

DIGITAL TRANSPORT MANAGEMENT SYSTEM

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

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APPROVAL

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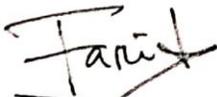
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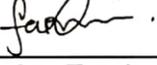
We hereby declare that, this project has been done by us under the supervision of **Md. Sadekur Rahman, Assistant Professor, Department of CSE, Daffodil International University**. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree.

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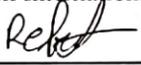


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ABSTRACT

The objective of this application is to automate the details of transportation pick and drop services provided by an organization to its employees and to manage the related information in a convenient method. The purpose is to design a system that allows one to manage relevant information. This system allows the user view all information of services provided by the organization. The user can make a request to administrator for the cab. This system allows the user could make update to cab request. This system allows the administrator to maintain and update all information of cab service details. The cabs are assigned by administrator to user cab request. This system allows user to make complaint for service and the administrator take action on complaint. The information's of cab request details of day user and regular user are maintained by administrator and the administrator can view all or selected information's. The purpose to design the system that allows search and retrieve related data easily show.

TABLE OF CONTENTS

CONTENT	PAGE NO
Board of Examiners	i
Declaration	ii
Acknowledgements	iii
Dedication	iv
Abstract	v
CHAPTER	
CHAPTER 01: INTRODUCTION	1-3
1.1 Introduction	01
1.2 Motivation	01
1.3 Objectives	01
1.4 Expected Outcome	02
1.5 Report Layout	03
CHAPTER 02: BACKGROUND	4-5
2.1 Introduction	04
2.2 Related Works	04
2.3 Comparative Studies	04
2.4 Scope of the Problems	05
2.5 Challenges	05
CHAPTER 03: REQUIREMENT SPECIFICATION	6-13
3.1 Business Process Modelling	06
3.2 Requirement Collection and Analysis	06
3.3 Use Case Modelling and Description	07
3.4 Logical Data Model	12
3.5 Design Requirements	13

CHAPTER 04: DESIGN SPECIFICATION	14-16
4.1 Front-end Design	14
4.2 Back-end Design	15
4.3 Interaction Design and UX	15
4.4 Implementation Requirement	16
CHAPTER 05: IMPLEMENTATION AND TESTING	17-34
5.1 Implementation of Database	17
5.2 Implementation of Front-end Design	19
5.3 Implementation of Interactions	33
5.4 Testing Implementation	33
5.5 Test Results and Reports	34
CHAPTER 06: CONCLUTION AND FUTERE SCOPE	35-35
6.1 Discussion and Conclusion	35
6.2 Scope for Further Developments	35
REFERENCES	36
APPENDIX	37

LIST OF FIGURES

FIGURES	PAGE NO
Figure 3.1: BPM of Transport Management System	06
Figure 3.2: Use Case Diagram for Helper	08
Figure 3.3: Use Case Diagram for Driver.	09
Figure 3.4: Use Case Diagram for Transport	10
Figure 3.5: Use Case Diagram for Admin and Officer	10
Figure 3.6: E-R Diagram of the Transport Management System	12
Figure 5.1: Local server home page	17
Figure 5.2: Implementation of main system table	18
Figure 5.3: Show schedule travel information	18
Figure 5.4: Login page of the project	19
Figure 5.5: Registration page of the project.	20
Figure 5.6: Create user page of the project.	20
Figure 5.7: Dashboard of the Transport Management System (TMS)	21
Figure 5.8: Existing brand of transport.	21
Figure 5.9: Add brand name of transport	22
Figure 5.10: Existing brand model of transport	22
Figure 5.11: Create brand model of transport	22
Figure 5.12: Transport type of transport	23
Figure 5.13: create new transport type of transport	23
Figure 5.14: Existing venue of transport	24
Figure 5.15: Create a new venue of transport	24

Figure 5.16: Existing institute of transport	24
Figure 5.17: Create a new transport information of project part-1	25
Figure 5.18: Create a new transport information of project part-2	25
Figure 5.19: Editing transport information of project	26
Figure 5.20: Existing repair and maintenance of transport	26
Figure 5.21: Create new repair and maintenance head of transport	27
Figure 5.22: Rejected request of transport	27
Figure 5.23: Approved request of transport	27
Figure 5.24: Existing traveler types of transport	28
Figure 5.25: Create new traveler types of transport	28
Figure 5.26: Existing traveling schedule of transport	28
Figure 5.27: Create new transport schedule page of transport	29
Figure 5.28: Existing schedule and travel information of transport	29
Figure 5.29: Create new transport schedule and travel information page of transport	30
Figure 5.30: Existing transport requisition information of transport	30
Figure 5.31: Create new requisition of transport	31
Figure 5.32: Pending list for approval	31
Figure 5.33: approval list for request	32
Figure 5.34: Existing general travel information of transport	32
Figure 5.35: Create new generate travel for transition	33

LIST OF TABLES

FIGURES	PAGE NO
Table 2.1: Comparative Analysis Table	5
Table 4.1: Activity List of the System	14
Table 5.1: System Testing Tab	34

CHAPTER 01

Introduction

1.1 Introduction

Digital Transport management system that show the dashboard, basic configuration, repair maintenance, travel & trip. The whole world is now coping with this digital technology that makes our daily life easier. Making this platform popular and maintains transport system easier in our country, so we develop this web application. In this system user can access to our application feature. There are three types of user can access this they are admin, driver, and passengers like students. Admin can control entire system. Additionally, the motivation of this application and how it naturalizes users will be illustrated.

1.2 Motivation

We are motivated by many things during developing this system. There was various reason we stepped forward and thought to go ahead solving this problem.

- Bangladesh has 46 public universities and the total number of approved private university is now 97 [1]. Every university has own transport system but maximum private and public university doesn't have better TMS. This reason student and employee face several problems. So, we decided to make this application as useful as possible for employees and students helps.
- Sometimes students and employee missed their university bus, so they couldn't attend class and office in just time. Because, there lack of understanding about university transport schedule.
- Due to lack of proper management system, many times driver wastes time unnecessary on the road as a result passenger are suffering.

1.3 Objectives

The key objects of the project are as follows:

- To provide a better TMS for any organization and institute.
- To maintain the proper time schedules all transport system.

- To provide registration option for all user.
- To provide a personal profile for every registered employee and admin. Where they can login by using username or password and also can update their own information.
- To provide a special schedule for special case and maintain easily.
- There is no fear of losing document, and it's easy to find any old information easily.
- To provide a platform for all users to find the time schedule and which are available to service.
- To provide a platform all transport system what kind of vehicles are use institute or organization, every vehicle details can show this application.
- To provide a platform to the TMS (Transport Management System) admin so that they can update the website from anywhere with internet access.

1.4 Expected Outcome

We are going to create a website. We will try to lower the specified characteristics or outcome in the initial stages. In our project will be given basic all transport information of institute. All information divided according to some category. Such as Basic configuration, Travel & Trip, Repair and Maintenance, Employee, Create user.

Basic configuration has Band, Band Name, Band Model, Transport type, Venue, Institute, transport information. Transport information has transport name, brand model name, model no, registration number, engine no, fitness no, fitness issue date, fitness expire date, tax token no, tax token issue date, tax token expire date, route permit no, route permit issue date, route permit expire date, total seat no, purchase date, purchase by, purchase from, purchase reference and other information.

Employee details has employee name, employee age, employee id, join date, bath of date and home town and employees are driver and helper.

Travel & Trip that show the transport name, from location, to location, departure time, driver name, helper name, travel type, travel starting and ending date & time, transport type AC or non-AC, transport quantity. Passengers can easily check transport information.

Repair maintenance that show the how many vehicles are currently in repair, and how long it takes? How many new vehicles are applying for repair?

Admin can create new model, create new transport type, create new venue, create new institute, create transport information and control the application.

So, the expected outcome of this project is to develop a system that will provide services.

1.5 Report Layout

The report is distributed into five chapters. Each chapter has various parts explaining in detail.

● Chapter 1: Introduction

In this chapter we have discussed about the Transport management system, motivation, of our project, its objectives and expected outcome.

● Chapter 2: Background

This part talks about our task related works, similar examinations and extent of the issue.

●Chapter 3: Requirement Specification

This part illustrates the Business Process Modelling, necessity accumulation and examination, use case displaying and depiction, sensible information model and plan prerequisites.

●Chapter 4: Design Specification

This section examines our undertaking front-end configuration, back-end structure, connection plan and UX and execution prerequisites.

●Chapter 5: Implementation and Testing

This part talks about the Implementation of database, front-end structure, connections, testing. Likewise examine about test outcomes and reports.

●Chapter 6: Conclusion and Future Scope

This section talks about the end and future extent of our task.

CHAPTER 02

Background

2.1 Introduction

Transportation is a web-based project management system. In this chapter we will discuss about the comparative, present, future occurrence on transportation system. Now we will try to discuss about the solution on the transportation management system. We will try to find out present transportation problem solution on many institutions, business management system, hospital management system etc. Now we also try to full fill our target on this transportation system. Not only this management system have we wanted to also try to solve our all institutions transportation system. In this work we face many challenges on this transportation system.

2.2 Related Works

There are many transportation systems on online sourcing system all over the world but this transportation system we can try to solve our problem to easier to for institutional problem. There will be a record in system on our transportation apps solution therefore we can easily find out all kinds of transport vehicle & we can detect all transportations vehicles drivers' details. So, it is easier to use all users for detect their transportation system. In this project there is something different from other transportation system it is easier to use all users from in this web base system. That's why we suggest to use to safe institutional system.

