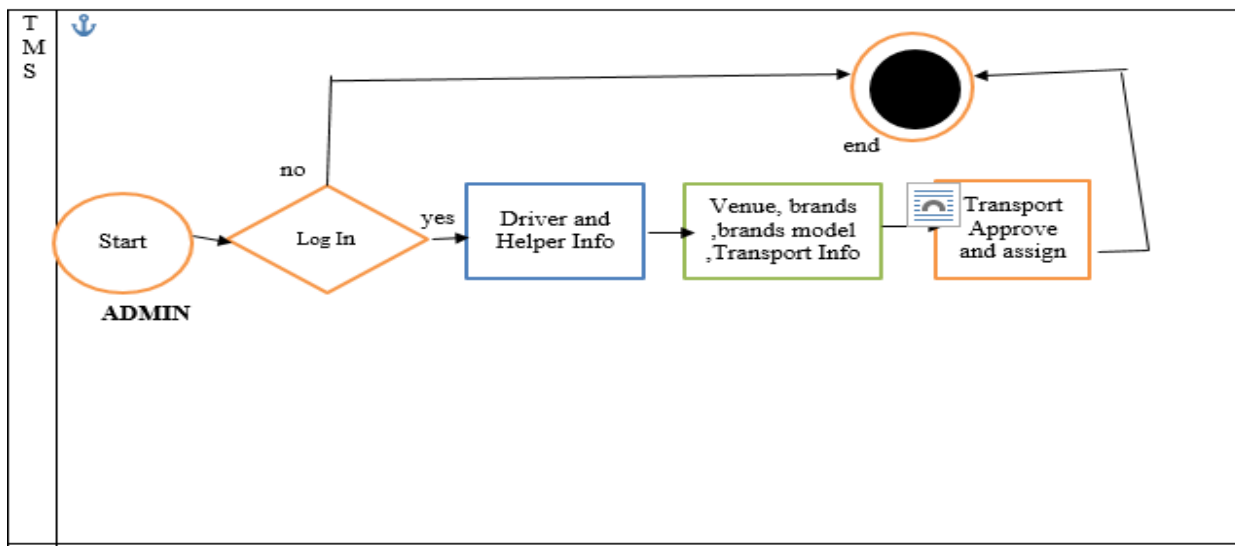
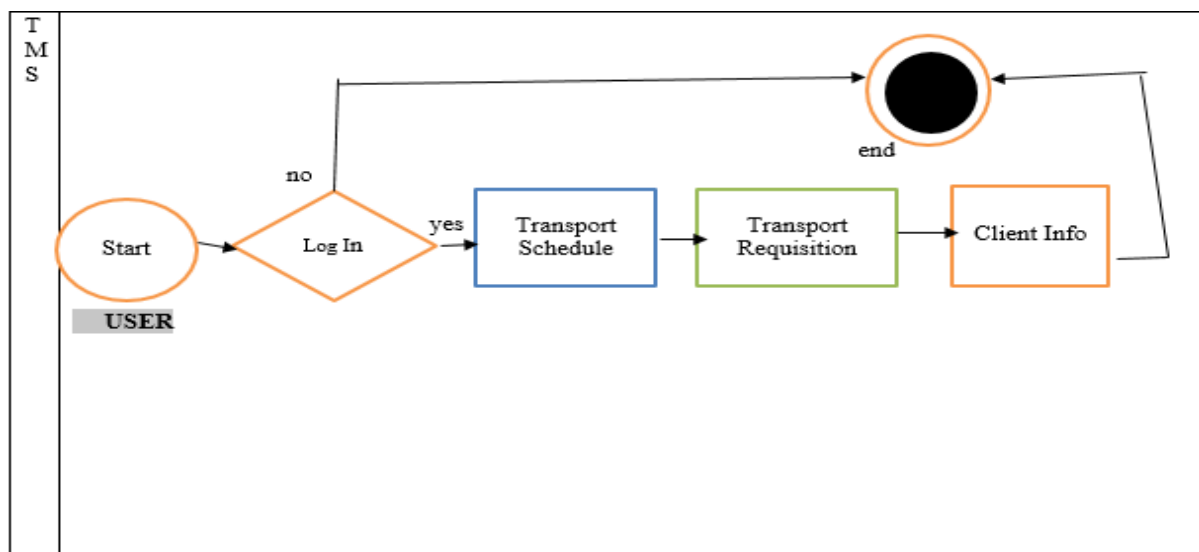


