

## Chapter:-1

### Introduction

# **1.**

## **INTRODUCTION**

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### **1.1 PROJECT PROFILE**

#### **❖ Project partners**

Strength: - 4.

Name: -

- Nayak Megha A. (106500307502)
- Patel Sheetal A. (106500307503)
- Joshi Jinal B. (106500307512)
- Zala Bhaven M. (106500307526)

#### **❖ Hardware & Software requirement**

##### **Hardware**

- Pentium IV processor or any higher processor
- 256 MB RAM or more
- 700 MB Hard Disk or more

##### **Software**

- Operating System
- Windows XP or higher operating system

##### **Development Tools**

- Microsoft Asp.NET 2008
- Database-Microsoft SQL Server 2005

##### **Documentation & Presentation Tools**

- Microsoft word 2007
- Microsoft PowerPoint 2007

### 1.2 SYSTEM OVERVIEW

- ❖ In today's world with the increasing traffic and longer commuting distances it is becoming very difficult for people to travel for their particular licenses issue.
- ❖ Also most of the people today work for longer hours and do not have the flexibility to take a break from work to give the licenses tests.
- ❖ People have not spent more time for licenses test.
- ❖ The People want a facility where they can have easy to issue their licenses.
- ❖ The facility to achieve schedule date by SMS, call or mail...
- ❖ The people collect their license from post and travel from long distance for issuing license. So, the people waste their money.

### 1.3 OBJECTIVE

- ❖ So, require to build new Website according to RTO office infrastructure and Facilities.
- ❖ So that all the people can get information about the e-RTO.
- ❖ Create a web application to be used in place of old system.
- ❖ Use ASP.NET and SQL Server technology to create strong and secured database connectivity.
- ❖ To maintain and improve the skill management for the department personnel.
- ❖ To ensure transparency in the day-to-day management and administration of the officials.

### 1.4 SCOPE

- ❖ This project prepared RTO office to maintain all the records like issuing the LL, DL, Vehicle registration, Vehicle ownership transfer etc. Once all these get computerized to work efficiency of the employee will get increases.

### 1.5 DETAIL DESCRIPTION

#### **Functionalities:**

- ❖ Issue of Duplicate Registration Certificate.
- ❖ Issue of Learning Licenses.
- ❖ Issue of Regular Driving License.
- ❖ Renewal of Driving Licenses.
- ❖ Issue of a Duplicate Driving License.
- ❖ Issue of Conductors Licenses.
- ❖ Issue of Taxi/Maxi Cabs/Auto Rickshaw and Private Service Vehicle Permits.
- ❖ Message Facility (Expire Date, Result Display)

#### **Goal:**

- The main goal of the project is to maintain the records of issuing the LL, DL, Vehicle registration, User Details, RTO Test Facility etc.
- "RTO Management System" has been designed to automate the process of registration of vehicle and issuing driving license process. System can make the daily activities efficient and

## E-RTO System

providing the fast response to store and retrieve information to the people By Using SMS or E-Mail.

### Chapter:-2

### Project Management

## 2.

## PROJECT MANAGEMENT

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### 1.1 PROJECT DEVELOPMENT APPROACH

#### Software process model

To solve actual problems in an industry, software developer or a team of developers must incorporate a development strategy that encompasses the process, methods and tools layers and generic phases. This strategy is often referred to as process model or 3 software developing paradigm. A process model for software developing is chosen based on the nature of project and application, the methods and tools to be used, and the controls and deliverables that are required. All software development can be characterized as a problem solving loop in which four distinct stages are encountered: Status quo, problem definition, technical development and solution integration. Regardless of the process model that is chosen for a software project all of the stages coexist simultaneously at some level of detail.

#### Our project follows the waterfall model

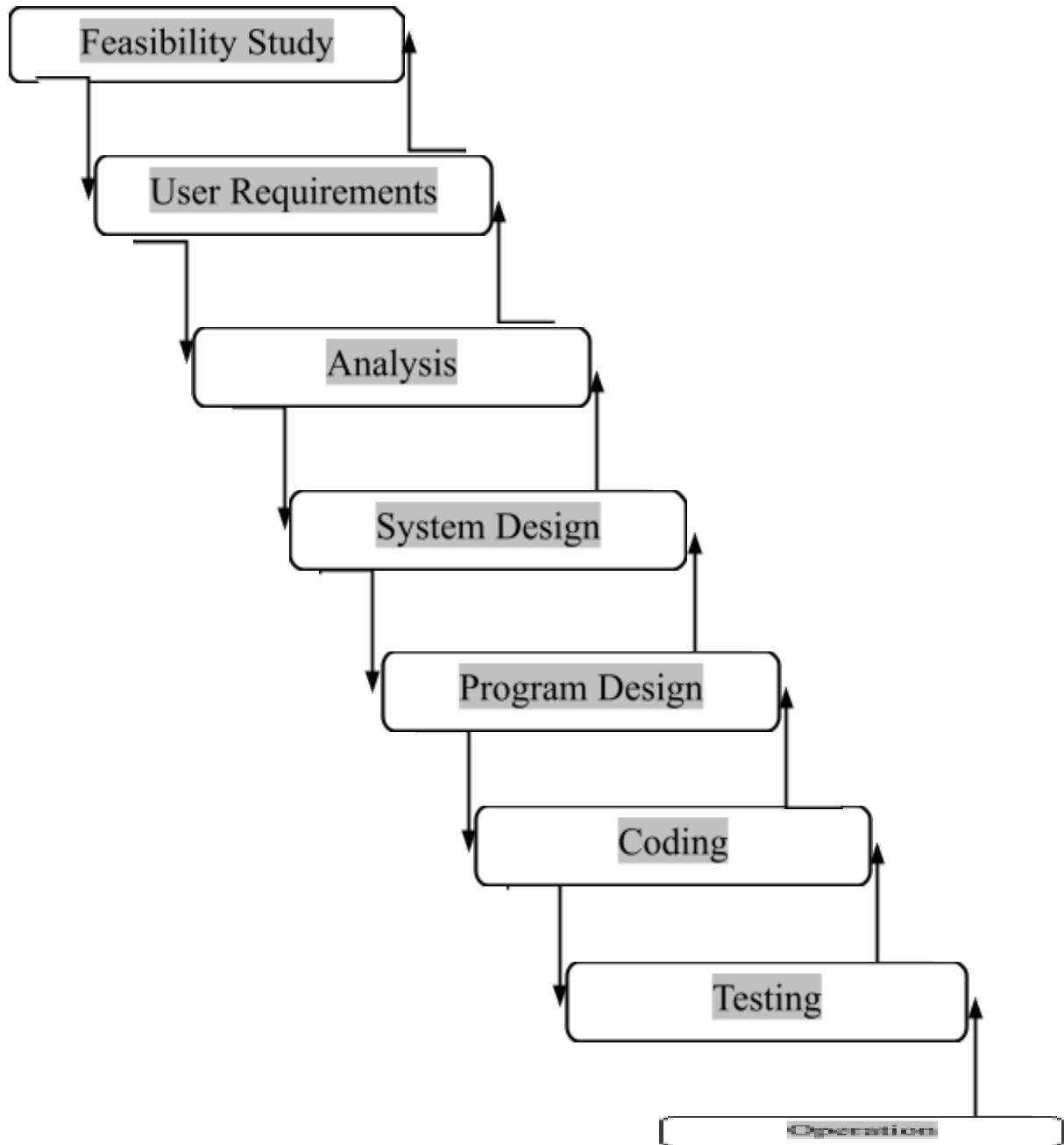
#### THE WATERFALL MODEL

The steps of the typical waterfall model are:

- 1) Requirement definition
- 2) System & software design
- 3) Implementation

## E-RTO System

- 4) Integration & system testing
- 5) Operation and maintenance



[FIG: - WATERFALL MODEL]

There have been some variations from the typical waterfall model for this project lifecycle.

**They are:** - Maintenance has been omitted from the current project. Not all testing methods which are present in theoretical model are implemented.

### **1.2 STUDY ABOUT SOFTWARE**

#### **❖ ASP.NET 3.5 using Visual studio 2008**

ASP.NET 3.5 is the big step back in the right direction. Microsoft recognized that one thing people who build web sites don't want to do is have to code. Code is dull; code is geeky. However, Microsoft also recognized that some people still have to code for a living. And more hand that, these coders have to build the same things, over and over again: a login mechanism, a menu system, a shopping cart, a funky theme for your site's backdrop applied to every page—something every web site requires. Two guiding principles seem to be at work here: make it easier for the novice to use and reduce the amount of repetitive work the developer has to do. Claims for ASP.NET 3.5 boast "70 percent less code" is needed; ASP.NET 3.5 also comes with a multitude of controls to enable the developer to create login systems and menus in minutes.

Late in 2008 we saw the previews of the new version of Active Server Pages named ASP.NET 3.5. Everyone knew that these claims weren't just hyperbole and that the way developers create web applications was going to change fundamentally. Microsoft expanded the powerful features of earlier ASP versions while greatly reducing the effort to implement those features. The ease of implementation meant a reduction in the cost of developing complex sites. Or, put another way, there would now be a large expansion of the number of people that have the capability to build a complex site.