2.3 Comparative Studies

Transportation is a system there is a huge number of managements on online sourcing system. There are some websites similar on this type management system. But this is different for other web sites there is a requested by on this system we can see this app with there all details but other web sites are unable to this we can also the rejected person who reject the order on this system procedure but other is shown but there no all kind of information why he rejects the order. Also, this process is recorded on their system on this management system that's why it's important for all kinds of institutions on management system.

2.3.1 Comparison with related applications

A comparative analysis of some related applications is shown in table 2.1 [2].

Table 2.1: Comparative analysis

	Loaded	Running	Returned	Stock
User registration	Yes	Yes	Yes	No
Driver	Yes	Yes	No	No
Transportation	Yes	No	No	Yes
Product Type	Heavy	Yes	No	No
Location	Yes	Yes	No	No

Here we see the differences the web differences on the systems on this procedure. we can define this table & we can find out easily.

2.4 Scope of the Problem solution

If we modify at random on this management system, we can solve our transportation problem easily. It helps us easily on our transportation system. We can add charts on transportation system if a driver needs a thing on other drives they can chart on their members easily it helps institution time costing less easily. That's why we can use for our transportation system.

2.4.1 Scope of the Problem

Many drivers are illiterates so they are unknown to play this app on devices so they face a very big hesitation on their procedure & it hampers on institutional reputation on this procedure so it's some way's we will face some common problem on this management system.

2.5 Scopes

If we continuing this app running on this procedure we can be success to popular and familiar to this app & there is so common problem we will face if we curve it we can be success & get our goal easily.

CHAPTER 03

Requirement Specification

3.1 Business Process Modeling

The whole workflow of system is representing by business process model (BPM). The main characteristic of the methodology is representing “flow diagram”. A business process model is graphically notation to the ability of understanding their interior business procedure [3]. The graphical notation will ensure the business procedure collaborations between different organizations. BPM are representing whole procedure of business shortly, that are efficient of business purses.

BPM of Transport Management System shown in figure 3.1

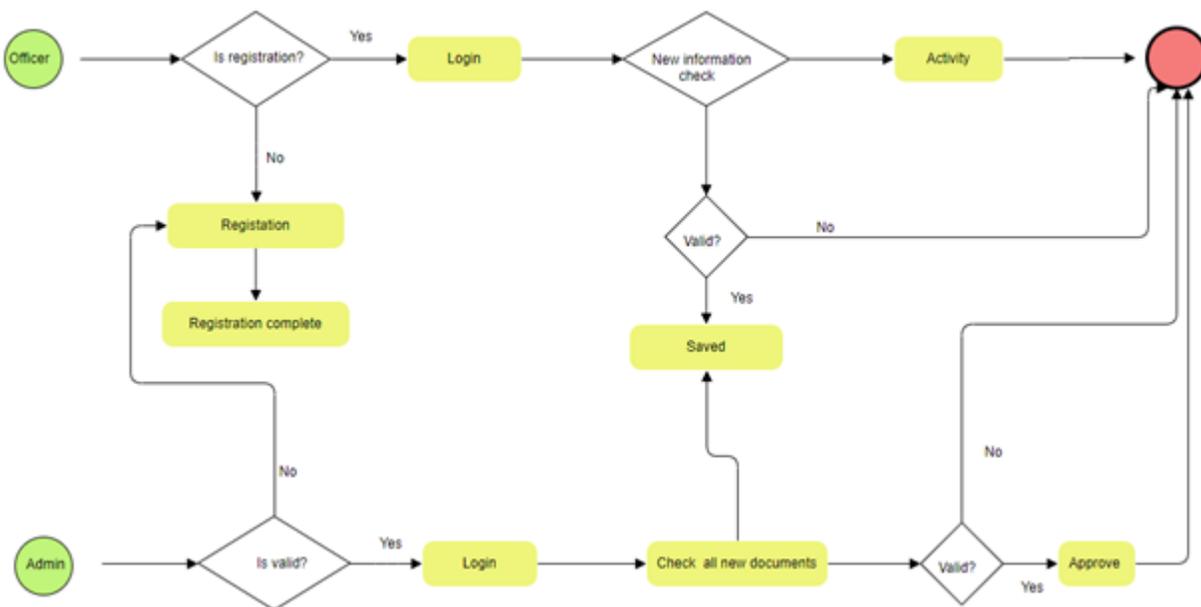


Figure 3.1: BPM of Transport Management System

3.2 Requirement Collection and Analysis

Requirement collection and analysis is one of the basic important parts of development application. For development, now we describe some requirements.

3.2.1 Software Requirements

To build up this web application, we used following software:

- Operating System: windows & Linux.
- System Design: Adobe Photoshop, Illustrator.
- Language: HTML, CSS, JavaScript.
- Framework: Spring Boot(java), Bootstrap 4 (CSS).
- Editor: Subline Text, Eclipse, Postman.
- Device: computer.

Software Requirement for running the app:

- Operating System: computer, Laptop.

3.2.2 Hardware Requirements

- Processor: Intel Core i3.
- RAM: 4GB
- Space on Disk: Minimum 0.2GB

3.2.3 Functional Requirements

From the whole of the view of our system, it should have huge functional requirements, registration section, login, sing out section section, approval section, maintenance and update section where can authenticate person can access, a dashboard for maintaining profile. Dashboard also contains more option other portion like, real time transport location, time and calendar.

3.2.4 Non-functional Requirements

Non-functional requirements are help to being more efficiently such as: performance optimize, consuming of memory, smoother operation and load on quickly as soon as possible to our application. Application design of UI should be user friendly and gorgeous for user experience.

3.3 Use Case Modelling and Description

A use case diagram is also called unified modeling language that are represent system action in graphically. Every activity is show in this type diagram we can get knowledge the whole activity of actor. A use case shows and design the list of action, role and activity of user and authority in a short time. In use case diagram actors are play the main role of different actions and a use case diagram has many types of actor every actor is play different actions. Scenarios of application or system interacts with people, institute or organization.

A use case diagram didn't explain whole procedure clearly but you achieve huge knowledge for this kind of diagram. It clearly suggestion the whole process of your actor activity [4]. Now we show the all use case diagram of our application. Actually, admin is not a proper user he maintains the all system and monitoring whole process. Admin is controller which are connected all actor direct or indirect.

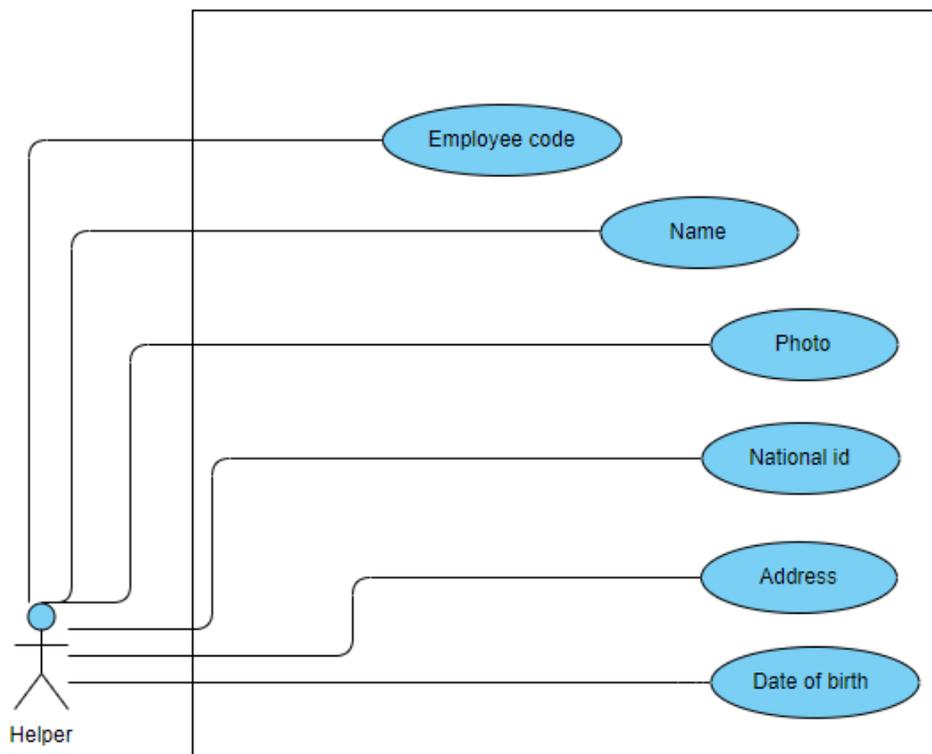


Figure 3.2: Use Case Diagram for Helper.

Figure 3.2 show the helper activity what his needed to registration, we can see some information are show the diagram like their employee code, name, photo, national id, date of birth address etc.

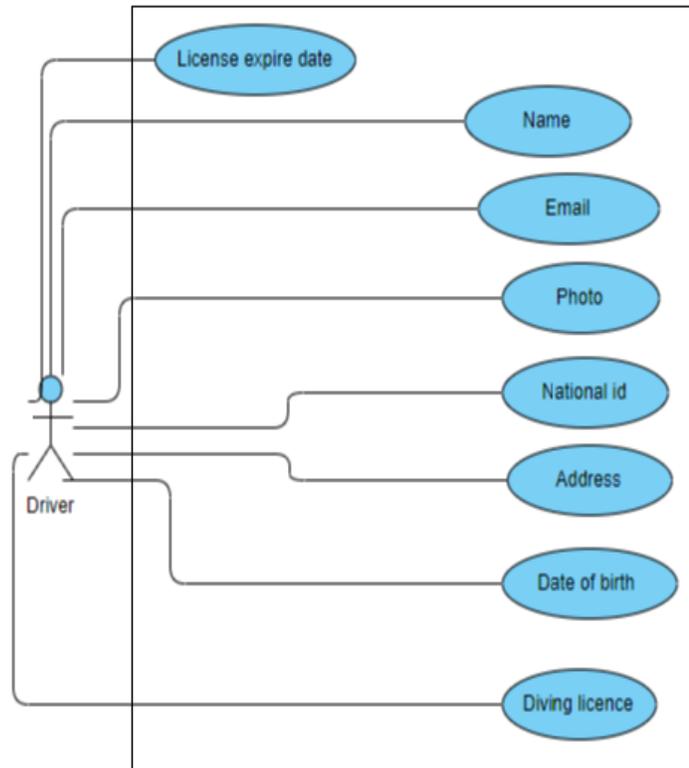


Figure 3.3: Use Case Diagram for Driver.