Figure 4.3: System Design



4.4Activity

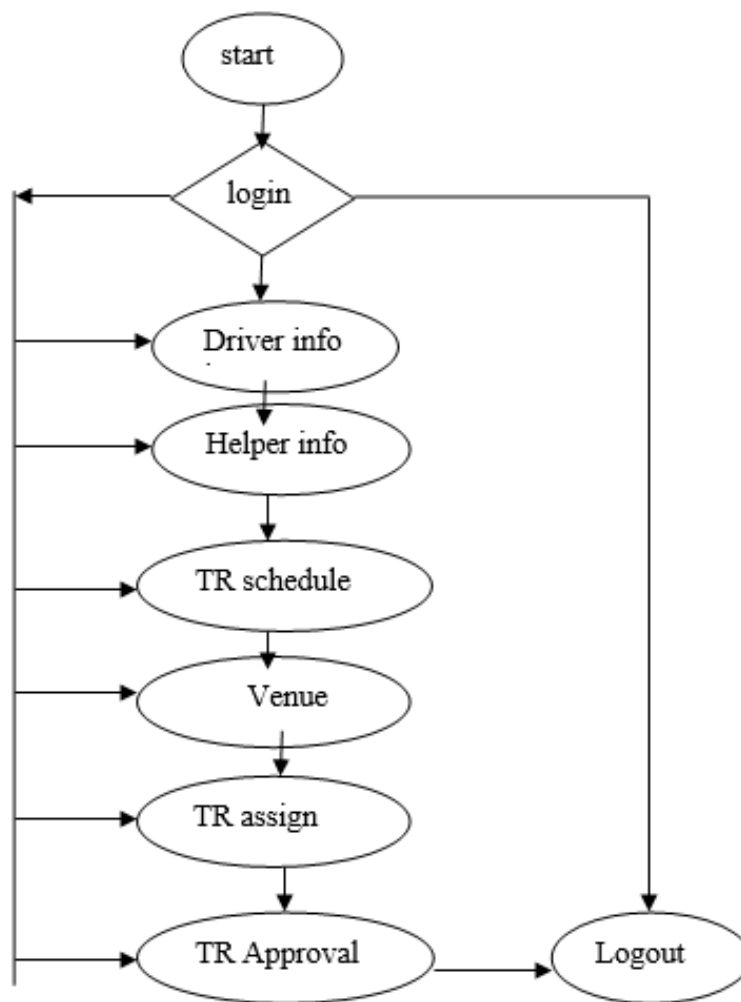


Figure 4.4: Activity Diagram

CHAPTER 5

DESIGN SPECIFICATION

5.1 Front-end Development

The front-end is designed is made based on user requirement. When a user logs in then he can see his Desired features. It can be interesting for the user because the user cannot see the irrelevant feature. Front-end design is more important to satisfy the user. Generally users want to simple user interface or graphical user interface from the developer. If the front-end design is so complex, the application fails to attract the user.


5.2 Back-end Development

Back-end side means the server side. It maintains the behavior of the site upon action is taken. In the back-end, admin can operate CRUD operation. so the security, structure, content management of it is very much important. The back-end has basically three parts such as a server, database and application.

5.3 UI Design

User Interface (UI) that permitted the user to interact with mobile devices or other electronic devices. UI design especially refers to the design of Graphical User Interface (GUI), but can also refer to others, such as natural and voice user interfaces.

5.4 User Interface (screen)



Username

admin

Password

.....

Sign In

☐ Keep me sign in

Forgot Username? . Forgot Password?

Create New Transport Type

0

Transport Type

Enter Transport Type

Save

Reset

Create New Transport Requisition

Travel Date

Transport Type

Purpose

Transport Information

Transport Name

Transport Type

License Number

VIN Number

Registration Number

Brand

Model No.

