

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI-590018



**A DBMS Mini-Project
On**

“TOLL TAX MANAGEMENT SYSTEM”

*A Mini project report submitted in partial fulfillment of the requirements for
the 5th semester of **Bachelor of Engineering in Computer Science Engineering**
of Visvesvaraya Technological University, Belagavi*

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CERTIFICATE

Certified that the mini project work entitled "**Toll Tax Management System**" has been successfully carried out by **Hari Prasad BP** bearing USN 1ST20CS043 and **Gagan R** bearing USN 1ST20CS039, bonafide students of **Sambhram Institute of Technology** in partial fulfillment of the requirements for the **5th semester** of **Bachelor of Engineering in Computer Science and Engineering** of **Visvesvaraya Technological University**, Belagavi, during academic year 2022-2023. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the laboratory requirements of 5th semester BE, CSE.

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Date:

Place: Bengaluru

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ABSTRACT

Toll gate Automation and Vehicle Tracking is designed to automatically keep track of the vehicle's movement, record the time and the details like Owner's name, date of registration, vehicle model etc. This system is very useful for automatic vehicle tracking, time management and for automation of Toll gate. This paper explains the implementation of Toll Gate Automation which is a step towards improving the Tracking monitoring of vehicles, traveling in predetermined routes. In this system, a computerized system automatically identifies an approaching vehicle and records the vehicle number and Time. If the vehicle belongs to the authorized personal group, it automatically opens the Toll Gate and a predetermined amount is automatically deducted from its account.

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CHAPTER 1

INTRODUCTION

Toll Tax Management System is a web based application that can provide all the information related to toll plazas and the passenger checks in and pays the amount, then he/she will be provided by a receipt. With this receipt he/she can leave the toll booth without waiting for any verification call.

The information would also cover registration of staff, toll plaza collection, toll plaza collection entry for vehicles, date wise report entry, Vehicle passes and passes reports b/w dates

CHAPTER 2

OBJECTIVE

This project is based on the RDBMS technology. The main objective of this project is to computerize the manual system & reduce the time consumption.

In other words we can say that our project has the following objectives:

- Make all the system computerized.
- Reduce time consumption.
- Reduce error scope.
- All system managements are automated.
- Centralized database management.
- Easy operations for operator of the system.
- No paper work requirement.

Here we are going to see some points regarding to purpose and scope behind choosing this topic & what is the requirement of this type of the project in our day to day life.

- Avoid the fuel loss.
- Saving of time in collecting toll.
- Avoid financial loss.
- To monitor the traffic.

CHAPTER 3

FEATURES OF THE APPLICATION

Below listed is the broad category of the features for Toll Tax Department:

- This application is to facilitate the department in maintaining the repositories of the report about the toll tax collected at a specific time period.
- To provide details about contracts, contractors of Toll Tax Department
- To provide Toll Tax Rates of different vehicles.

CHAPTER 4

TECHNOLOGY

4.1 SOFTWARE OR TOOLS REQUIREMENTS

The tools that I have used in developing this System is:-

- Sublime , Notepad.
- Xampp server.
- Adobe Photoshop.
- Google chrome , Firefox , Internet Explorer.
- Bootstrap Framework.
- Microsoft word for project documentation.
- JQuery.
- HTML.
- PHP.
- MYSQL.

4.2 HARDWARE REQUIREMENTS

1. Personal computer with at least
 - Atleast 4GB of RAM.
 - Atleast Hard disk (256GB, 512GB .etc.
 - Atleast Processor 2.7GHZ.
2. Printer.