Figure 3.3 show the driver activity what his needed to registration, we can see some information are show the diagram like their employee code, name, photo, national id, date of birth address etc. Driver can be must inform his license and license expire date.

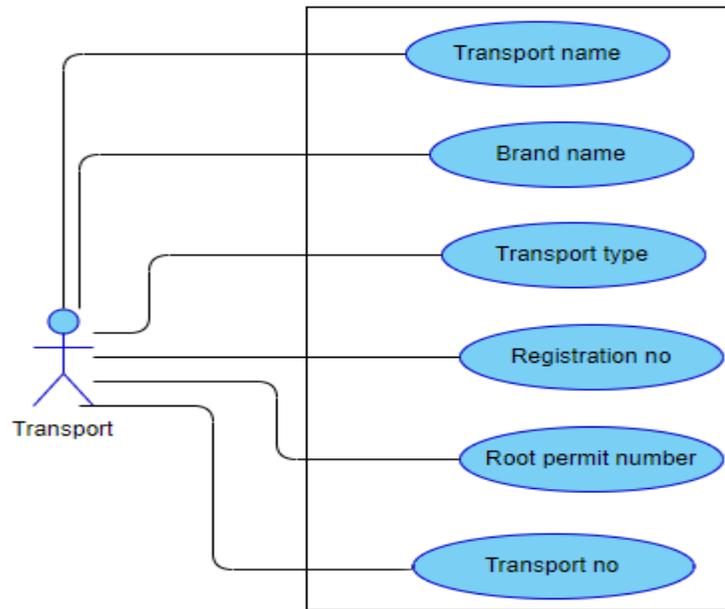


Figure 3.4: Use Case Diagram for Transport.

This figure 3.4 show the transport use case diagram that has transport name, brand name, transport type, registration no, root permit number, transport no etc.

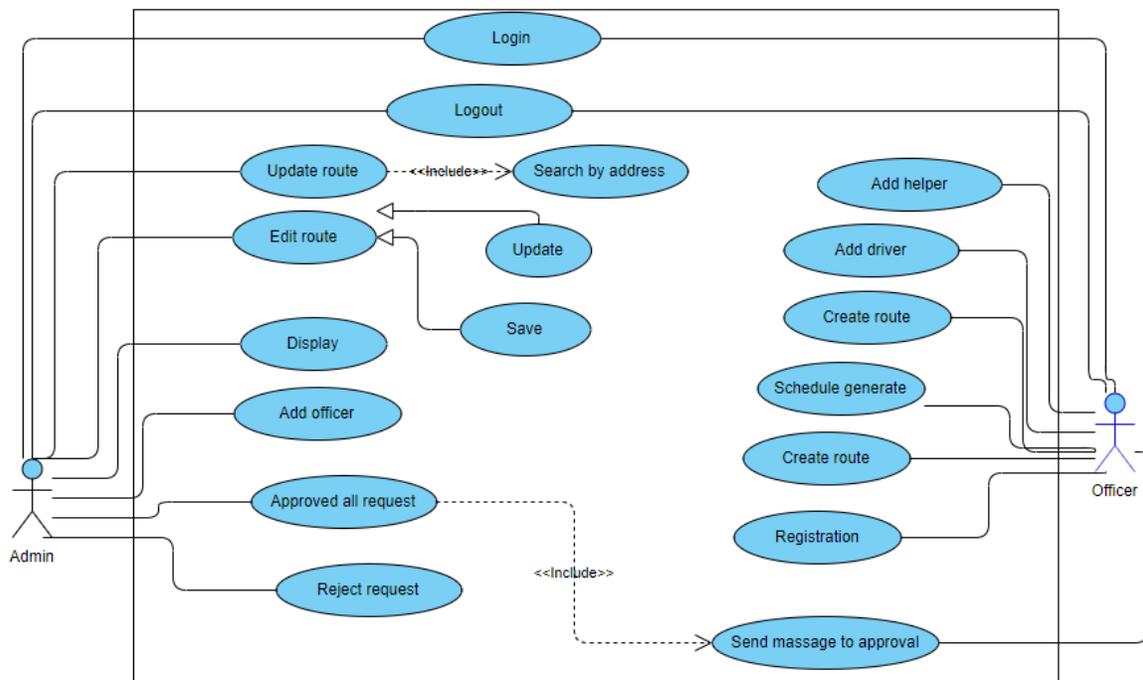


Figure 3.5: Use Case Diagram for Admin and Officer.

Here figure 3.2, 3.3, 3.4, 3.5 respectively show the use case diagram for admin, officer, driver, helper they can register, they can login in the system, they can check the profile, they can keep their personal information. Here admin is the head of this system, admin can be edit, check, update, delete or everything. They also can check all display information.

3.4 Logical Data Model

An Entity Relationship diagram is the part of flowchart that are broadly describes how to connected each other like as people and object. An Entity Relationship diagrams are biggest portion to use to draw a relationship diagram in software engineering, computer engineering, business, education thesis and research field. This field are easy to describe using ER diagram. people and student can easily understand whole system in a few times. And also known as ER or ERDs models used they can create a set of symbols such as diamond, ovals, rectangle, connecting lines together [5].

Data structure diagram (DSDs) are related to Entity Relationship. ER diagram are flow the design of whole diagram of system. Now we can see this process, how to describe whole system in ER diagram in our project. Given below is the E_R diagram used in our Project.

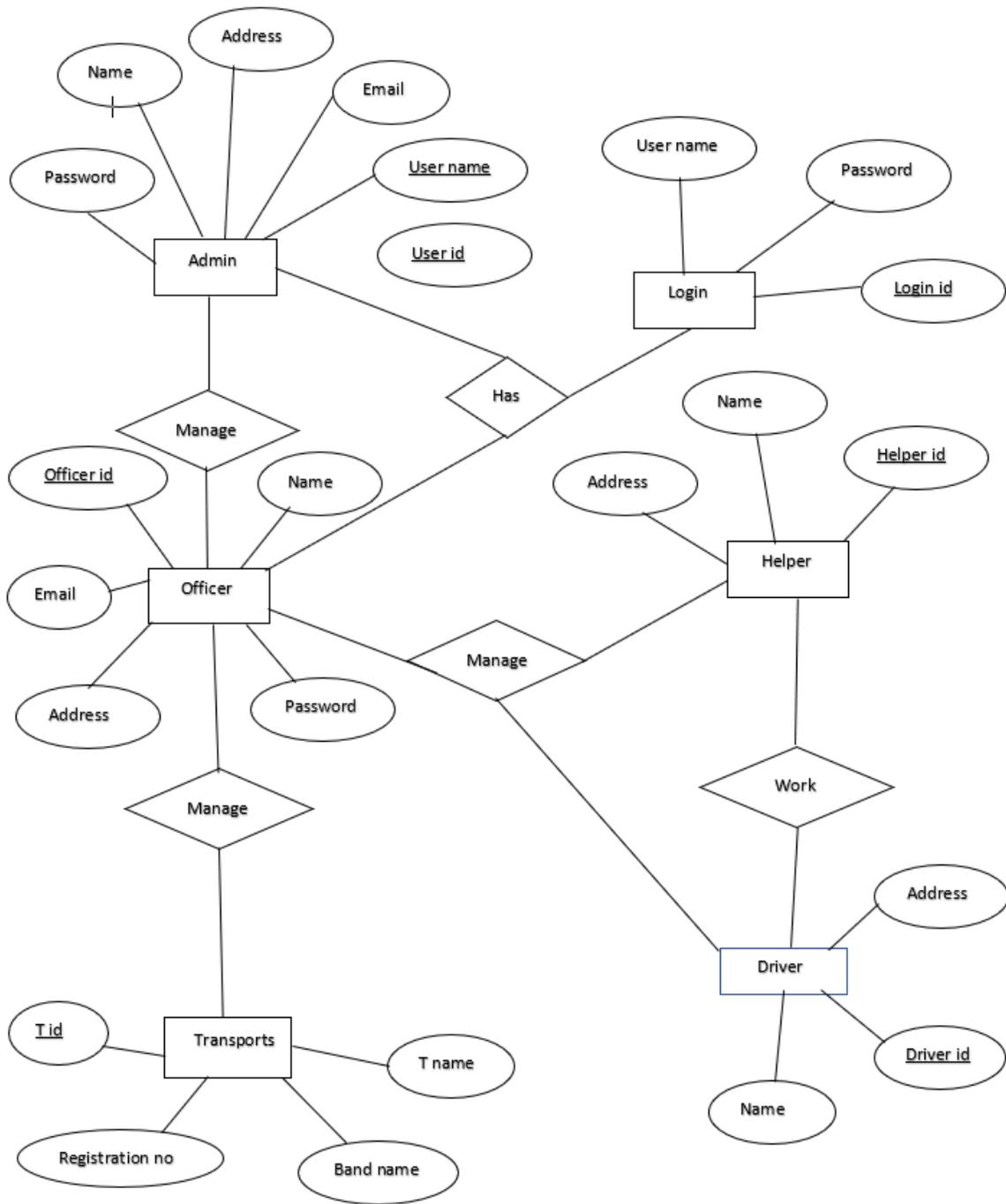


Figure 3.6: E-R Diagram of the Transport Management System.