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In addition to ASP.NET 3.5 comes a new, affordable tool for creating these web sites: Visual Web Developer Express. Microsoft's previous attempts at providing tools for helping create dynamic web sites have been clunky (Front Page) or have never really taken off (Visual Interdev), but this time they've got it right. Visual Web Developer is part of the Visual Studio.NET suite, but a scaled-down version of Visual Web Developer Express will be free in the foreseeable future. It allows you to drag and drop a site together within minutes, is instantly recognizable to developers, and allows easy creation and management of your web pages.

This book leads you step-by-step through creating dynamic, data-driven, complex web sites using ASP.NET 3.5. To those ends, this chapter explains the basic ideas and examines the completed sample site. You then learn how to use Visual Web Developer Express (VWD) to build ASP.NET 3.5 sites.

### ❖ Microsoft SQL Server 2005

After a long gap in the release of SQL Server databases, Microsoft recently released SQL Server 2005 (formerly code-named Yukon). In this substantial upgrade, they've packed the new database engine full of features. Probably the most significant one that will catch your attention is the price tag – it's up to 25% higher than SQL Server 2000. A single processor license for SQL Server 2005 Enterprise Edition will set you back approximately \$25,000. That's not cheap, but Microsoft has made some great advances in functionality that make up the difference.

In this first part of our series on this new product, let's take a look at the four different editions of SQL Server 2005 that Microsoft plans to release:

## E-RTO System

- **SQL Server 2005 Express** replaces the Microsoft Data Engine (MSDE) as the free version of SQL Server for application development and lightweight use. It remains free and retains the limitations of MSDE with respect to client connections and performance. It's a great tool for developing and testing applications and extremely small implementations, but that's about as far as you can run with it.
- **SQL Server 2005 Workgroup** is the new entrant in the product line. It's billed as a "small business SQL Server" and it offers an impressive array of functionality for a \$3,899 price tag per processor. (It's also available under a 5-user license for \$739). Workgroup edition maxes out at 2 CPUs with 3GB of RAM and allows for most of the functionality you'd expect from a server-based relational database. It offers limited replication capabilities as well.
- The workhorse **SQL Server 2005 Standard Edition** remains the staple of the product line for serious database applications. It can handle up to 4 CPUs with an unlimited amount of RAM. Standard Edition 2005 introduces database mirroring and integration services. It's priced at \$5,999 for a processor or \$2,799 for 5 users.
- The big kid on the block is **SQL Server 2005 Enterprise Edition**. With the release of 2005, Enterprise Edition allows unlimited scalability and partitioning. It's truly an enterprise-class database and its hefty price tag (\$24,999 per processor or \$13,499 for 5 users) reflects its value.

## Chapter:-3

### System Requirement Study

### 3. **System Requirement Study**

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#### **3.1 USER CHARACTERISTICS**

- ❖ This system will be used in two modules which are Administrator, user. As all of these have different requirements the modules are designed to meet their needs and avoid any type of confusion. The uses of all two user modules have been described below.

##### **1) Administrator can do the following function**

- Update the act and rules.
- Manage the user information.
- Send the acknowledgement to user.
- Cancel the user registration.
- Manage the user account.
- Update the news.
- Issue the license.
- Renew the license.
- Take demo test, driving test.

## E-RTO System

### 2) User can do the following function

Register their information and create account.

Select Demo test And Give That test.

See the demo test result at the time.

See The Information regarding RTO.

See the act and Rules Updated by admin.

## 3.2 HARDWARE SOFTWARE REQUIREMENT

### Minimum Software Requirement

Server side:-

- Window Xp or any Server OS
- ASP.net
- My Sql Server 2005

Client side:-

- Windows Xp or Above
- Internet Explorer 5.0 or Above
- Google Chrome
- Mozilla Firefox

### Minimum Hardware Requirement

Server side:-

- Pentium-4 or Above

## E-RTO System

- 512MB RAM
- 700 MB Hard Disk

Client side:

- Pentium 4 or above
- 256 MB RAM
- 700 MB hard disk

### Chapter:-4

### System Analysis

### 4. **System Analysis**

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#### **4.1 DRAWBACK OF CURRENT SYSTEM**

- ❖ Existing system is very complex, waste of time & many more Real-life problem.
- ❖ Many employees are needed to handle current system.
- ❖ It is more expensive process.
- ❖ Immediate responses to the queries are difficult.
- ❖ Lots of times are consumed for each report generation.
- ❖ So, require to build new Website according to RTO office Infrastructure and Facilities.
- ❖ So that all the people can get information about the e-RTO.

#### **4.2 FEATURES OF NEW SYSTEM**

- ❖ By using this system we can get Information about RTO. Information like Driving License, Learning License and all the RTO service online.
- ❖ This system helps to solve the time related problem.
- ❖ System helps customer to find his/her requirement in various

## E-RTO System

RTO Information online.

- ❖ It also Provide Online RTO tests.
- ❖ We can get the information at any time by using this system about.
- ❖ This system reduces all the paper work.

### 4.3 FEASIBILITY STUDY

The following three areas were taken into consideration while deciding the feasibility of the proposed system.

- ❖ Technical Feasibility
- ❖ Economic Feasibility
- ❖ Operational Feasibility

#### **Technical Feasibility**

The company is an efficient company with excellent infrastructure so as to successfully support me, as a developer, and support the website. The system, which is being developed in the latest web technology available, can efficiently use the resources available and maximize output.

#### **Economic Feasibility**

The project will be quite beneficial economically as it will be designed to cater a global audience as per the company's market presence



## E-RTO System

requirements. It shall ensure a richer customer base that spreads across the globe thanks to the transaction facilities that will be implemented.

### **Operational Feasibility**

The project once completed shall be useful to the company and the company will be able to manage it very effectively using the administration tools that shall be incorporated within the said system. The general difficulty level of the project has been kept low so as to ensure ease of operation.

Chapter:-5

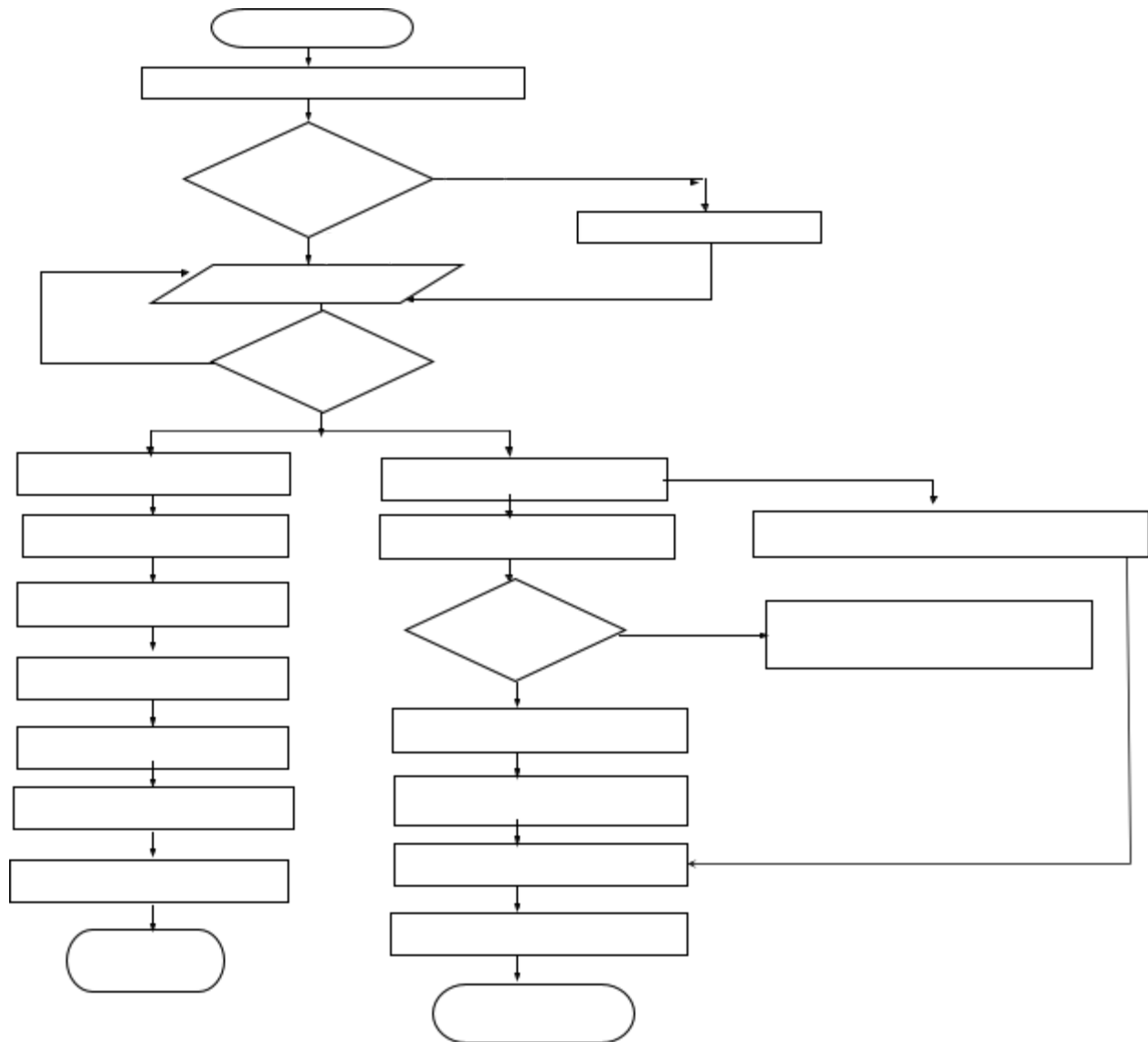
System Design

## **5. System design**

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### **5.1 SYSTEM FLOW CHART**

## E-RT0 System



## [Process of system For User]

## 5.2 DATA FLOW DIAGRAM (DFD)

The DFD (also known as bubble chart) is a simple graphical formalism that can be used to represent a system in terms of the input data into the

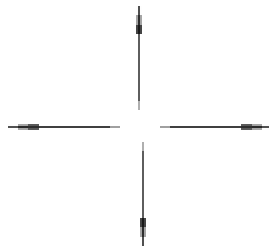
## E-RTO System

system, various process carried on these data and the output data generated by the system.