CHAPTER 5

PROJECT OVERVIEW

It has two modules admin and staff,

5.1 Admin:

1. **Dashboard:** In this section admin can see all details in brief like total number of staffs, Total number of vehicle categories, Total number of passes, Total number of receipts, Total vehicle entered today, yesterday, last seven days and total vehicle passed till now in toll plaza.
2. **Staff:** In this section admin can manage staffs (add and update).
3. **Vehicle Category:** In this section admin can manage vehicle category (add and update).
4. **Pass:** In this section admin can manage pass(add and update).
5. **Receipt:** In this section admin can view receipt and take print of receipt which is generated by staffs.
6. **Search Pass:** In this section admin can search pass with the help of his/her pass id or owner name or vehicle number.
7. **Search Receipt:** In this section admin can search receipt with the help of his/her receipt id or owner name or vehicle number.
8. **Reports of Pass:** In this section admin can view how many passes has been generated in particular periods, count of passes and sales from generated passes.
9. **Reports of receipt:** In this admin can view how much receipt has been generated in particular periods, count of receipts.

Admin can also update his profile, change password and reset password.

5.2 Staffs:

1. **Dashboard:** Welcome page for staff.
2. **Receipt:** In this section staff can mange receipts (add and update).
3. **Search:** In this section admin can search receipt with the help of his/her receipt id.


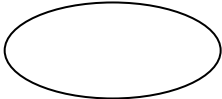
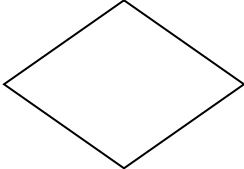

Staffs can also update his profile, change password and reset password.

CHAPTER 6

ENTITY-RELATIONSHIP DIAGRAM

E-R (Entity-Relationship) Diagram is used to represents the relationship between entities in the table.

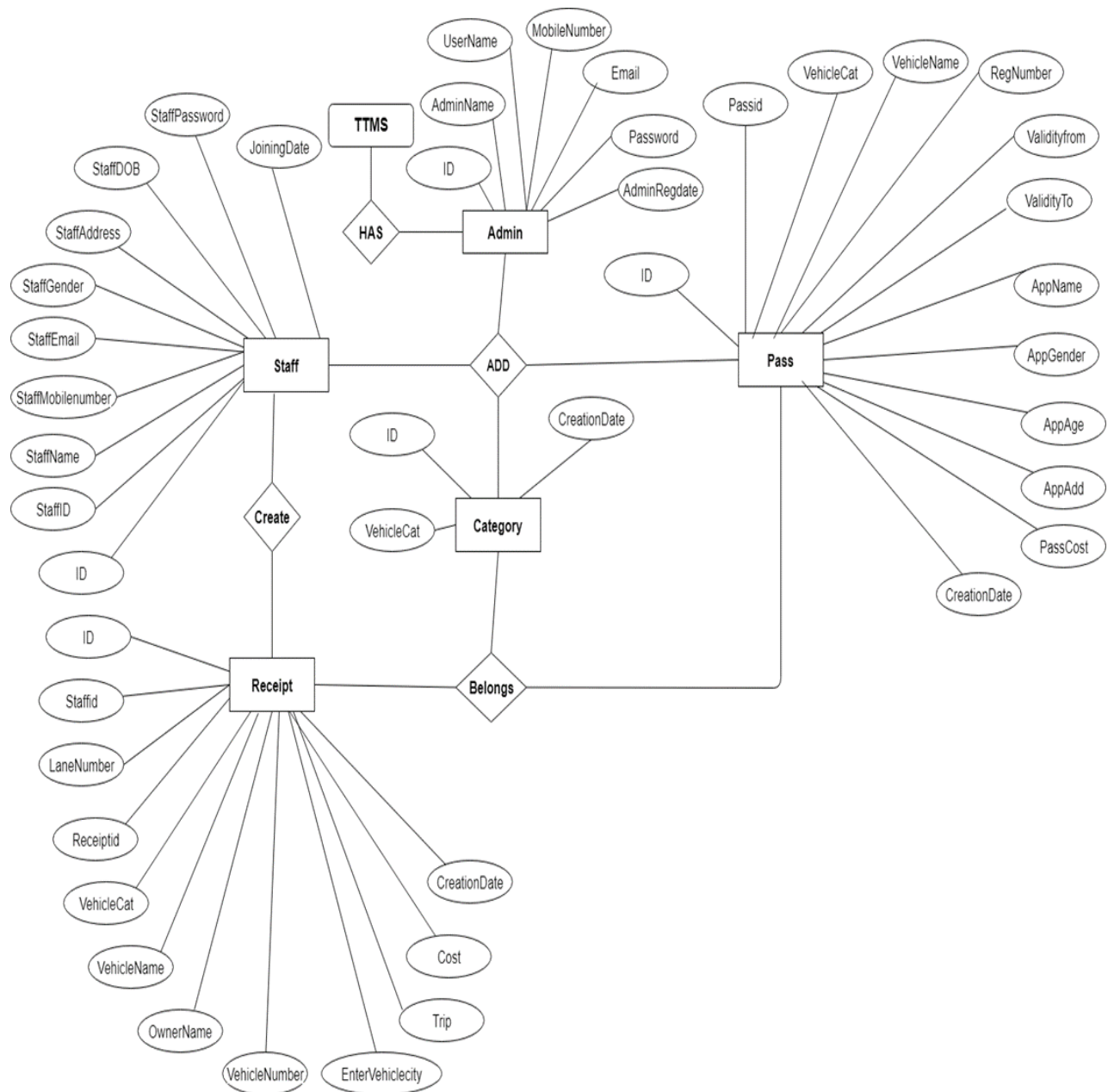
The symbols used in E-R diagrams are:

<u>SYMBOL</u>	<u>PURPOSE</u>
	Represents Entity sets.
	Represent attributes.
	Represent Relationship Sets.
	Line represent flow.

Structured analysis is a set of tools and techniques that the analyst.

To develop a new kind of a system:

The traditional approach focuses on the cost benefit and feasibility analysis, Project management, and hardware and software selection a personal considerations.




ENTITY RELATIONSHIP DIAGRAM
CH6 Fig. 6.1

CHAPTER 7

Table Structure


Toll Tax Management System (TTMS) contains 5 MySQL tables:

7.1 tbladmin table Structure : This table stores the login details of admin.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID 	int(10)			No	None		AUTO_INCREMENT
2	AdminName	varchar(50)	latin1_swedish_ci		Yes	NULL		
3	UserName	varchar(50)	latin1_swedish_ci		Yes	NULL		
4	MobileNumber	bigint(10)			Yes	NULL		
5	Email	varchar(120)	latin1_swedish_ci		Yes	NULL		
6	Password	varchar(120)	latin1_swedish_ci		Yes	NULL		
7	AdminRegdate	timestamp			Yes	current_timestamp()		


CH7 Fig7.1

7.2 tblstaff table Structure : This table stores the staff personal and login details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID 	int(10)			No	None		AUTO_INCREMENT
2	StaffID	varchar(50)	latin1_swedish_ci		Yes	NULL		
3	StaffName	varchar(120)	latin1_swedish_ci		Yes	NULL		
4	StaffMobilenumber	bigint(10)			Yes	NULL		
5	StaffEmail	varchar(120)	latin1_swedish_ci		Yes	NULL		
6	StaffGender	varchar(20)	latin1_swedish_ci		Yes	NULL		
7	StaffAddress	varchar(200)	latin1_swedish_ci		Yes	NULL		
8	StaffDOB	varchar(200)	latin1_swedish_ci		Yes	NULL		
9	StaffPassword	varchar(120)	latin1_swedish_ci		Yes	NULL		
10	JoiningDate	timestamp			No	current_timestamp()		


CH7 Fig7.2

7.3 tblcategory table Structure : This table stores the vehicle category details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID 	int(10)			No	None		AUTO_INCREMENT
2	VehicleCat	varchar(120)	latin1_swedish_ci		Yes	NULL		
3	CreationDate	timestamp			No	current_timestamp()		ON UPDATE CURRENT_TIMESTAMP()


CH7 Fig 7.3

7.4 tblreceipt table Structure : This table stores the vehicle toll receipt details(like vehicle number, owner details).