Figure 3.6 represent all system of transport management system how to connect each other to the project. All actor is connected each other and put their action. Admin can access all transport system and approval all system message and information.

3.5 Design Requirements

Finding out requirements for designing the whole project is most important task for completing the whole project. The other side of development is totally dependent on designing the system. That graphically represents how the system will be working.

- the system will control two types of admin first admin second are officers. Admin are main authority.
- Admin will be monitoring the whole system. And approved and reject any request.
- Officers are adding helper and driver information, create route, setting and update transport information, schedule generate, entry the new route, observe the vehicles maintaining, etc.

CHAPTER 04

Design Specification

4.1 Front-end Design

In this transportation system we use in front-end and back-end process on this system. We trying to beautiful designed on this transportation system. Also trying to easy process for users friendly on this management system. In front-end back-end we want to try user friendly management system on this web base management system process.

Now we are trying to draw table for over view on the system –

Table 4.1: Activity on the procedure

Serial No	Activity Name
1	Transport management system
2	More options on system
3	Screen paper
4	System buttons
5	Driver management
6	Transport register
7	Travel management
8	Trip management
9	Repair maintenance
10	AMP maintenance
11	User information
12	API on the system
13	Programming interface
14	View in JS
15	Java query

4.2 Back-end Design

Dynamic function on this project application on the system on transport management process. In this procedure we used in data base management because transport management system is trying to solve in user friendly app on the system. Application in our transport system is easier for users and friendly for this procedure. The user can't be accessed by the back-end design or framework system or management system on this application procedure. The controller can be accessed by all files on the transportation system. It is the important system for the application. Model is trying to be drawing easy for users. In this all combinations then everyone can be seen this framework easily.

4.3 Interaction Design and UX

Transportation management web-based app is user friendly. It is best for all institutions to know about their vehicles on the system. The users are not satisfied if an application is not user friendly from users and moves on to other apps that are easier to use. It is best thing from all apps on the system. When a user's is more satisfy to use the app then they will interact on the system on this application system. This model is best interring reactive from user on the system [6]. There is a simple concept from all users when users can use this app then the controller can be controlled on the application on the system. That's makes so easier for us.

Dashboard inter reaction design & UX

Dashboard is common thing from all users because this is a front-end content from this application. In this dash board first page here is front screen on the system here is a creating list, total number of vehicles, driver list, driver details, user interface, model no & name in vehicles, mapping system on the list, going to their routing system from all users in the system. If we can use and update this app at random on the system we can be change our proper direction app on the system properly.

Screen paper & UX

In this screen paper we see the database from users on this procedure. Screen has all accessing buttons on TMS. TMS has some own features it is we can easily add or define this vehicles info on this management system. Therefore, all institutions can be accessed by the users from the rules in this management system.

User information & UX

In this process we can be accessed by all user's information in databases on this management system it's important for all transport system's procedure.

Interaction & Design & UX

User can react their opinion on this process & management system.

Trip maintenance & UX

All data is saved from details from the user in this process when the trip or when they drop out.

4.4 Implementing & Requirements

- The design we needed to implement in Sublime text, eclipse, java query
- Needed to browser google chrome, Firefox, slim jet
- We used to language are html, CSS, java query
- Some frame work we used to be Spring Boot(java), Bootstrap(java) 4, CSS, java query.
- SQL injection needed to protect with string escaping.

CHAPTER 05

Implementation and Testing

5.1 Implementation of Database

In this web application app, we can use DBMS (MySQL). MySQL is one of the best server side applications. Here I am show figure in MySQL database. The figure I am showing the MySQL server 5.1, 5.2, 5.3.

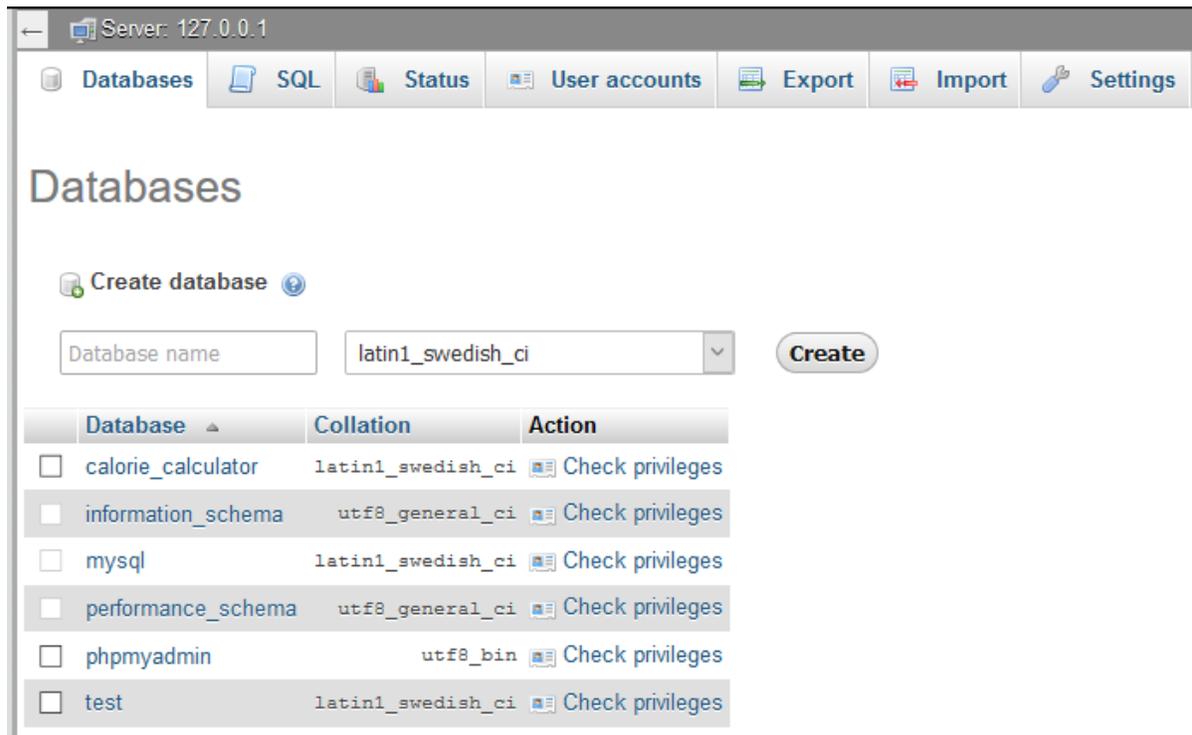


Figure 5.1: Local server home page

The figure a 5.1 show local server home page. Here showing table create section and sub database table.

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> billing	★ Browse Structure Search Insert Empty Drop	22	InnoDB	utf8_general_ci	48 K1B	-
<input type="checkbox"/> brandandmodel	★ Browse Structure Search Insert Drop	~0	View	---	-	-
<input type="checkbox"/> brandmodel	★ Browse Structure Search Insert Empty Drop	20	InnoDB	utf8_general_ci	48 K1B	-
<input type="checkbox"/> brands	★ Browse Structure Search Insert Empty Drop	30	InnoDB	utf8_general_ci	48 K1B	-
<input type="checkbox"/> busschedule	★ Browse Structure Search Insert Drop	~0	View	---	-	-
<input type="checkbox"/> driverinformation	★ Browse Structure Search Insert Empty Drop	15	InnoDB	utf8_general_ci	48 K1B	-
<input type="checkbox"/> generaltravelinformation	★ Browse Structure Search Insert Empty Drop	14	InnoDB	utf8_general_ci	96 K1B	-
<input type="checkbox"/> helperinformation	★ Browse Structure Search Insert Empty Drop	3	InnoDB	utf8_general_ci	48 K1B	-
<input type="checkbox"/> institute	★ Browse Structure Search Insert Empty Drop	4	InnoDB	utf8_general_ci	48 K1B	-
<input type="checkbox"/> policecase	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8_general_ci	32 K1B	-
<input type="checkbox"/> policecasetype	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8_general_ci	32 K1B	-
<input type="checkbox"/> repairmaintenancedetail	★ Browse Structure Search Insert Empty Drop	26	InnoDB	utf8_general_ci	48 K1B	-
<input type="checkbox"/> repairmaintenancehead	★ Browse Structure Search Insert Empty Drop	5	InnoDB	utf8_general_ci	48 K1B	-
<input type="checkbox"/> repairmaintenancerequest	★ Browse Structure Search Insert Empty Drop	8	InnoDB	utf8_general_ci	64 K1B	-
<input type="checkbox"/> role	★ Browse Structure Search Insert Empty Drop	12	InnoDB	utf8_general_ci	48 K1B	-
<input type="checkbox"/> sheduledtravelinformation	★ Browse Structure Search Insert Empty Drop	11	InnoDB	utf8_general_ci	48 K1B	-

Figure 5.2: Implementation of main system table

The figure 5.2 shows the MySQL table system. This page manages database table system edit, deleted and update. It's also shows all table information.