The main reason why the DFD technique is so popular is because the fact that the DFD is very simple formalism – it is simple to understand use. A DFD is a very limited number of primitive symbols to represent the functions performed by a system and the data flow among the functions. Starting with a set of high-level functions that a system performs, a DFD model hierarchy represents various sub-functions.

### **Data Flow :**

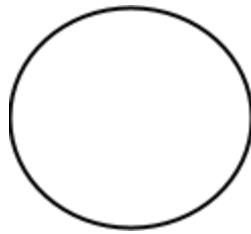
A line with an arrow represents data flows. The arrow shows the direction of flow of data. The name of the data appears next to the line. Data move in a specific Direction from an origin to a destination. The data flow is a 'packet' of data.



### **Process:**

## E-RTO System

A Circle is used to depict a process. Processes are numbered and given a name.



### **Data Store :**

A data store stores the data. Two parallel lines with square depict a data store. Processes may store or retrieve data from a data store. If an arrow points to the store, it indicates operation of writing in the store. If it points away from the store, it indicates operation of reading from the store.



### **External Entity :**

External Entities are represented by the rectangle, and are outside the system, such as vendors or customers with which the system interacts. The designers have no control over them.

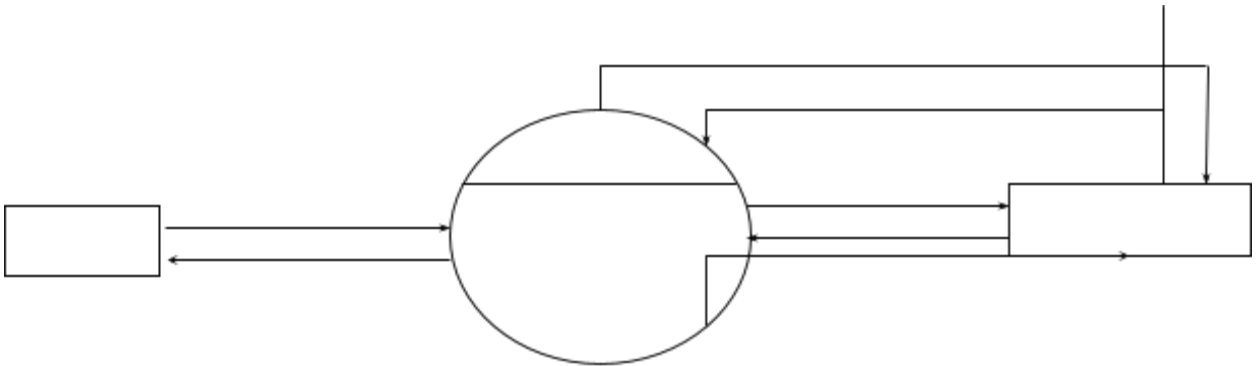


## **❖ DATA FLOW DIAGRAM**

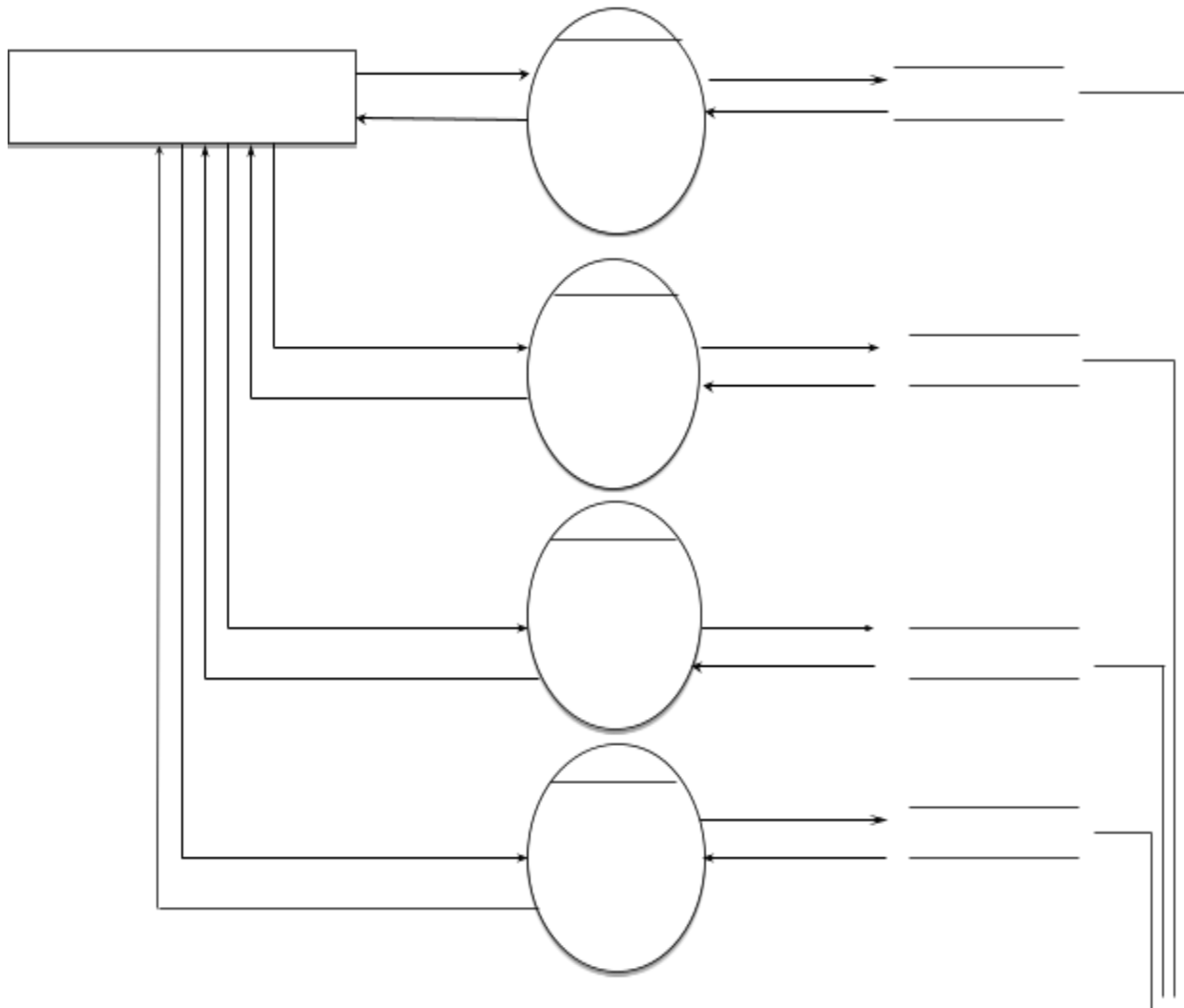
## E-RTO System

- **Context level DFD**
- **First level DFD**
- **Second level DFD**

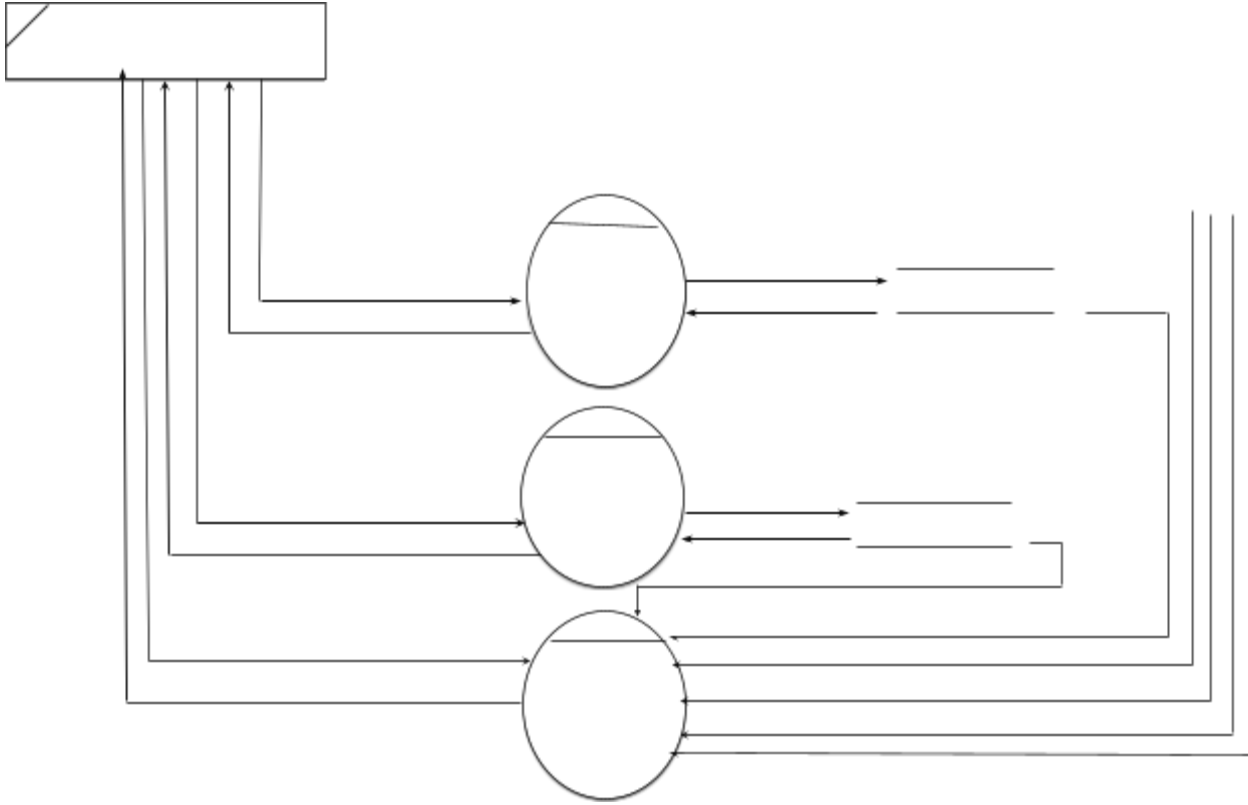
### ❖ **CONTEXT LEVEL DFD**



❖ **FIRST LEVEL DFD [Admin]**

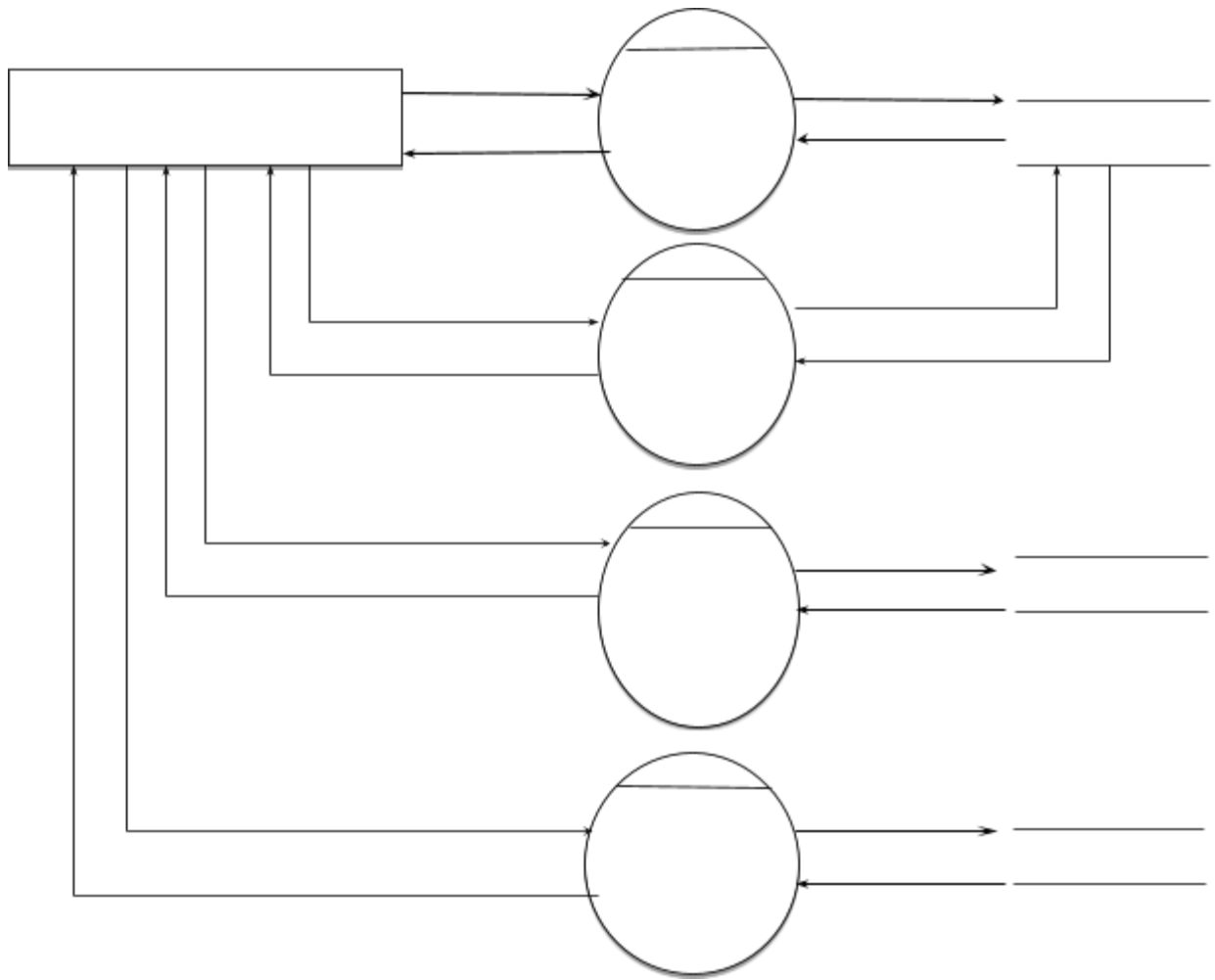


## E-RTO System

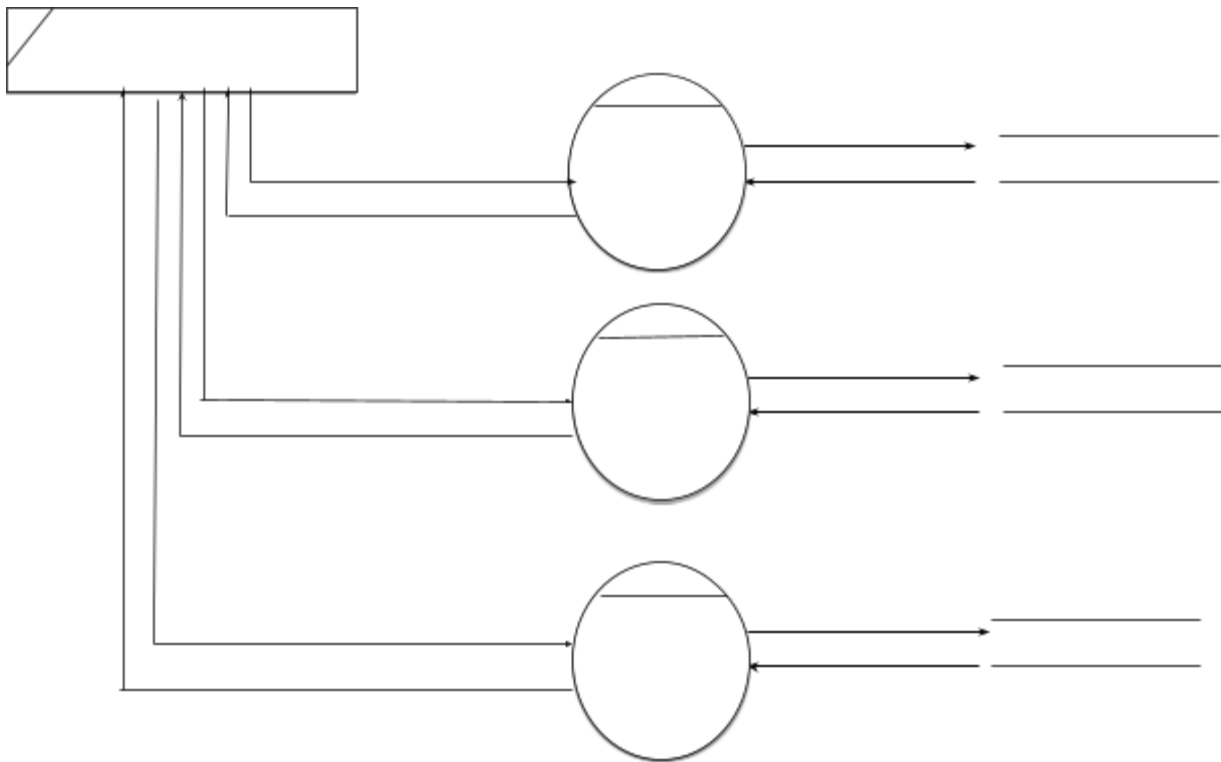




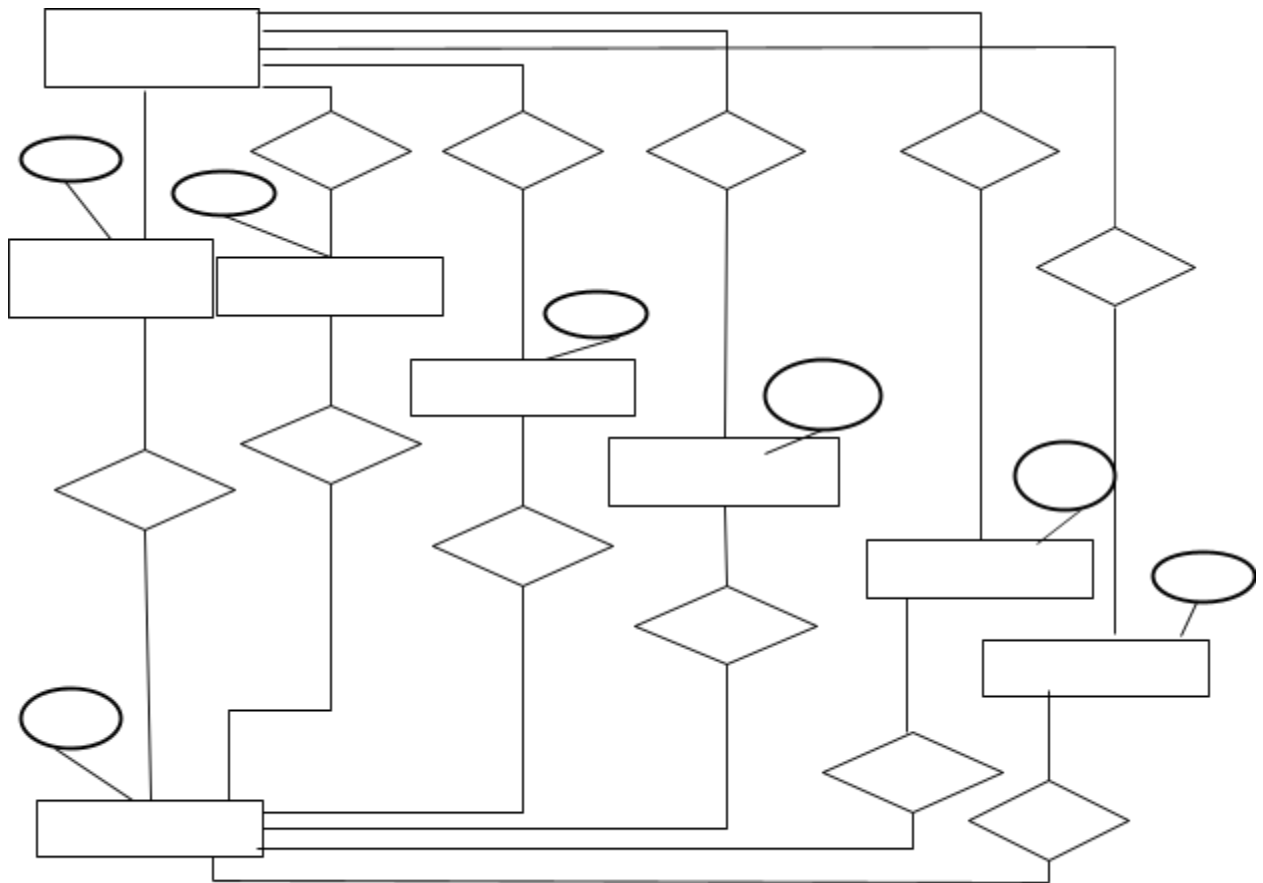