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID 	int(10)			No	None		AUTO_INCREMENT
2	Staffid	int(10)			Yes	NULL		
3	LaneNumber	varchar(120)	latin1_swedish_ci		No	None		
4	Receiptid	varchar(50)	latin1_swedish_ci		Yes	NULL		
5	VehicleCat	varchar(120)	latin1_swedish_ci		Yes	NULL		
6	VehicleName	varchar(150)	latin1_swedish_ci		Yes	NULL		
7	OwnerName	varchar(120)	latin1_swedish_ci		Yes	NULL		
8	VehicleNumber	varchar(120)	latin1_swedish_ci		Yes	NULL		
9	EnterVehiclecity	varchar(120)	latin1_swedish_ci		Yes	NULL		
10	Trip	varchar(120)	latin1_swedish_ci		Yes	NULL		
11	Cost	varchar(120)	latin1_swedish_ci		Yes	NULL		
12	CreationDate	timestamp			Yes	current_timestamp()		

CH7 Fig. 7.4

7.5 tblpass table Structure : This table stores the vehicle toll pass.

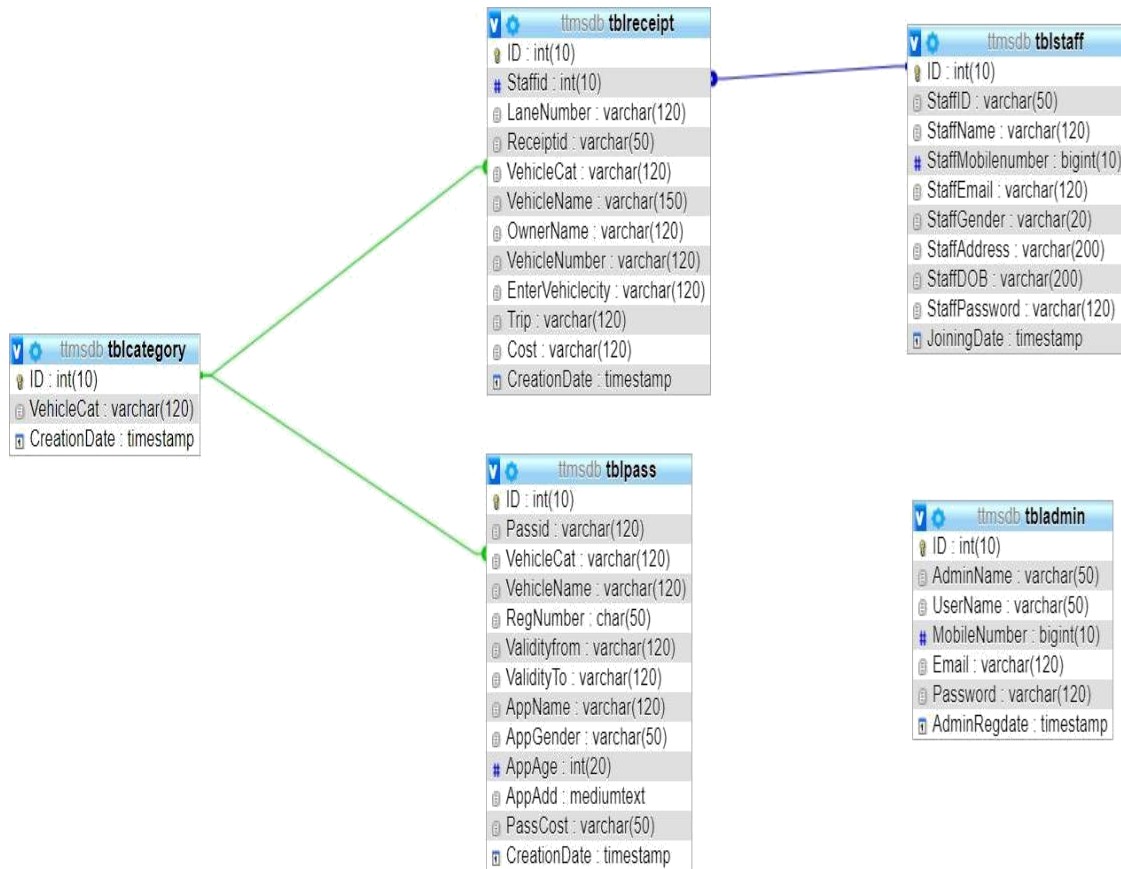
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID 	int(10)			No	None		AUTO_INCREMENT
2	Passid	varchar(120)	latin1_swedish_ci		No	None		
3	VehicleCat	varchar(120)	latin1_swedish_ci		Yes	NULL		
4	VehicleName	varchar(120)	latin1_swedish_ci		Yes	NULL		
5	RegNumber	char(50)	latin1_swedish_ci		Yes	NULL		
6	Validityfrom	varchar(120)	latin1_swedish_ci		Yes	NULL		
7	ValidityTo	varchar(120)	latin1_swedish_ci		Yes	NULL		
8	AppName	varchar(120)	latin1_swedish_ci		Yes	NULL		
9	AppGender	varchar(50)	latin1_swedish_ci		Yes	NULL		
10	AppAge	int(20)			No	None		
11	AppAdd	mediumtext	latin1_swedish_ci		Yes	NULL		
12	PassCost	varchar(50)	latin1_swedish_ci		Yes	NULL		
13	CreationDate	timestamp			No	current_timestamp()		