Purchase Date

Purchase BY

Purchase From

Purchase Reference

Price

Specification

Create New venue

Venue Name

Enter Venue Name

Location Map(*Optional)

Enter Location Map URL

Save Venue

Reset Venue

Create New Driver Information

[View Driver Information](#)

Name

Enter Driver Name

Employee Code

Enter Driver Code

Date Of Birth

mm/dd/yyyy

NID(Optional)

Enter 17 digit NID

Driving License

Driving License

License Expire Date

mm/dd/yyyy

Contant Number

Enter Phone No

Email(Optional)

Email

Photo(Optional)

[Choose file](#) No file chosen

Present Address

Parmanent Address

Save

Reset

University

Create New Driver Information

View Driver Information

0

Name

Enter Driver Name

Employee Code

Enter Driver Code

Date Of Birth

mm/dd/yyyy

NID(Optional)

Enter 17 digit NID

Driving License

Driving License

License Expire Date

mm/dd/yyyy

Contant Number

Enter Phone No

Email(Optional)

Email

Photo(Optional)

Choose file

No file chosen

Present Address

Parmanent Address

Save

Reset

Fig: 5.4 User Interface

CHAPTER-6

6.1 DFD Level 0

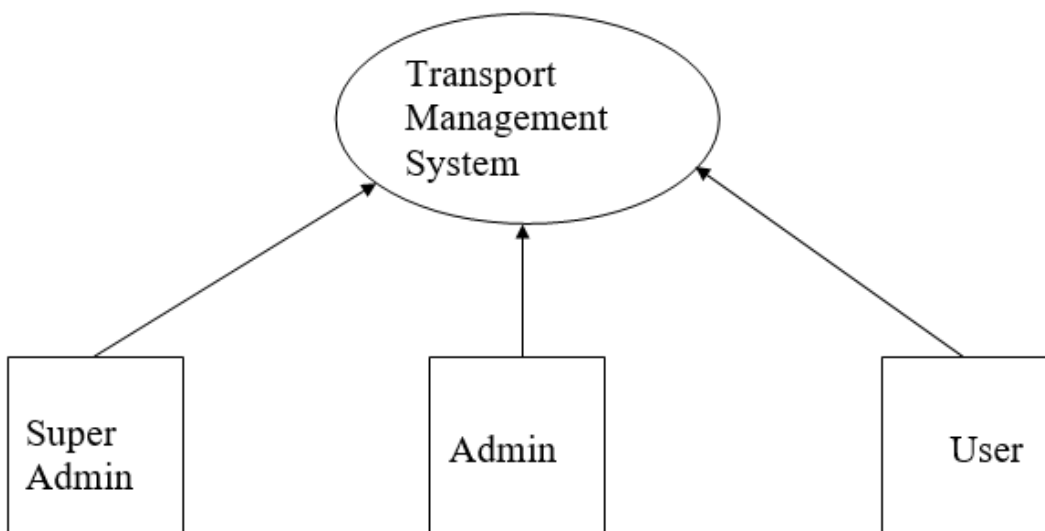


Fig: 6.1 DFD Level0

6.2 DFD Level1

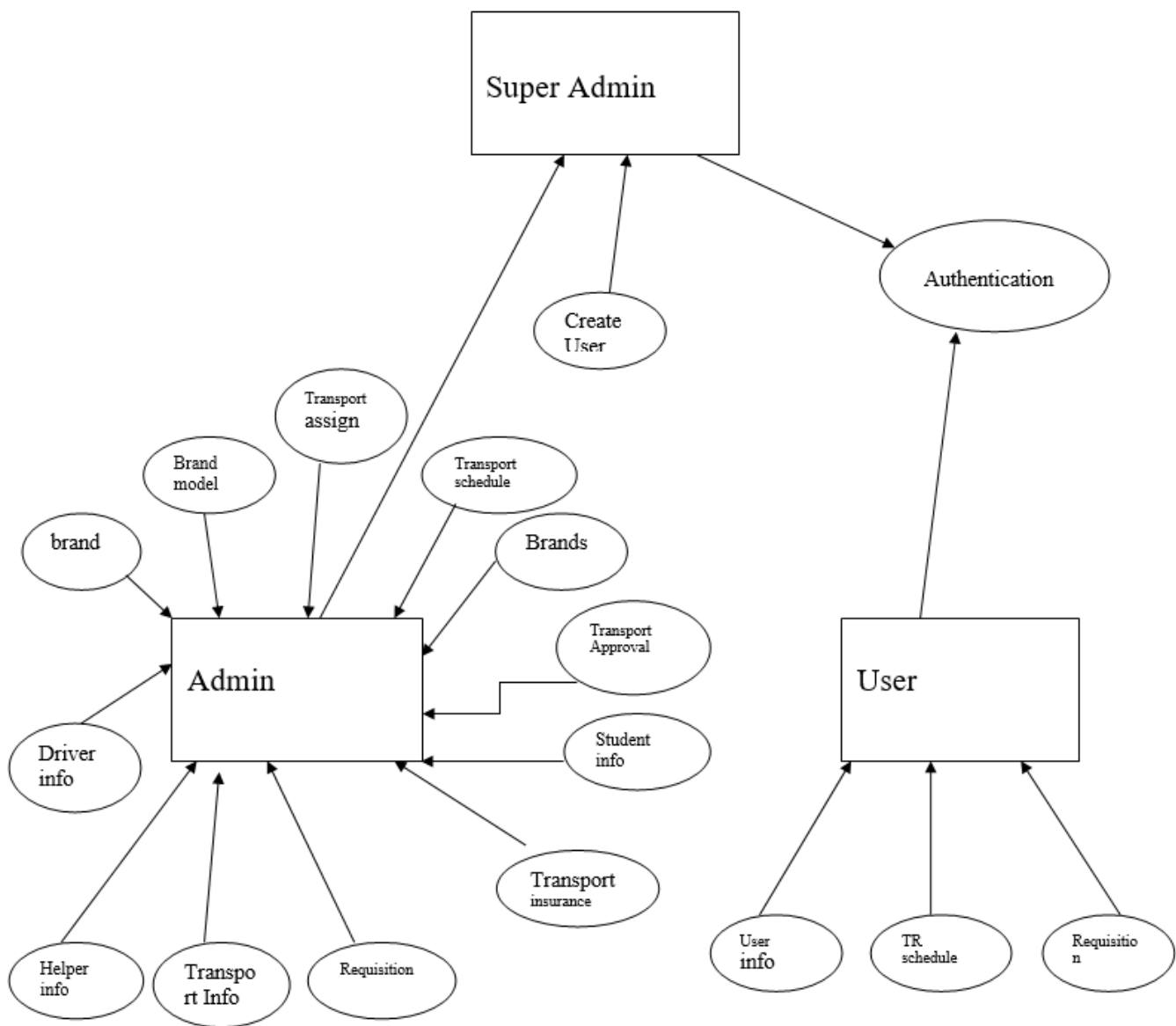


Fig: 6.2 DFD level1

6.3 Class Diagram:

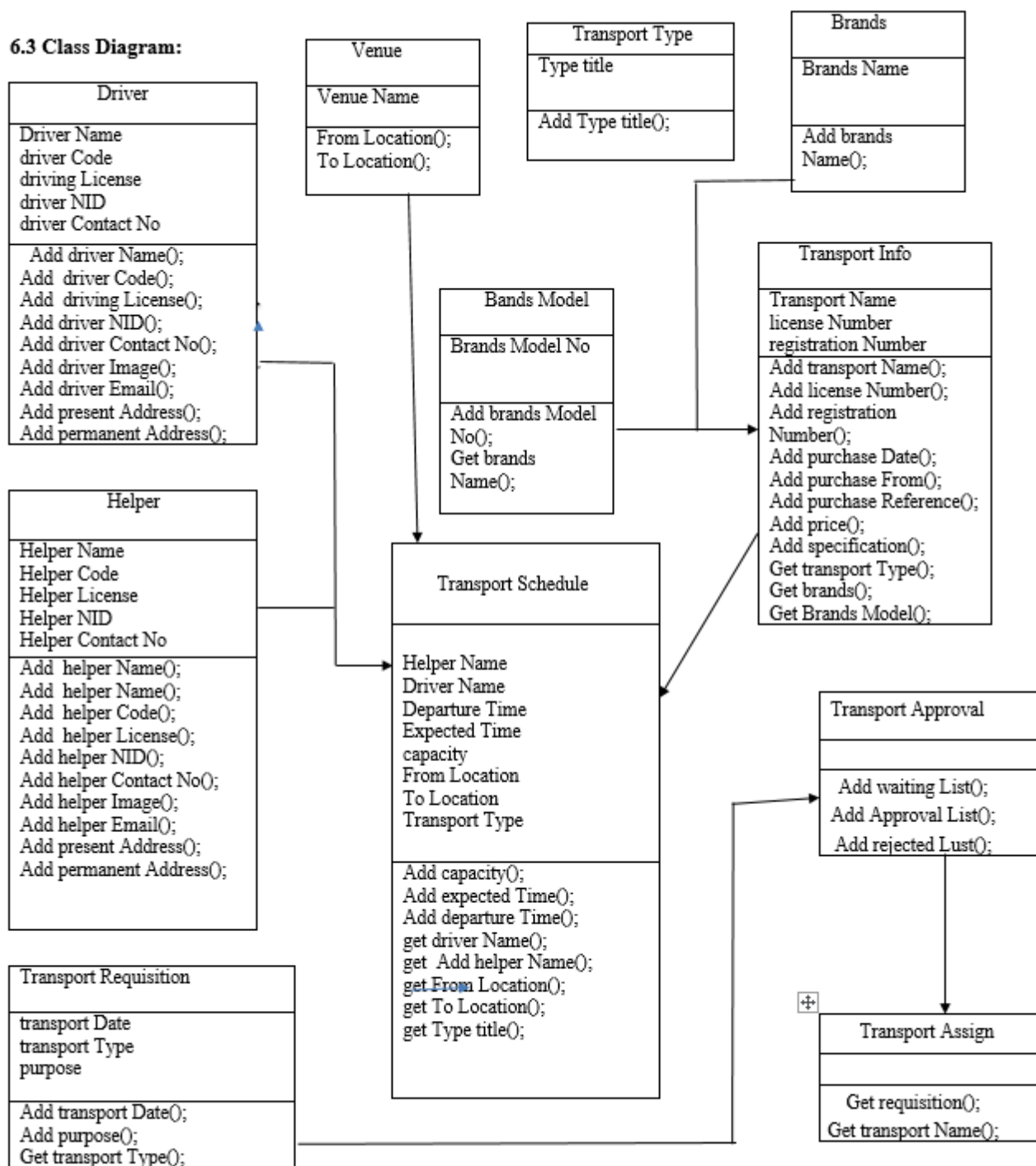


Fig: 6.3 Class Diagram

6.4 ERD (Entity Relationship Diagram) :

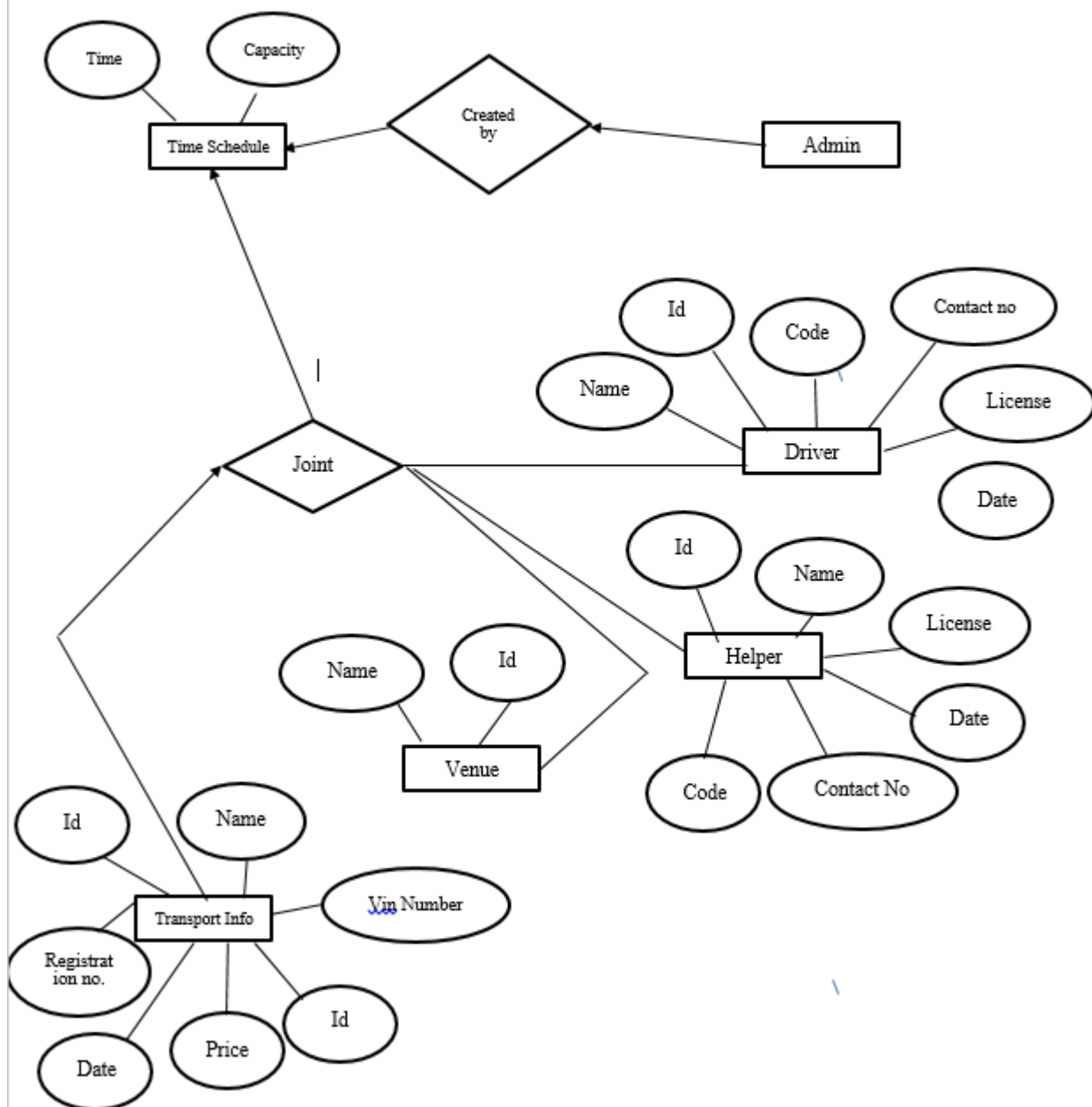


Fig: 6.4 Entity Relationship Diagram

CHAPTER 7

Implementation Details

7.1 Development Setup

-Programming language:

JAVA

-Frontend:

HTML , CSS, JAVASCRIPT

-Hardware interface

windows7/8/10

- Database: **MYSQL Server.**

Tools: Spring Framework

Framework: MVC

My SQL server is an open source relational database management system which is used to store the database using SQL queries. In this, All the filled data are stored in the database. MVC (Model View Controller) is used for implementing a user interface on computers.