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	id	fkTrnsportId	fkScheduleId	travelDate	actualDepartureTime	actualReachedTime	comments	createdTime
<input type="checkbox"/> Edit Copy Delete	1	19	19	2019-01-14	00:00:00	00:00:00	comments	2019-01-14 22:05:02
<input type="checkbox"/> Edit Copy Delete	2	7	9	2019-01-14	00:00:00	00:00:00	fdg	2019-01-14 22:26:51
<input type="checkbox"/> Edit Copy Delete	3	19	12	2019-01-14	00:00:00	00:00:00	fg	2019-01-21 22:45:35
<input type="checkbox"/> Edit Copy Delete	4	19	12	2019-01-14	00:00:00	00:00:00	fg	2019-01-14 22:46:36
<input type="checkbox"/> Edit Copy Delete	5	7	10	2019-01-14	00:00:00	00:00:00	vpn	2019-01-14 22:54:07
<input type="checkbox"/> Edit Copy Delete	6	19	19	2019-01-14	00:00:00	00:00:00	fyy	2019-01-14 23:21:48
<input type="checkbox"/> Edit Copy Delete	7	9	9	2019-01-21	00:00:00	00:00:00	comments	2019-01-21 22:13:58
<input type="checkbox"/> Edit Copy Delete	8	19	13	2019-01-21	00:00:00	00:00:00	cdfrg	2019-01-21 21:31:34
<input type="checkbox"/> Edit Copy Delete	9	10	17	2019-01-21	00:00:00	00:00:00	xs	2019-01-21 21:39:00
<input type="checkbox"/> Edit Copy Delete	10	19	13	2019-01-21	00:00:00	00:00:00	fit	2019-01-21 23:49:10
<input type="checkbox"/> Edit Copy Delete	11	9	9	2019-02-10	00:00:00	00:00:00	hbj	2019-02-10 13:17:33

Check all | With selected: Edit Copy Delete Export

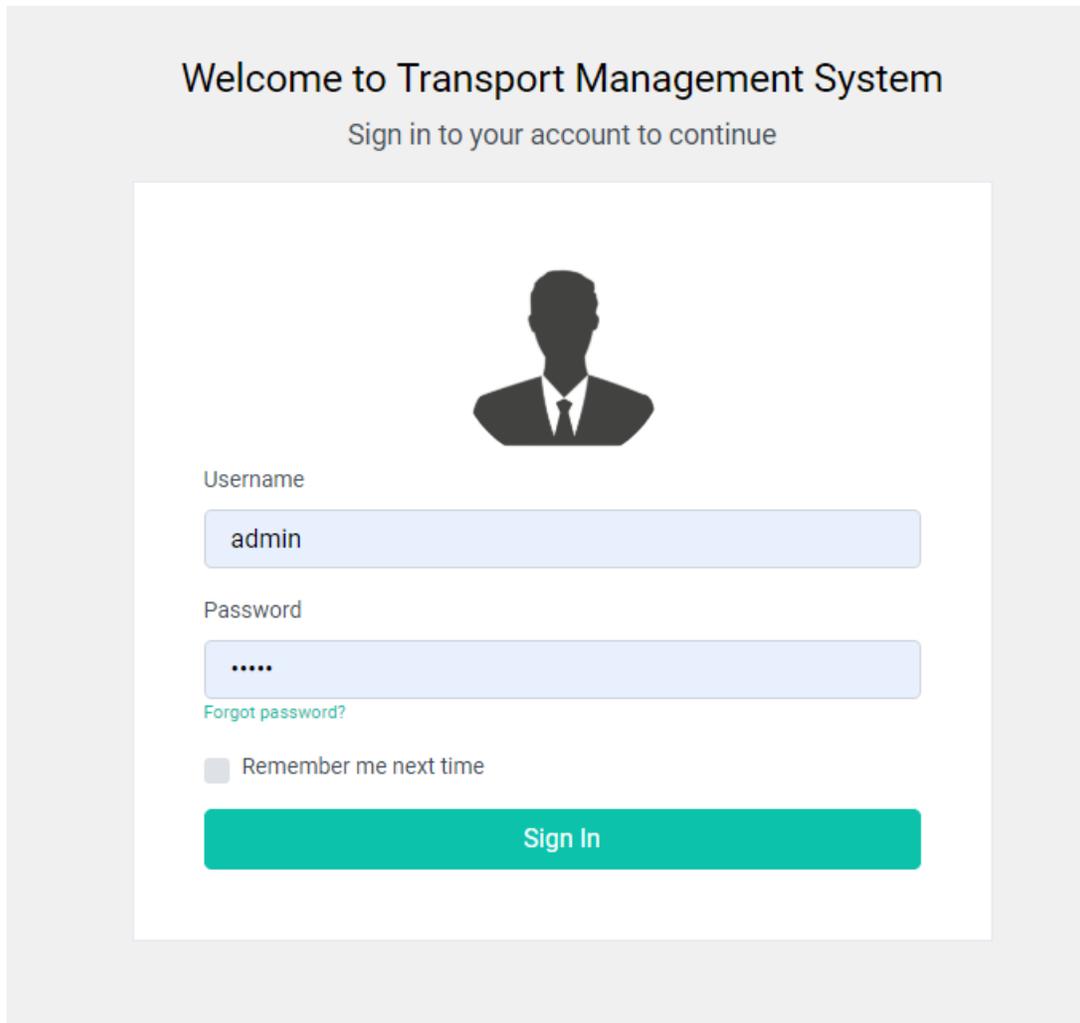
Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Figure 5.3: Show schedule travel information

The figure 5.3 shows schedule travel information table data.

5.2 Implementation of Front-end Design

For the application development front-end is a most important section. User can directly interact front-end design and its work on presentation layer. It is very useful to user when they use application and they can easily understand. So, we tried to develop and design our application easy user friendly so that user can easily use this application, but development task was not easy. Now we attach some front-end screen given below.



Welcome to Transport Management System

Sign in to your account to continue

Username

admin

Password

.....

[Forgot password?](#)

Remember me next time

Sign In

Figure 5.4: Login page of the project.

This figure show in this system user must login before use this application. User sign in and sign out in this project.

User Registration

Full Name

Email Address

Password

Re-type Password

Company Name

[Back to Login](#) [Register for User](#)

Figure 5.5: Registration page of the project.

This are registration page user can registration here. User visit this site and complete registration easily. When registration complete, they can easily login the login page.

Create New User

User Registration
 Create new user.

First Name

Last Name

Username

Email address

Phone Number

Password

Conform Password

User Type

Photo
 No file selected.

[Sign Up](#)

Activate Windows

Figure 5.6: Create user page of the project.

This registration officer can create new user from this page. Here all requirement adds here.

Now we show the dashboard of our project.

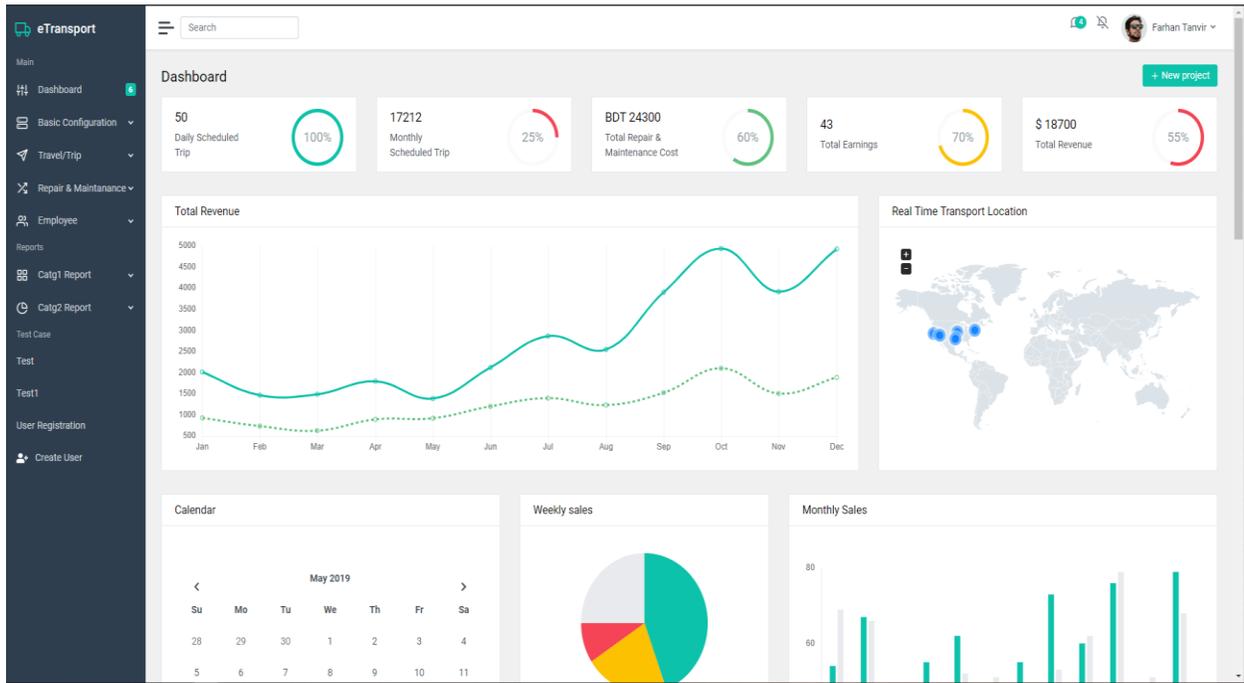


Figure 5.7: Dashboard of the Transport Management System (TMS).

Here we can see the first page of transport management system. This are dashboard of the project.

Now we go to the basic configuration of the project here has some criteria.

The 'Brands' configuration page shows a table of existing brands with the following data:

ID	Brand Name	Actions
1	2	1 3 11 4 11
2	BMW	🗑️ 📄
3	Marully	🗑️ 📄
5	Mercedes	🗑️ 📄
6	Feari	🗑️ 📄
7	TATA	🗑️ 📄
8	Mazda	🗑️ 📄
9	Echer	🗑️ 📄
11	Transport1	🗑️ 📄
15	NEW3	🗑️ 📄
16	New	🗑️ 📄

The page also includes a search bar, a 'Show 10 entries' dropdown, and pagination controls at the bottom right.

Figure 5.8: Existing brand of transport.

This figure shows the table of all transport brand information. We can see this figure has id, brand name.