CH7 Fig7.5

CHAPTER 8

Class Diagram (Relational Schema Diagram):

The class diagram (Relational Schema Diagram) shows a set of classes, interfaces, collaborations and their relationships.



CH8 Fig.8.1

CHAPTER 9

SOURCE CODE AND IMPLEMENTATION

9.1 SQL CODE:

```
CREATE TABLE `contacthome` (  
  `id` int(10) NOT NULL,  
  `name` varchar(20) NOT NULL,  
  `email` varchar(20) NOT NULL,  
  `subject` varchar(50) NOT NULL,  
  `message` varchar(200) NOT NULL,  
  `date` timestamp NOT NULL DEFAULT current_timestamp()  
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Dumping data for table `contacthome`

```
INSERT INTO `contacthome` (`id`, `name`, `email`, `subject`, `message`, `date`) VALUES  
(2, 'Navaneeth', 'admin@gmail.com', 'enquiry ', 'Hello sir, How can i get Monthly Pass.', '2022-  
08-18 10:47:06'),  
(3, 'Tejas', 'admin@gmail.com', 'enquiry ', 'hello sir,', '2022-08-18 11:03:53');
```

9.2 ADD TOLL GATE

```
include('includes/dbconnection.php');  
if (strlen($_SESSION['ttmsaid']==0)) {  
  header('location:logout.php');  
} else{  
  if(isset($_POST['submit']))  
  {  
  
    $catname=$_POST['catname'];  
    $address=$_POST['tolladdress'];  
  
    $query=mysqli_query($con, "insert into tbltollgate(TollGateName,Address)  
value('$catname','$address')");  
    if ($query) {  
      echo '<script>alert("Toll Gate Details has been added.")</script>';  
      echo "<script>window.location.href ='add-toll-gate.php'</script>";  
    }  
  }  
}
```

9.3 FEEDBACK MESSAGES