7.2Deploymentsetup:

As this project is an onlineweb-based application so we must be followed the following five steps during deployment steps:

Step1: Preparation

The three general ideas for this website application deployment are;

1. The client has nothing(i.e. this is their first website).
2. The client already has to host and you will be deploying the site on their server.
3. The client already has to host but you will be moving to a new server.

Step2: Setup DNS records

Step 3: Set Up a Live Testing Site

Step 4: Set Up Email Accounts

Developers deploying a website often overlook email, but it will be a priority to the client. Does your client have mail hosted on their old server? Are you moving their email.

7.3 Deployment checklist:

1. Have access to DNS record management or know the people to contact
2. Set up the DNS records and make sure that all the settings are correct
3. Set up and test the website on the production server (where it will live)
4. Set up an email.
5. Back up the old site (if applicable) and deploy the new one.

7.4 System Constraints:

- PC or Laptop
- Smart Phone
- Internet
- Database
- User (anyone which is interested to see schedules).

CHAPTER-8

RESULTS/OUTPUT OF OUR SOFTWARE

All Files are included the results of the above comparison.

-Completion.

We have completed our project 100%. We have met all the functional requirements that we discussed.


-Accuracy

Our project is working 100% accurate. It fills all the functional and nonfunctional fields.

Correctness

As we have tested all the requirements and made their test cases mentioned and cleared all the mistakes so now our project is 100% correct.