❖ **FIRST LEVEL DFD FOR USER**



## E-RTO System



## ❖ E-R Diagram:



## 5.3 DATA MODELING

### ❖ Data Dictionary:

**TABLE 1:-** Admin\_master

**Descriptions:** - This table keeps The Information about Admin.

Sr.no.	Field name	Data type	Constrain	Size	Description
1.	Admin_id	int	Primary key	-	Id of admin master.
2.	User_name	Varchar	Not null	50	Name of user
3.	Password	Varchar	Not null	50	Password of user
4.	F_name	Varchar	Not null	50	First name of user
5.	L_name	Varchar	Not null	50	Last name of user
6.	Address	Varchar	Not null	50	Address of user
7.	City	Varchar	Not null	50	City of user
8.	Mobile	Decimal	Not null	18	Mobile number of user
9.	E-mail	Varchar	Not null	50	Email address of user
10.	Seq_que	Varchar	Not null	50	Security question
11.	Seq_ans	Varchar	Not null	50	Security answer
12.	Status	Varchar	Not null	50	Status

## E-RTO System

**TABLE 2:-** Registration

**Descriptions:-** This table keeps The Information about User Registration.

Sr.no.	Field name		Constrain	Size	Description
1.	Reg_id	Int	Primary key	-	Id of registration.
2.	User_name	Varchar	Not null	50	Name of user
3.	Password	Varchar	Not null	50	Password of user
4.	F_name	Varchar	Not null	50	First name of user
5.	L_name	Varchar	Not null	50	Last name of user
6.	Address	Varchar	Not null	50	Address of user
7.	City	Varchar	Not null	50	City of user
8.	Mobile	Decimal	Not null	18	Mobile number of user
9.	E-mail	Varchar	Not null	50	Email address of user
10.	Seq_que	Varchar	Not null	50	Security question
11.	Seq_ans	Varchar	Not null	50	Security answer
12.	Status	Varchar	Not null	50	Status
13.	Temp	Varchar	Not null	50	Document

## E-RTO System

14.	Photo	Varchar	Not null	50	Photos
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**TABLE 3:-** Contact Us