```
<!DOCTYPE HTML>
```

```
<html>
<head>
<title>Toll Tax Management System || View Feedback Messages</title>
<script type="application/x-javascript"> addEventListener("load", function() {
setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); }
</script>
<!-- Bootstrap Core CSS -->
<link href="css/bootstrap.min.css" rel='stylesheet' type='text/css' />
<!-- Custom CSS -->
<link href="css/style.css" rel='stylesheet' type='text/css' />
<link href="css/font-awesome.css" rel="stylesheet">
<!-- jQuery -->
<script src="js/jquery.min.js"></script>
<!--webfonts-->
<link href='http://fonts.googleapis.com/css?family=Roboto:400,100,300,500,700,900'
rel='stylesheet' type='text/css'>
<!--//webfonts-->
<!-- Bootstrap Core JavaScript -->
<script src="js/bootstrap.min.js"></script>
</head>
```

9.4 STAFF DASHBOARD

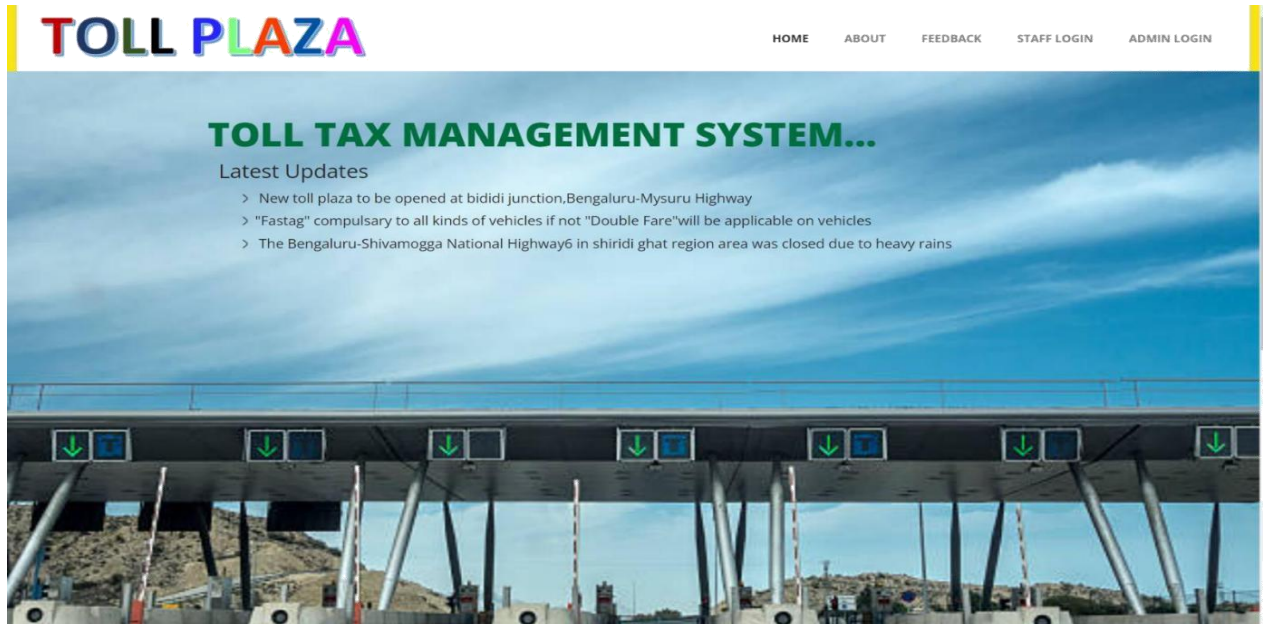
```
<html>
<head>
<title>Toll Tax Management System || Dashboard</title>