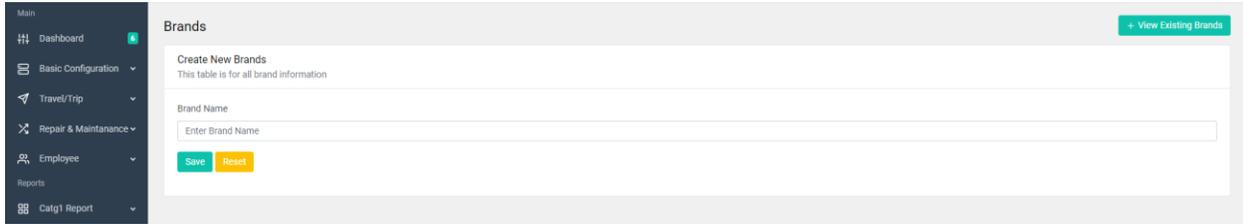


Figure 5.9: Add brand name of transport.

Here adds the brand name of all transport system.

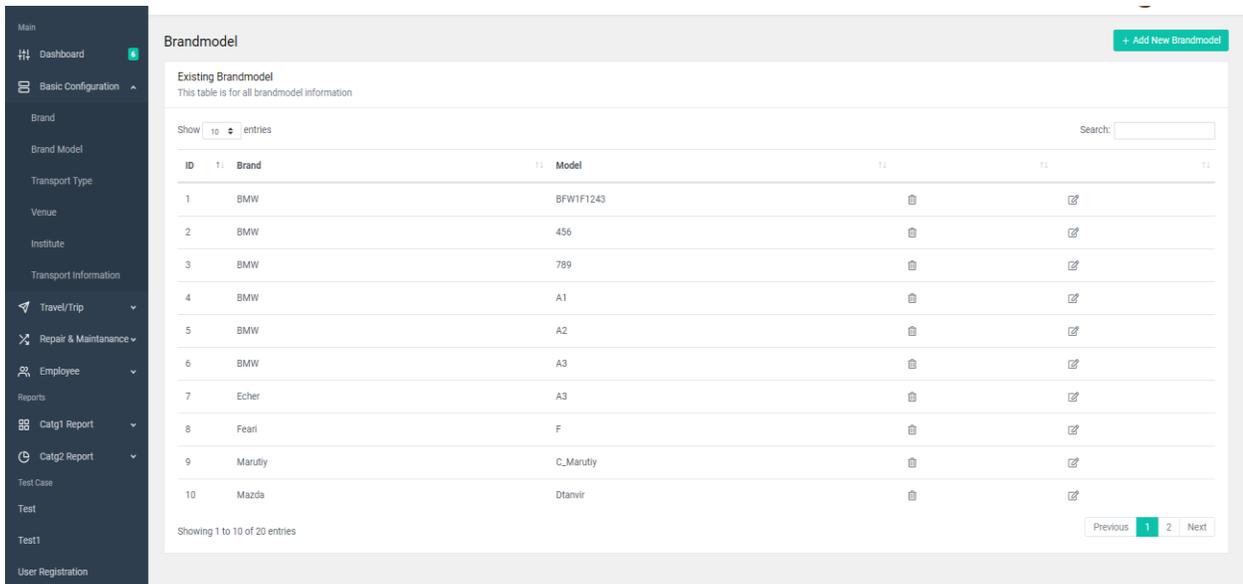


Figure 5.10: Existing brand model of transport.

This figure shows the table of all transport brand model information. We can see this figure has id, brand name, and brand model.

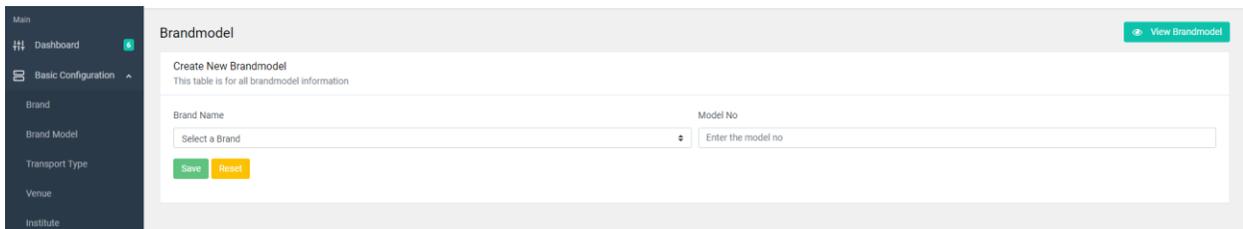


Figure 5.11: Create brand model of transport.

Here admin of officer creates the brand model easily.

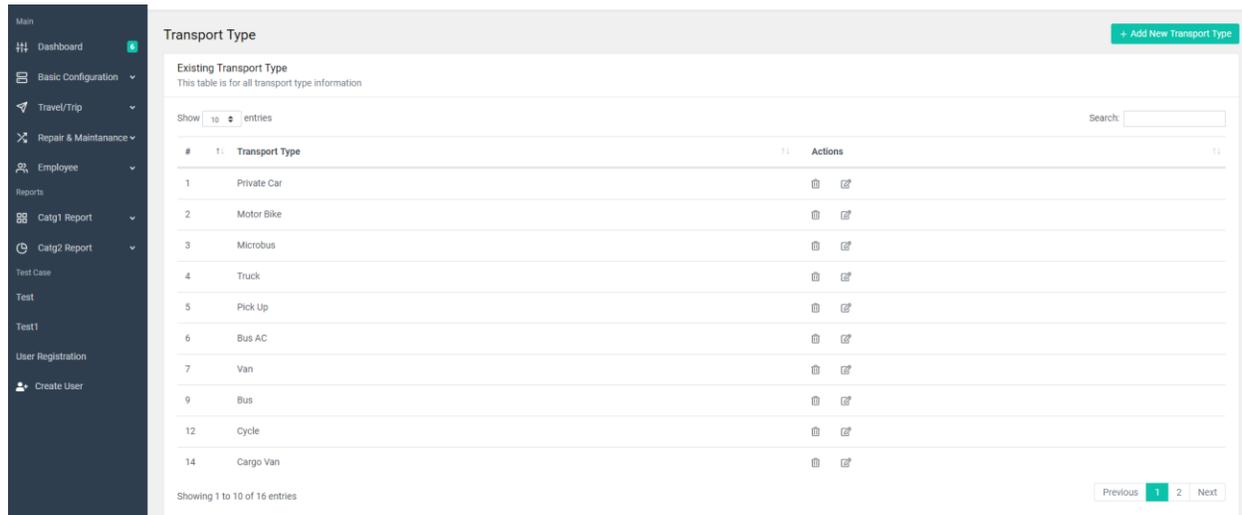


Figure 5.12: Transport type of transport.

We can see this figure the transport type of transport like bus, car, ac bus, non ac bus.

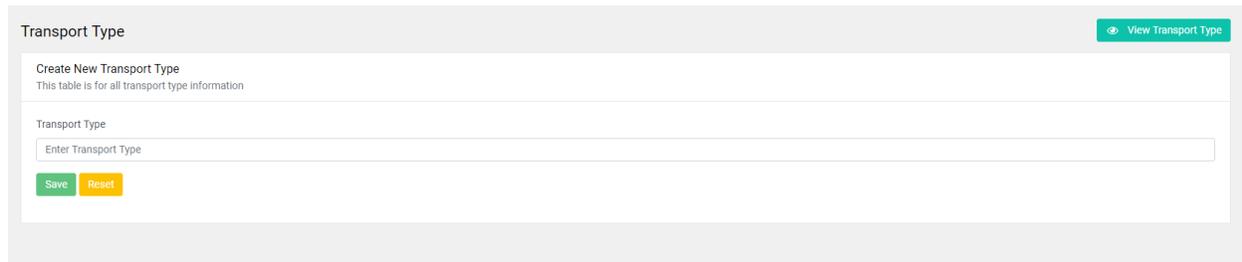


Figure 5.13: create new transport type of transport.

Here adds the transport type off transport.

eTransport | Search | Farhan Tanvir

Venue + Add New Venue

Existing Venue
This table is for all venue information

Show 10 entries | Search:

ID	Venue Name		
1	Main Campus		
2	Permanent Campus		
3	Uttara_Campus		
4	C & B		
6	Mirpur-11		
11	Mirpur-1		
13	Savar		
14	Gazipur		
15	TestVenue1		

Showing 1 to 9 of 9 entries | Previous 1 Next

Figure 5.14: Existing venue of transport.

Here shows the all venue of transports. We can see this figure venue name.

Venue View Existing Venue

Create New Venue
This table is for all venue information

Venue Name

Enter Venue Name

Save Reset

Figure 5.15: Create a new venue of transport.

Here creates the new venue of transports system.

Institute + Add New Institute

Existing Institute
This table is for all institute information

Show 10 entries | Search:

ID	Institute Name	Actions
1	DIU	
2	DIS	
3	DIC	
19	DIA	

Showing 1 to 4 of 4 entries | Previous 1 Next

Figure 5.16: Existing institute of transport.

Here shows the all institute of transport system. We can see this figure venue name.

Transport Information View Transport Info

Create New Transport Information
This table is for all transport information

Transport Name: Transport Type*:

Brand: Model No.:

Registration Information

Registration Number	Engine No.*	VIN Number*
<input type="text" value="Registration Number"/>	<input type="text" value="Engine No."/>	<input type="text" value="VIN number"/>
Fitness No.	Fitness Issue Date	Fitness Expire Date
<input type="text" value="Fitness No. provided by BRTA"/>	<input type="text" value="2019-05-13"/>	<input type="text" value="2019-05-13"/>
Tax Token No.	Tax Token Issue Date	Tax Token Expire Date
<input type="text" value="Tax Token No. provided by BRTA"/>	<input type="text" value="2019-05-13"/>	<input type="text" value="2019-05-13"/>
Route Permit No.	Route Permit Issue Date	Route Permit Expire Date*
<input type="text" value="Route Permit No. provided by BRTA"/>	<input type="text" value="2019-05-13"/>	<input type="text" value="2019-05-13"/>

Purchase Information

Purchase Date: Purchase By:

Figure 5.17: Create a new transport information of project part-1.