**Descriptions:** -This table keeps The Information about Contact Us.

Sr.no.	Field name	Data type	Constrain	Size	Description
1.	Cont_id	int	Primary key	-	Id of contact us.
2.	Name	Varchar	Not null	20	Name of user
3.	Date	Date time	Not null	30	Date
4.	Mobile	Decimal	Not null	18	Mobile number of user
5.	E-mail	Varchar	Not null	50	Email address of user
6.	Detail	Varchar	Not null	50	Detail about

## E-RTO System

**TABLE 4:-** Download

**Descriptions:-** This table keeps the information of the download form.

Sr.no.	Field name	Data type	Constrain	Size	Description
1.	D_id	int	Primary key	-	Id of download form
2.	Title_eng	Varchar	Not null	Max	Name of English form
3.	Title_guj	Varchar	Not null	Max	Name of Gujrati form
4.	File name eng	Varchar	Not null	Max	Name of English file
5.	File name guj	Varchar	Not null	Max	Name of Gujrati file
6.	Category	Varchar	Not null	50	Category of form
7.	Detail	Varchar	Not null	Max	Detail about
8.	Status	Varchar	Not null	50	Status

## E-RTO System

**TABLE 5:-** Feedback

**Descriptions:-**This table keeps the information about feedback

Sr.no.	Field name	Data type	Constrain	Size	Description
1.	Feed_id	int	Primary key	-	Id of feedback form.
2.	Date	Date time	Not null	30	Date
3.	Name	Varchar	Not null	50	Name of user
4.	Mobile	Decimal	Not null	18	Mobile number of user
5.	E-mail	Varchar	Not null	10	e-mail address of user
6.	Comments	Varchar	Not null	50	Category of form



**TABLE 6:-** RTO-Test

**Descriptions:-** This table keeps information about RTO test.

Sr no.	Field name	Data type.	Constrain	Size	Description
1.	Que_id	int	Primary key	-	Question id.
2.	Que_name	Varchar	Not null	Max	Question name.
3.	Opt_1	Varchar	Not null	Max	Option 1.
4.	Opt_2	Varchar	Not null	Max	Option 2.
5.	Opt_3	Varchar	Not null	Max	Option 3.
6.	Ans	Varchar	Not null	1	Answer of question
7.	Image	Varchar	Not null	50	Image