<script type="application/x-javascript"> addEventListener("load", function() {
setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); }
</script>
<!-- Bootstrap Core CSS -->
<link href="css/bootstrap.min.css" rel='stylesheet' type='text/css' />
<!-- Custom CSS -->
<link href="css/style.css" rel='stylesheet' type='text/css' />
<!-- Graph CSS -->
<link href="css/lines.css" rel='stylesheet' type='text/css' />
<link href="css/font-awesome.css" rel="stylesheet">
<!-- jQuery -->
<script src="js/jquery.min.js"></script>
<!--webfonts-->
<link href='http://fonts.googleapis.com/css?family=Roboto:400,100,300,500,700,900'
rel='stylesheet' type='text/css'>
<!--//webfonts-->
```

CHAPTER 10

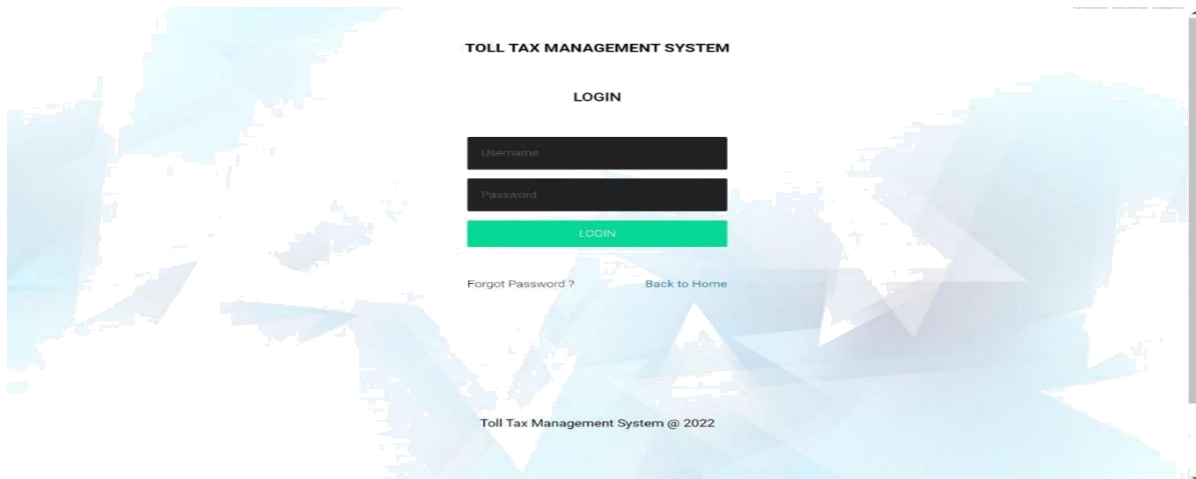
OUTPUT SCREEN SNAP SHOTS:

HOME PAGE:



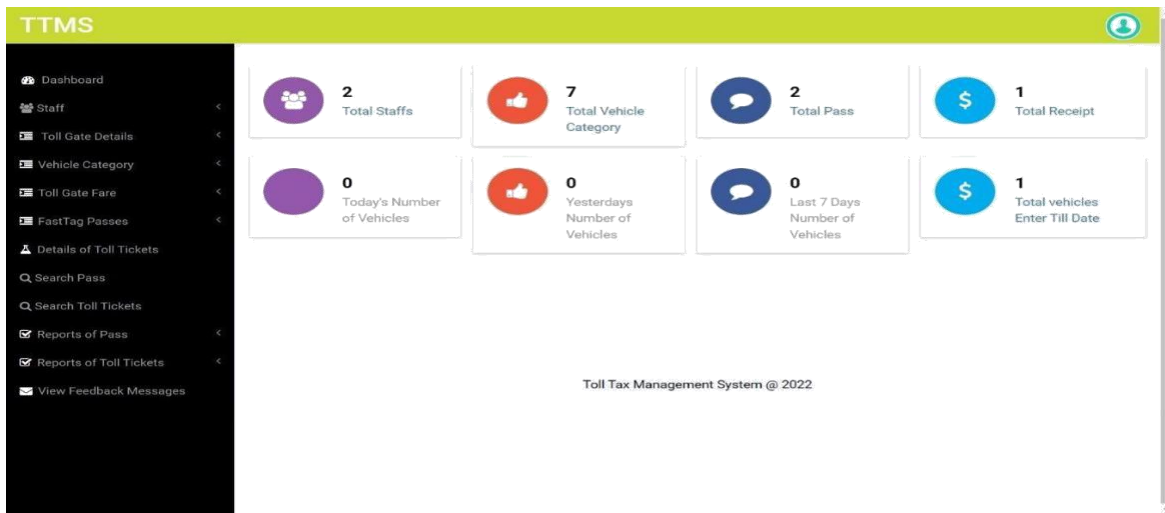
CH10 Fig10.1

ADMIN LOGIN:



CH10 Fig10.2

Dashboard:



CH10 Fig10.3

ADMIN PROFILE:

The screenshot shows the TTMS Admin Profile page. The sidebar menu is the same as in the dashboard. The main content area has a light green header with the TTMS logo and a user profile icon. Below the header, the title 'Admin Profile' is displayed. The form contains the following fields: Admin Name (test), User Name (admin), Contact Number (7889898987), Email address (tester1@gmail.com), and Admin Reg Date (2019-08-21 16:42:29). An 'Update' button is located at the bottom right of the form.

Field	Value
Admin Name	test
User Name	admin
Contact Number	7889898987
Email address	tester1@gmail.com
Admin Reg Date	2019-08-21 16:42:29

CH10 Fig 9.4

ADD STAFF:

TTMS

Add Staff

Staff Name

Staff Mobile Number

Staff Email Address

Staff Password

Staff Gender: ☒ Female ☐ Male ☐ Other

Staff Address

Staff DOB
mm/dd/yyyy

Add

CH10 Fig 10.5

MANAGE STAFF:

TTMS

Manage Staff

S.NO	Staff ID	Staff Name	Action	Remove