Some features are given below

Home Driver Helper Schedule Functional Travel/Trip Others Log out

Existing Driver Data

+ Add Driver Information

Driver Name	Driver Code	Driving License	License Expire Date	Contact No		
Adul Halim1	DR000000001	236e5635436548326548	01-08-2018	01973637453	Delete	Edit
Karimuzzaman	DR000000002	2843275757	24-08-2018	017345327463	Delete	Edit
Abdus Samad	654332	323435436	11-09-2018	01973565353	Delete	Edit
Abdus samad	DR000000005	47836453645184818	14-09-2018	01973565353	Delete	Edit
Tanvir Hossain	DR000000006	34384325823	28-09-2018	01985464534	Delete	Edit
Akkas Ali Khan1	DR000000007	5474645845	27-09-2018	01973637451	Delete	Edit
Adul Halimm23	DR0000000098	236e563543654	26-10-2018	01973637453	Delete	Edit

Home Driver Helper Schedule Functional Travel/Trip Others Log out

Create New Driver Information

View Driver Information

0

Name

Enter Driver Name

Employee Code

Enter Driver Code

Date Of Birth

mm / dd / yyyy

NID(Optional)

Enter 17 digit NID

Driving License

Driving License

License Expire Date

mm / dd / yyyy

Contant Number

Enter Phone No

Email(Optional)

Email

Photo(Optional)

Browse... No file selected.

Present Address

Parmanent Address

Save

Reset

Transport Requisitions Approval

[Approval Waiting List](#)
[Approved List](#)
[Approval Rejected List](#)

Pending List For Approval

Show 10 entries

Search:

Transport Type	Travel Date	Requested By	Purpose	Approve	Reject
Private Car2	2020-07-24	admin	Abc	Approve →	✕ Reject

Showing 1 to 1 of 1 entries

[Previous](#)
[1](#)
[Next](#)

Transport Requisitions Approval

[Approval Waiting List](#)
[Approved List](#)
[Approval Rejected List](#)

Approved List

Show 10 entries

Search:

Transport Type	Travel Date	Requested By	Purpose	Approve	Reject
Abc	2017-09-11	mahadi	Mair purpose	Back to Pending	✕ Reject
Private Car2	2018-09-17	mujahid	Mair purpose	Back to Pending	✕ Reject
Abc	2018-09-19	mujahid	45	Back to Pending	✕ Reject
Abc	2018-10-15	admin	Approval	Back to Pending	✕ Reject
Bus	2018-10-20	khan	test	Back to Pending	✕ Reject
Abc	2017-09-11	mujahid	Exaple	Back to Pending	✕ Reject
Abc	2017-09-11	mujahid	Exaple	Back to Pending	✕ Reject
Abc	2017-09-11	mujahid	Exaple	Back to Pending	✕ Reject
Abc	2017-09-11	mujahid	Exaple	Back to Pending	✕ Reject
Abc	2017-09-11	mujahid	Exaple	Back to Pending	✕ Reject

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CHAPTER – 9

9.1 CONCLUSION

Our ERP type of web-based Software is made for a company. The company can use this system for their Transport Management. The objective of Web App Planning is to provide a framework that enables the administrator to make reasonable estimate Made within a limited time frame at the beginning of the software project and should be updated regularly as the project regularly.

In the end, it is concluded that we have made an effort on following points...

- All the field of this project is described in this Report.
- The description of the purpose, scope, and applicability.
- We already described the project on which we are working on the project.
- We explain the requirement and specifications of the system and actions that can be done on these things.

9.2 FUTUREWORK

We have a plan to improve our Web-based App in the future. Such as:

- Billing Info: All the expenses List of vehicles and other Cost can save this System.
- Police Case, Vehicle Insurance Info could save using this system.
- The user can see their bus status.
- The user can pay their bill using gateway System.
- The above-mentioned points are the enhancements which can be done to increase applicability and uses of the project.

REFERENCES:

1. Phillip Webb, Dave Syer, Josh Long, Stéphane Nicoll, Rob Winch, Andy Wilkinson, Marcel Overdijk, Christian Dupuis, Sébastien Deleuze, Michael Simons, Vedran Pavić, Jay Bryant, Madhura Bhav. <https://docs.spring.io/spring-boot/docs/current/reference/htmlsingle/#using-boot-devtools-restart-triggerfile>
2. Laffra, Advanced Java, Prentice Hall, 1997. [Google Scholar](#)
3. B. Liblit, A. Begel, E. Sweetser, "Cognitive perspectives on the role of naming in computer programs", *Proc. 18th Annual Psychology of Programming Workshop*, 2006.
4. Head First Programming, by David Griffiths.
5. <https://www.w3schools.com> .
6. <https://spring.io/projects/spring-boot>.