## E-RTO System

**TABLE 7:-** Result

**Descriptions:** - This table keeps information about Result.

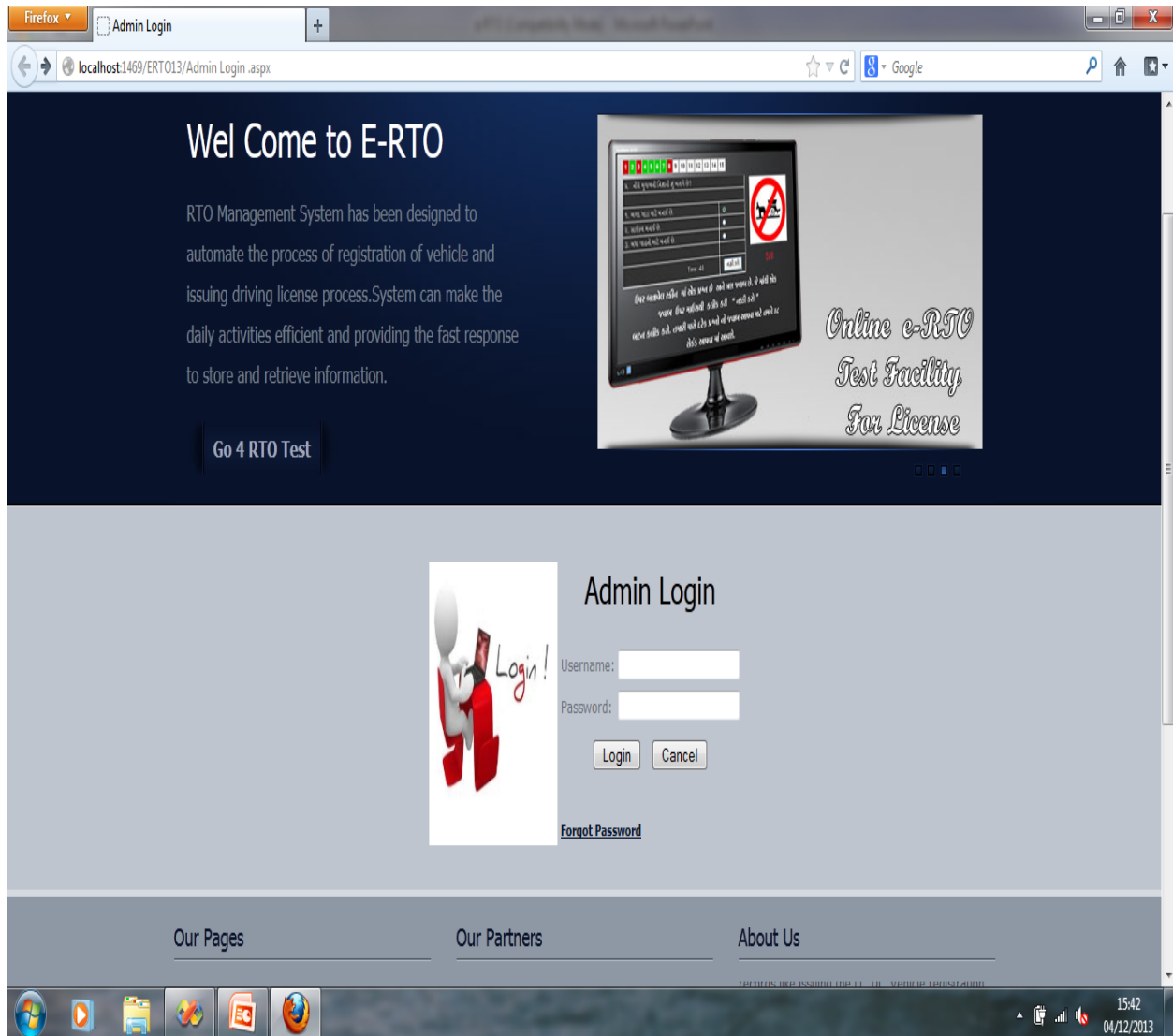
Sr no.	Field name	Data type.	Constrain	Size	Description
1.	Id	int	Primary key	-	Id.
2.	User_Id	Varchar	Not null	20	User id
3.	Date	Date Time	Not null	30	Test Date
4.	Marks	int	Not null	20	Obtain Mark
4.	Result	Varchar	Not null	20	Pass/Fail

Chapter:-6

napshort

## **Admin Page:**

## E-RTO System



## Admin Registration Page:

## E-RTO System

The screenshot shows a web browser window with the title "Registration Entry Form". The address bar displays "localhost:1469/ERTO13/admin/Entry\_Registration.aspx". The page features a header banner with a map of India, a traffic light, a "No Parking" sign, and the text "Welcome To e-RTO". Below the banner, there are two welcome messages: "Wel Come: Megha" and "Welcome Admin Page". The main content area is titled "Registration Entry Form" and contains a list of links in the left sidebar: "Admin Info", "Registration", "RTO Test", "Contact Us Info", "Feedback", and "Download Form". The registration form itself includes fields for "Regi Id", "UserName", "Password", "First Name", "Last Name", "Address", "City", "Mobile No", "E-mail", "Security Que" (with a dropdown menu showing "what is your favourite author?"), "Security Ans", and "Status" (with a dropdown menu showing "YES").

Firefox Registration Entry Form

localhost:1469/ERTO13/admin/Entry\_Registration.aspx

Welcome To e-RTO

Wel Come: Megha

Welcome Admin Page

**:: Menu ::**

- [Admin Info](#)
- [Registration](#)
- [RTO Test](#)
- [Contact Us Info](#)
- [Feedback](#)
- [Download Form](#)

**Registration Entry Form**

Regi Id :

UserName :

Password :

First Name :

Last Name :

Address :

City :

Mobile No :

E-mail :

Security Que : what is your favourite author?

Security Ans :

Status : YES

## Admin RTO Test Page:

# E-RTO System

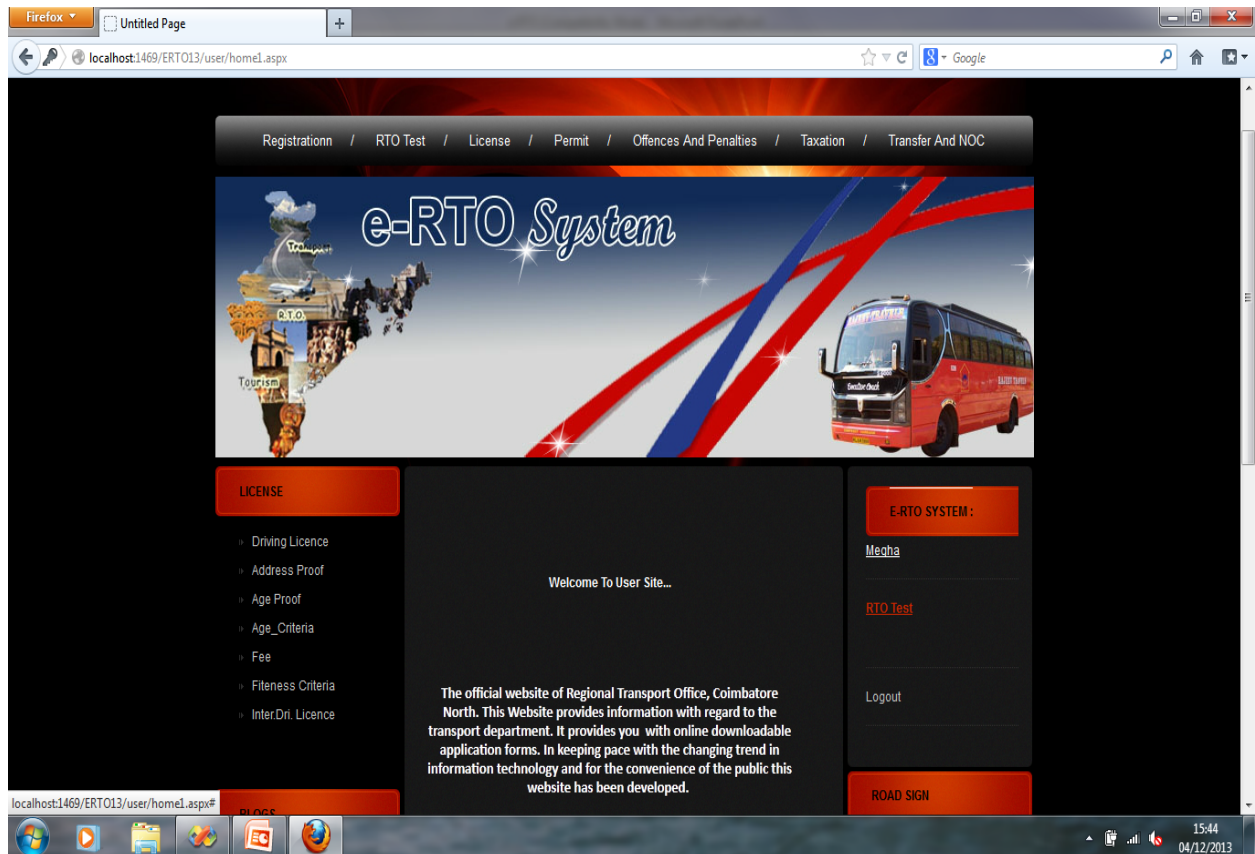
The screenshot displays a web browser window with the title "RTO Test Entry Form". The address bar shows the URL "localhost:1469/ERTO13/admin/Entry\_RTO Test.aspx". The page features a header banner with a map of India, a traffic light, a "No Parking" sign, and the text "Welcome To e-RTO". Below the banner, there are two welcome messages: "Wel Come: Megha" and "Welcome Admin Page". A sidebar menu on the left lists links: "Admin Info", "Registration", "RTO Test", "Contact Us Info", "Feedback", and "Download Form". The main content area is titled "RTO Test Entry Form" and contains the following fields and buttons:

- Question Id :
- Question Name :
- Option 1 :
- Option 2 :
- Option 3 :
- Answer :
- Image :
- 

At the bottom of the page, there is a "Logout" link and a footer that reads "Developed By: Sheetal & Bhavani & Megha & Jinal". The Windows taskbar at the bottom shows the system clock as 15:39 on 04/12/2013.