Purchase Information

Purchase Date: Purchase By:

Purchase From: Purchase Reference:

Others Information

Price: Total Seat No.:

Specification:

Figure 5.18: Create a new transport information of project part-2.

Here we can see the all transport information are add this page.

ID	Transport Type	Transport Name	Brand	Model	Registration Number	Total Seat No.	Actions
7	Bus AC	Shurjomukhi 10	TATA	123	371368754871471947	76237527	[Edit] [Delete]
8	Cycle	Rojnigondha 01	Feati	F	371368754871471947	76237527	[Edit] [Delete]
9	Bus	Shurjomukhi 11	Echer	Sallimoddi	3765437	40	[Edit] [Delete]
10	Motor Bike	Shurjomukhi 9	NEW3	123	37654371	3525732	[Edit] [Delete]
11	Bus AC	Rojnigondha 02	Echer	Sallimoddi	2552356	40	[Edit] [Delete]
12	Cargo Van	Shurjomukhi 3	NEW3	123	5325235	40	[Edit] [Delete]
13	Cycle	Shurjomukhi 6	TATA	123	23214135135	23214135	[Edit] [Delete]
14	Cycle	Shurjomukhi 5	BMW	456	23214135135	40	[Edit] [Delete]
15	Cycle	Shurjomukhi 4	BMW	456	23214135135	40	[Edit] [Delete]
16	Bus	Rojnigondha 03	BMW	789	4768686	40	[Edit] [Delete]

Figure 5.19: Editing transport information of project.

All are binding is here all info are set this page.

The second part of transport management system are show in given below this are repair and maintenance.

ID	Head Title	Actions
1	Head1	[Edit] [Delete]
2	Head2	[Edit] [Delete]
3	Head3	[Edit] [Delete]
4	Head4	[Edit] [Delete]
5	Head5	[Edit] [Delete]

Figure 5.20: Existing repair and maintenance of transport.

Here we can see the head title of repair and maintenance.

Repair Maintenance Head View Existing Repair Maintenance Head

Create New Repair Maintenance Head
This table is for all repair maintenance head information

Repair Maintenance Head Name
Enter Repair Maintenance Head

Save Reset

Figure 5.21: Create new repair and maintenance head of transport.

That are Create new repair and maintenance page of transport maintenance.

Repair Maintenance Request Approval Pending List Approved List Rejected List

Rejected Request
This table is for all repair maintenance request approval information

<p># 25</p> <p>Requested By: admin Request Date: 2019-01-12 Transport Name: Shurjomukhi 10 Approximate Budget: 1919</p> <p>Approve Make Pending</p>	<p># 28</p> <p>Requested By: admin Request Date: 2019-01-14 Transport Name: Shurjomukhi 10 Approximate Budget: 50479</p> <p>Approve Make Pending</p>
---	--

Figure 5.22: Rejected request of transport.

Here admin can justify the request when officer send a message. If admin knows any way that's are false admin can reject request.

Repair Maintenance Request Approval Pending List Approved List Rejected List

Approved Request
This table is for all repair maintenance request approval information

<p># 20</p> <p>Requested By: admin Request Date: 2019-01-11 Transport Name: Shurjomukhi 10 Approximate Budget: 5090</p> <p>Make Pending Reject</p>	<p># 21</p> <p>Requested By: admin Request Date: 2019-01-11 Transport Name: Shurjomukhi 10 Approximate Budget: 442323</p> <p>Make Pending Reject</p>	<p># 22</p> <p>Requested By: admin Request Date: 2004-01-15 Transport Name: Rojonigondha 02 Approximate Budget: 40212</p> <p>Make Pending Reject</p>
--	--	--

Figure 5.23: Approved request of transport.

Here admin can justify the request when officer send a request. If admin can justify it valid or not when this are valid, admin can approve.

Now we describe about the figure of travel and trip.

Traveller Types + Add Traveller Type

Existing Traveller Type
This table is for all brand information

Show 10 entries Search:

ID	Traveller Name	Actions
2	Student	Edit Delete
3	Teacher	Edit Delete
4	Local	Edit Delete
5	Foreigner	Edit Delete
6	Example	Edit Delete
7	ami	Edit Delete
8	traveller	Edit Delete

Showing 1 to 7 of 7 entries Previous 1 Next

Figure 5.24: Existing traveler types of transport.

Here shows the traveler type, which type of traveler are join here.

Traveller Types + View Existing Traveller Type

Create New Traveller Type
This table is for all traveller type information

Traveller Name

Save Reset

Figure 5.25: Create new traveler types of transport.

Here adds new traveler type for transection.

Transport Schedule + Add New Schedule

Existing Transport Schedule
This table is for all transport schedule information

Show 10 entries Search:

Transport Type	Transport Name	From Location	To Location	Departure Time	Driver	Helper	Actions
Bus AC	Rojongondha 02	Main Campus	Main Campus	01:00 AM	Adul Halim	Rahim Miah	Edit Delete Add
Bus AC	Shurjomukhi 10	Main Campus	Main Campus	02:00 AM	Adul Halim	Rahim Miah	Edit Delete Add
Bus	Shurjomukhi 11	Main Campus	Main Campus	12:14 PM	Adul Halim	Karim Sheikh	Edit Delete Add
Motor Bike	Shurjomukhi 7	Permanent Campus	Uttara_Campus	08:30 AM	Karimuzzaman	Rahim Miah	Edit Delete Add
Motor Bike	Shurjomukhi 7	Permanent Campus	Permanent Campus	08:30 AM	Karimuzzaman	Rahim Miah	Edit Delete Add
Cycle	Shurjomukhi 6	Gazipur	C & B	12:05 AM	Akkas Ali Khan	Karim Sheikh	Edit Delete Add
Cycle	Shurjomukhi 6	Mirpur-11	Mirpur-1	01:51 AM	DWED	Rahim Miah	Edit Delete Add
Bus	Shurjomukhi 1	Main Campus	Main Campus	12:01 AM	Adul Halim	Rahim Miah	Edit Delete Add
Motor Bike	Shurjomukhi 9	Permanent Campus	Gazipur	01:13 AM	Adul Halim	Rahim Miah	Edit Delete Add
Motor Bike	Shurjomukhi 7	Savar	Permanent Campus	11:16 AM	Enam Kobir	Rahim Miah	Edit Delete Add

Showing 1 to 10 of 15 entries Previous 1 2 Next

Figure 5.26: Existing traveling schedule of transport.

All traveling schedule are saved here. We can see this page here adds travels type transport name, location, driver, helper and departure time etc.

Transport Schedule View Existing Schedule

Create New Transport Schedule
This table is for all transport schedule information

Transport Type: Private Car | Transport Name: _____

Driver: Adul Hallim , DR000000001 | Helper: Rahim Miah , HLP0837489378

From Location: Main Campus | To Location: Main Campus

Departure Time: 12:00 AM | Expected Travel Time: Expected Travel Time in Minutes | Capacity: _____

Save Reset

Figure 5.27: Create new transport schedule page of transport.

Here officer can create new transport schedule like transport type, transport no, driver name, helper name, from location, to location etc.

Schedule Travel Information Add New Schedule Travel Info

Existing Schedule Travel Information
This table is for all schedule travel information information

Show 10 entries | Search: _____

Transport Type	Transport Name	Schedule	Travel Date	Departure Time	Arrival Time	Actions
Bus	Shurjomukhi 11	9	2019-01-21	12:00 AM	12:00 AM	🗑️ 📄 👁️
Bus	Shurjomukhi 11	9	2019-02-10	12:00 AM	12:00 AM	🗑️ 📄 👁️
Bus AC	Shurjomukhi 10	9	2019-01-14	12:00 AM	12:00 AM	🗑️ 📄 👁️
Bus AC	Shurjomukhi 10	10	2019-01-14	12:00 AM	12:00 AM	🗑️ 📄 👁️
Motor Bike	Shurjomukhi 7	19	2019-01-14	12:00 AM	12:00 AM	🗑️ 📄 👁️
Motor Bike	Shurjomukhi 7	12	2019-01-14	12:00 AM	12:00 AM	🗑️ 📄 👁️
Motor Bike	Shurjomukhi 7	12	2019-01-14	12:00 AM	12:00 AM	🗑️ 📄 👁️
Motor Bike	Shurjomukhi 7	19	2019-01-14	12:00 AM	12:00 AM	🗑️ 📄 👁️
Motor Bike	Shurjomukhi 7	13	2019-01-21	12:00 AM	12:00 AM	🗑️ 📄 👁️
Motor Bike	Shurjomukhi 9	17	2019-01-21	12:00 AM	12:00 AM	🗑️ 📄 👁️

Showing 1 to 10 of 11 entries | Previous 1 2 Next

Figure 5.28: Existing schedule and travel information of transport.

Here shows the travel date, travel name, departure time arrival time, schedules.

Schedule Travel Information View Schedule Travel Info

Create New Schedule Travel Information
This table is for all schedule travel information information

Transport Type: Transport Name:

Travel Date: Departure Time: Arrival/Driver Check In Time:

Comment:

Figure 5.29: Create new transport schedule and travel information page of transport.

Here officer can create new transport information like travel date, travel name, departure time arrival time, schedules.