1	364518412	STAFF1	Edit	Delete
2	385342947	STAFF2	Edit	Delete

Toll Tax Management System @ 2022

CH10 Fig10.6

STAFF LOGIN:

TOLL TAX MANAGEMENT SYSTEM

STAFF LOGIN

Staff Email

Password

LOGIN

[Having Trouble in Login ? Reset Password](#)

[Back to Home](#)

Toll Tax Management System @ 2022

CH10 Fig.10.7

STAFF PROFILE:

TTMS

Dashboard

View Toll Fare

Book Toll Ticket

Manage Toll Ticket

Manage Passes

Search

My Profile

Staff ID
364518412

Name
STAFF1

Contact Number
8792827507

Email address
test@gmail.com

Gender: ☒ Male ☐ Female

Address
Yelahanka new town

DOB
07/25/2011

Joining Date

CH10 Fig10.8

BOOK TOLL TICKET:

TTMS

Dashboard
View Toll Fare
Book Toll Ticket
Manage Toll Ticket
Manage Passes
Search

Book Toll Ticket

Vehicle Category
Choose Category

Journey Type
Choose Journey Type

Vehicle Name

Owner Name

Vehicle Number

Enter Vehicle City

Add

CH10 Fig 10.8

MANAGE TOLL TICKET:

TTMS

Dashboard
View Toll Fare
Book Toll Ticket
Manage Toll Ticket
Manage Passes
Search

Manage Toll Ticket

S.NO	Receipt ID	Owner Name	Vehicle Number	Vehicle Type	Journey Type	Cost	Date of Creation	Action
1	561690342	Navaneeth Krishna	KA 03 NN 0500	Car/Jeep/Van	oneway	85	2023-01-02 20:05:37	View

Toll Tax Management System @ 2022

CH10 Fig 10,10

CHAPTER 11

CONCLUSION AND FUTURE ENHANCEMENT

The project titled as Toll Tax Management System was deeply studied and analysed to design the code and implement. It was done under the guidance of the experienced project guide. All the current requirements and possibilities have been taken care during the project time. Toll Tax management system is used for daily operations in any organization to maintain or access toll related information for internal administration purposes.

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