Transport Requisition Add Requisition

Existing Requisition
This table is for all requisition information

Show entries Search:

#	Traveller Type	Requested By	Travel Starting Date Time	Travel Ending Date Time	Transport Type	Transport Quantity	Actions
1	Student	admin	2018-12-26 11:30 PM	2018-12-26 11:30 PM	Bus AC	5	
2	Student	admin	2018-12-26 12:00 AM	2018-12-27 12:00 AM	Private Car	2	
3	Foreigner	admin	2019-12-20 06:30 PM	2019-12-13 06:30 PM	Bus	1	
4	Teacher	admin	2019-11-28 08:30 PM	2019-12-01 11:30 PM	Pick Up	2	
5	ami	admin	2019-11-13 11:45 PM	2019-12-11 11:30 PM	Private Car	2	
6	Student	admin	2018-12-27 12:00 AM	2018-12-27 12:00 AM	Private Car	4	
7	Student	admin	2018-12-27 12:00 AM	2018-12-12 12:00 AM	Private Car	4	
8	Student	admin	2018-12-27 12:00 AM	2018-12-22 12:00 AM	Private Car	1	
9	Student	admin	2018-12-07 12:00 PM	2018-12-19 12:00 AM	Private Car	1	

Figure 5.30: Existing transport requisition information of transport.

Here we can see some information adds here that's are travel starting date and time, travel ending date and time, which transport type and transport quantity.

Transport Requisition View Requisition

Create New Requisition
This table is for all Requisition information

Traveller Type
Select traveller type

Travel Start Date: 2019-05-13 Travel Start Time: 12:00 AM

Travel End Date: 2019-05-13 Travel End Time: 12:00 AM
 Single Day Requisition

Transport Type: Select transport type Transport Quantity: Quantity

Purpose

Save Reset

Figure 5.31: Create new requisition of transport.

Here adds the travel start time, travel end time, travel end date, travel start date and their quantity.

Transport Requisitions Approval Approval Waiting List Approved List Approval Rejected List

Pending List For Approval
This table is for all requisition information

Show 10 entries Search:

Traveller Type	Travel Start DateTime	Travel End DateTime	Transport Type	Requested By	Purpose	Approve	Reject
Student	2019-03-29 12:00 AM	2019-03-30 12:00 AM	Bus AC	mujahid	abcdefgh	Approve	Reject
Teacher	2019-04-01 12:00 AM	2019-04-01 12:00 AM	Private Car	admin	teacher main	Approve	Reject
Teacher	2019-04-03 12:00 AM	2019-04-03 12:00 AM	Bus AC	admin	teacher	Approve	Reject
Teacher	2019-04-07 12:00 AM	2019-04-07 12:00 AM	Private Car	admin	farhan tanvir	Approve	Reject
Teacher	2019-04-07 12:00 AM	2019-04-07 12:00 AM	Bus AC	admin	abcdret	Approve	Reject

Showing 1 to 5 of 5 entries Previous **1** Next

Figure 5.32: Pending list for approval.

Here shows the list for approval, admin can approve and reject as your wish.

Transport Requisitions Approval

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

Approved List
This table is for all requisition information

Show entries Search:

Traveller Type	Travel Start DateTime	Travel End DateTime	Transport Type	Requested By	Purpose	Approve	Reject
Student	2018-12-26 11:30 PM	2018-12-26 11:30 PM	Bus AC	admin	tour	Make Pending	Reject
Student	2018-12-26 12:00 AM	2018-12-27 12:00 AM	Private Car	admin	next	Make Pending	Reject
Foreigner	2019-12-20 06:30 PM	2019-12-13 06:30 PM	Bus	admin	yes Worked	Make Pending	Reject
Teacher	2019-11-28 08:30 PM	2019-12-01 11:30 PM	Pick Up	admin	Example	Make Pending	Reject
Student	2018-12-27 12:00 AM	2018-12-27 12:00 AM	Private Car	admin	none	Make Pending	Reject
Student	2018-12-27 12:00 AM	2018-12-12 12:00 AM	Private Car	admin	purpose	Make Pending	Reject
Student	2018-12-27 12:00 AM	2018-12-22 12:00 AM	Private Car	admin	tanvir	Make Pending	Reject
Student	2018-12-07 12:00 PM	2018-12-19 12:00 AM	Private Car	admin	tanvir3	Make Pending	Reject
Student	2018-12-27 12:00 AM	2018-12-27 12:00 AM	Private Car	admin	Ribon	Make Pending	Reject

Figure 5.33: approval list for request.

Here shows some approval list for request.

Existing General Travel Information
This table is for all general travel information

Show entries Search:

Transport Type	Transport Name	From Location	To Location	Travel Date	Departure Time	Driver			
Bus AC	Shurjomukhi 10	Mirpur-1	C & B	2008-06-18	10:00 AM	Farhan Tanvir	Edit	Delete	View
Bus AC	Rojnigondha 02	C & B	Mirpur-11	2008-05-28	12:40 AM	ss	Edit	Delete	View
Bus	Shurjomukhi 11	Main Campus	Main Campus	2018-12-27	12:00 AM	Adul Halim	Edit	Delete	View
Bus AC	Shurjomukhi 10	Main Campus	Main Campus	2018-12-27	11:00 PM	Adul Halim	Edit	Delete	View
Bus	Shurjomukhi 11	Main Campus	Main Campus	2018-12-27	12:00 AM	Adul Halim	Edit	Delete	View
Bus	Shurjomukhi 11	Main Campus	Main Campus	2018-12-27	12:00 AM	Adul Halim	Edit	Delete	View
Bus AC	Shurjomukhi 10	Main Campus	Main Campus	2018-12-27	12:00 AM	Adul Halim	Edit	Delete	View
Bus AC	Shurjomukhi 10	Main Campus	Main Campus	2019-01-01	12:00 AM	Adul Halim	Edit	Delete	View
Bus AC	Shurjomukhi 10	Main Campus	Main Campus	2019-01-01	12:00 AM	Adul Halim	Edit	Delete	View
Bus AC	Shurjomukhi 10	Main Campus	Main Campus	2018-12-26	12:00 AM	Adul Halim	Edit	Delete	View

Showing 1 to 10 of 14 entries
[Previous](#)
[1](#)
[2](#)
[Next](#)

Figure 5.34: Existing general travel information of transport.

Here shows the travel transport name, transport location, from location, to location.

General Travel Information + Add New Travel Info

Create New General Travel
This table is for all general travel information

Transport Type	Transport Name
Private Car	
Requisition	Travel Date
admin , 2018-12-26 , Bus AC	2019-05-13
From Locaton	To Location
Main Campus	Main Campus
Driver	Departure Time
Adul Halim , DR000000001	12:00 AM
Reached Time	Drivers Check in Time
12:00 AM	12:00 AM
Comments	

Save Reset

Figure 5.35: Create new generate travel for transition

That's is front end of our project here all feature show serially.

5.3 Implementation of interactions

Implementation of interaction is the most important portion of framework. To make our application system we implement UI for better user experience and their opinion [7]. we plan around carefully that the framework appeals to the user. We think the all sides of transport system user then we developed it. We construct each users part with the utmost care that no meter what the user needs here. At first, we communicate many institutes then we developed it their direction so this is very user friendly and maintain easy.

5.4 testing implementation

When we test the specific function of software program that is also called testing [8]. There are many types of software testing here we mansion two types of testing one is dynamic testing another is static testing. We test our project several times and that are produce batter performance for user. our testing area login, profile view, maintenance part, approval part, comparison and details seen, adding new document etc.

5.5 Test result and reports

Now we show the result of system testing:

Table 5.1: System testing table.

Step	Test Steps	Test Data	Expected Result	Actual result	Status (Pass/Fail)
1	Negative to login page	False data	No login	No login	Pass
2	Provide valid username	Right data	No login	No login	Pass
3	Provide valid password	Right data	No login	No login	Pass
4	Provide valid username and password	Right data	Login	login	Pass

Here the testing table we show the all testing result. Thais test case we are test fast time negative data that time it's is pass. This system are show invalid system, so it is work right way. Second and third time we are given the system only single data normally this system are don't login any single data. This system is comparing valid username and password than its pass or not it's fail. The four test case we can give valid username and password when it's find out its right data then its pass.

Chapter 6

Conclusion and Future Scope

6.1 Discussion and Conclusion

By the graceful of **Almighty ALLAH** who is making us to create this project & documentation. After the long term thinking we thing about this project to implement. After finishing this project, we also thankful to ALLAH for making us power to solve this. It is helpful to us. It is helping all institution to solve their transportation system on this process. It makes us to solve this management system.

Well, it is very important management system for all institutions on this process of transport management system. There is a list on project we can easily collect & count all of things a transport management system. And we also known about all transportation management system product on this process.

Well, now we solved the problem solution on this transportation management system. Our project will be helpful for all after using this for institution system & this management procedure.

6.2 Scope for Further Developments

We have some extra curriculum to add in this transport management system. Some of plans are on this transport management system is,

- Market demandable management system for using all transportation system in this project.
- User friendly & easier
- Web based problem solution.
- Will be used GPS on route in this management system.
- A Web Site will be developed as well.
- Easier product use for all users in this transport management system.

References

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APPENDIX

Appendix: Project Reflection

The last year journey, we acquired more knowledge and experience to complete our final project. We are three group members in our team; all are support to complete our project successfully. Every group member is hard work to complete the final project and we huge time spend behind this project.

When we start our project work, this time we did not know how to complete this project. But proper plan helps us to complete this project, when we complete our project 50% this time, we face big problem. We did not connect the database properly but we never demotivate when we go to our supervisor, he supports us each and every time, and he helps all time and solve our problem easily. When we face any problem, we discuss together and solve this problem. Now I believe everything is possible, if we work together.

After one-year hard work, we complete our project properly. I believe this is not easy to complete before group work. Every time supervisor sir supports us when we face any problem. At last, we are grateful to Almighty ALLAH and our honorable supervisor sir Md. Sadikur Rahman for his endless support and proper guideline throughout the session.