## User Home Page:

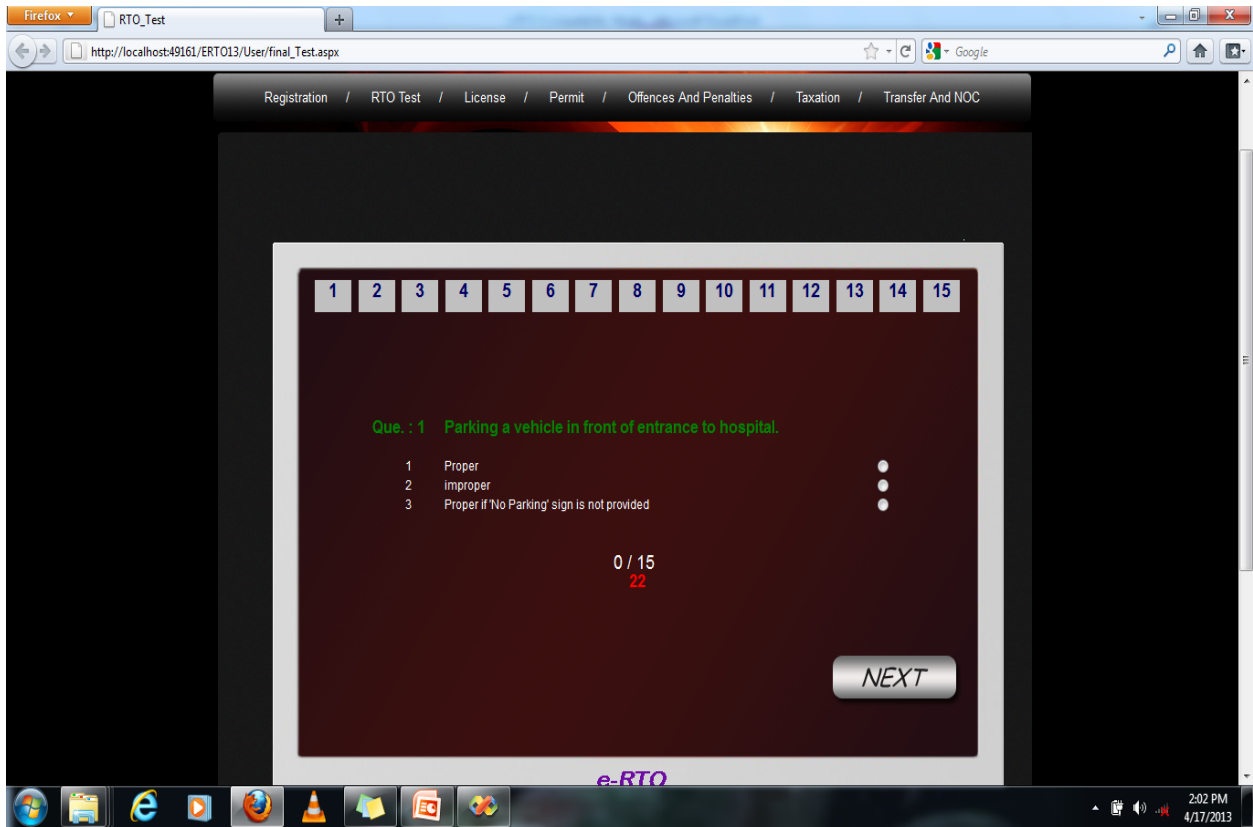
# E-RTO System



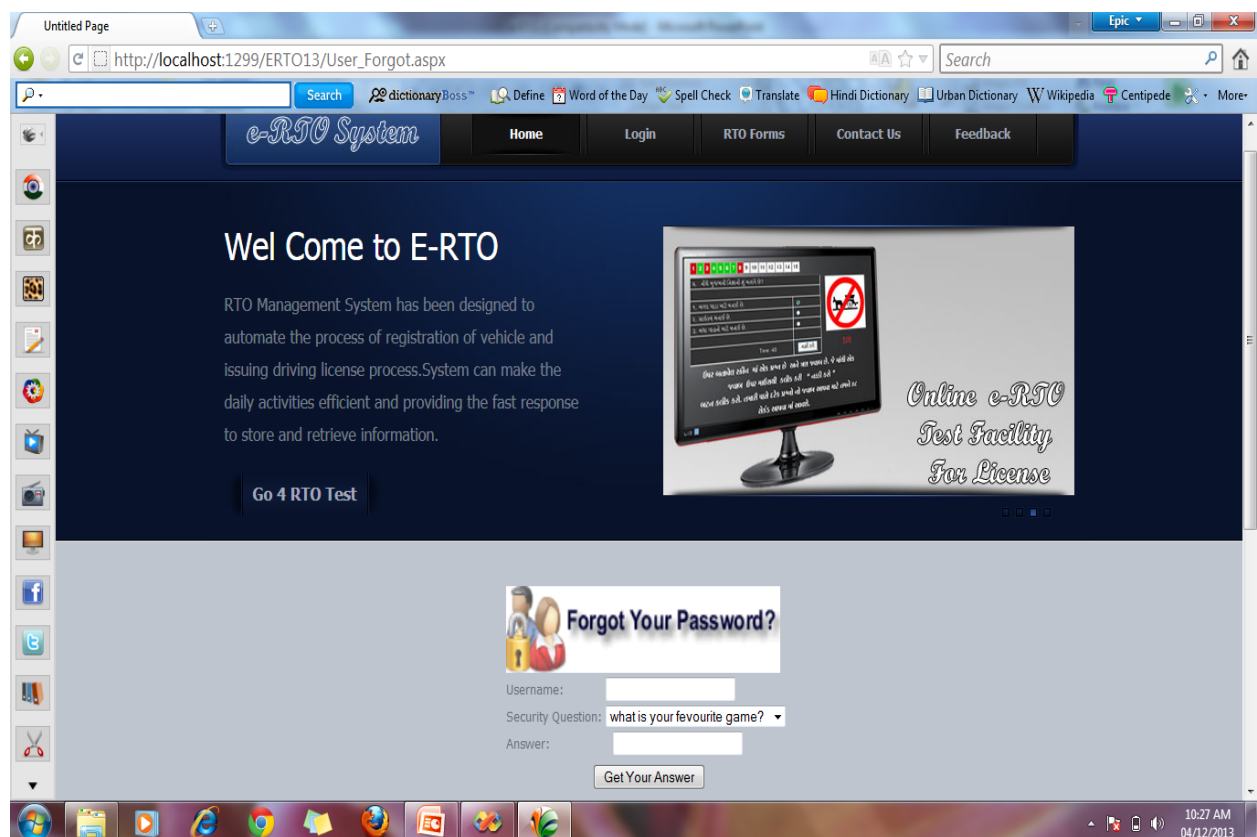
## RTO Test:



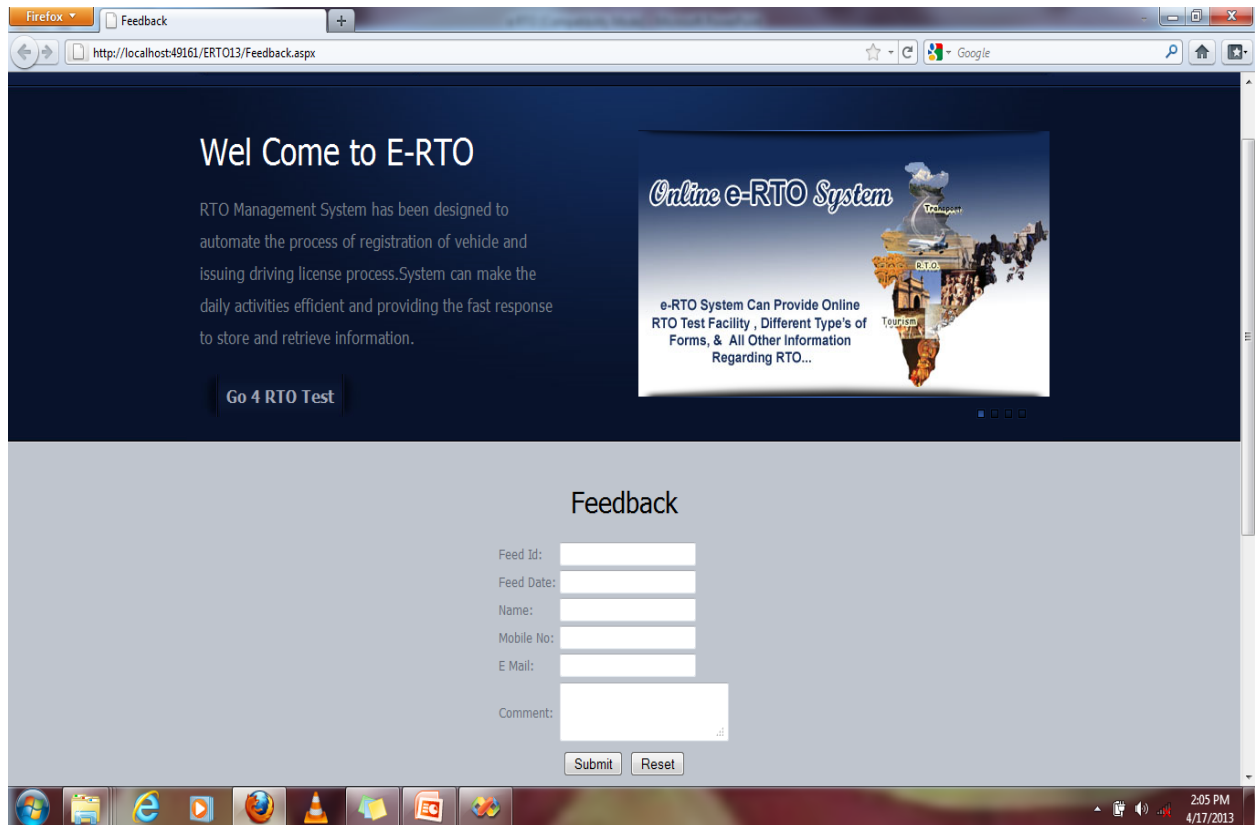
# E-RTO System



# Forgot password:



# Feedback Page:



The screenshot shows a web browser window with the title "Feedback" and the address bar displaying "http://localhost:49161/ERTO13/Feedback.aspx". The page content is divided into two main sections. The top section, titled "Wel Come to E-RTO", contains a paragraph describing the RTO Management System and a button labeled "Go 4 RTO Test". The right side of this section features a graphic titled "Online e-RTO System" with a map of India and text stating: "e-RTO System Can Provide Online RTO Test Facility , Different Type's of Forms, & All Other Information Regarding RTO...". The bottom section, titled "Feedback", contains a form with the following fields: "Feed Id:", "Feed Date:", "Name:", "Mobile No:", "E Mail:", and "Comment:". Below the "Comment:" field are "Submit" and "Reset" buttons. The Windows taskbar at the bottom shows various application icons and the system clock indicating 2:05 PM on 4/17/2013.

Firefox Feedback

http://localhost:49161/ERTO13/Feedback.aspx

Google

## Wel Come to E-RTO

RTO Management System has been designed to automate the process of registration of vehicle and issuing driving license process. System can make the daily activities efficient and providing the fast response to store and retrieve information.

[Go 4 RTO Test](#)

### Online e-RTO System

e-RTO System Can Provide Online RTO Test Facility , Different Type's of Forms, & All Other Information Regarding RTO...

## Feedback

Feed Id:

Feed Date:

Name:

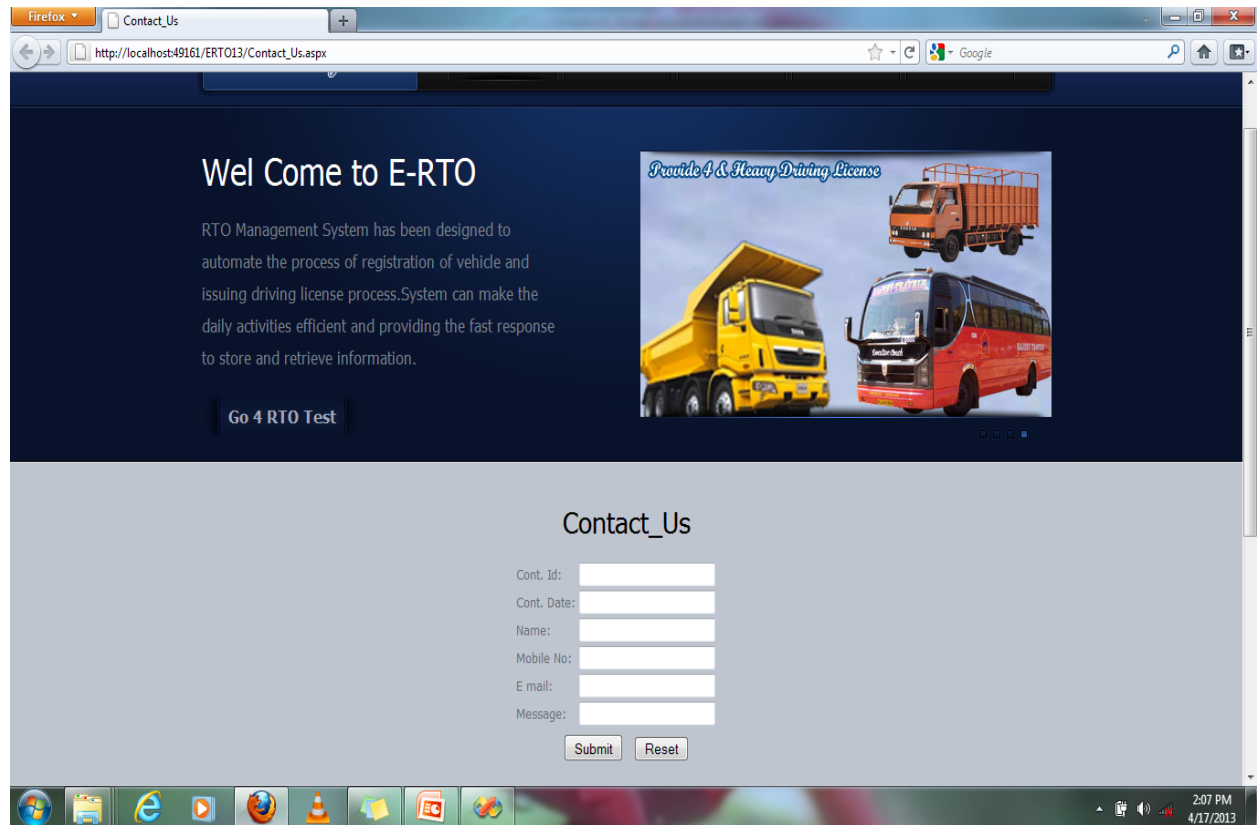
Mobile No:

E Mail:

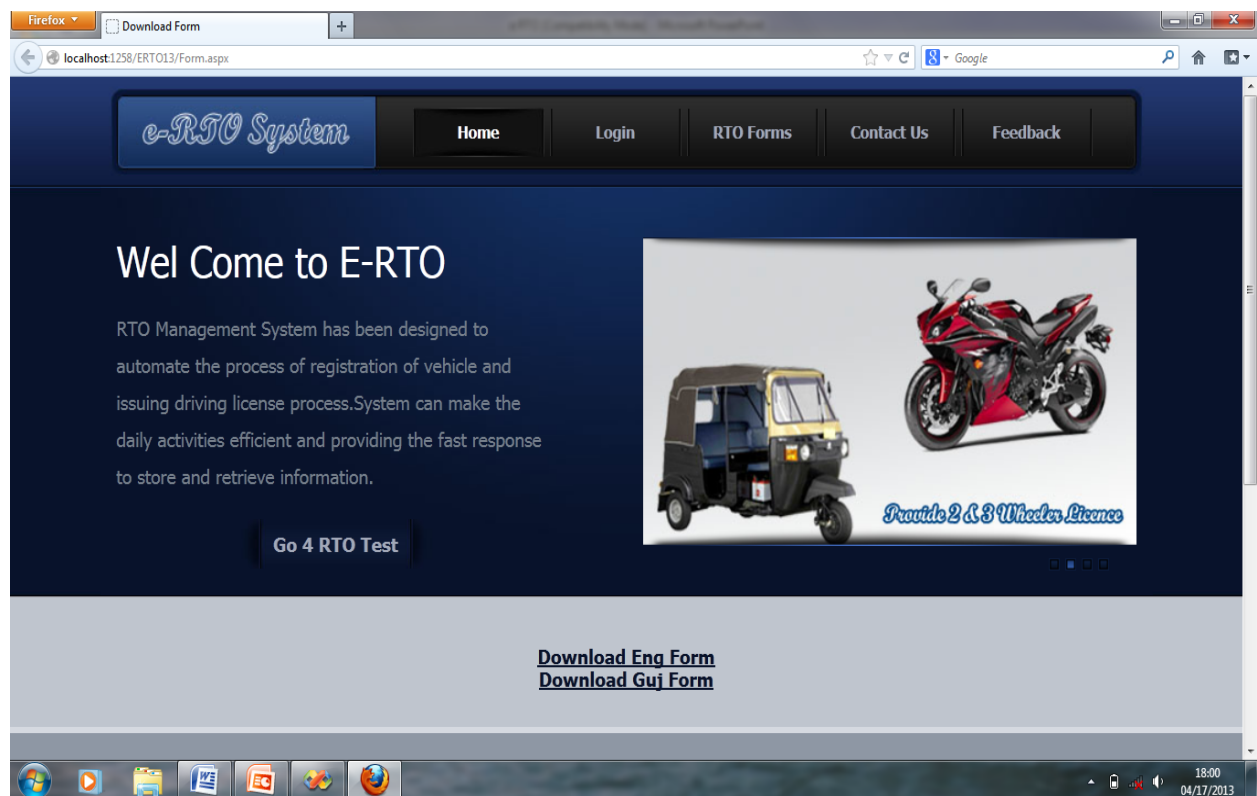
Comment:

2:05 PM 4/17/2013

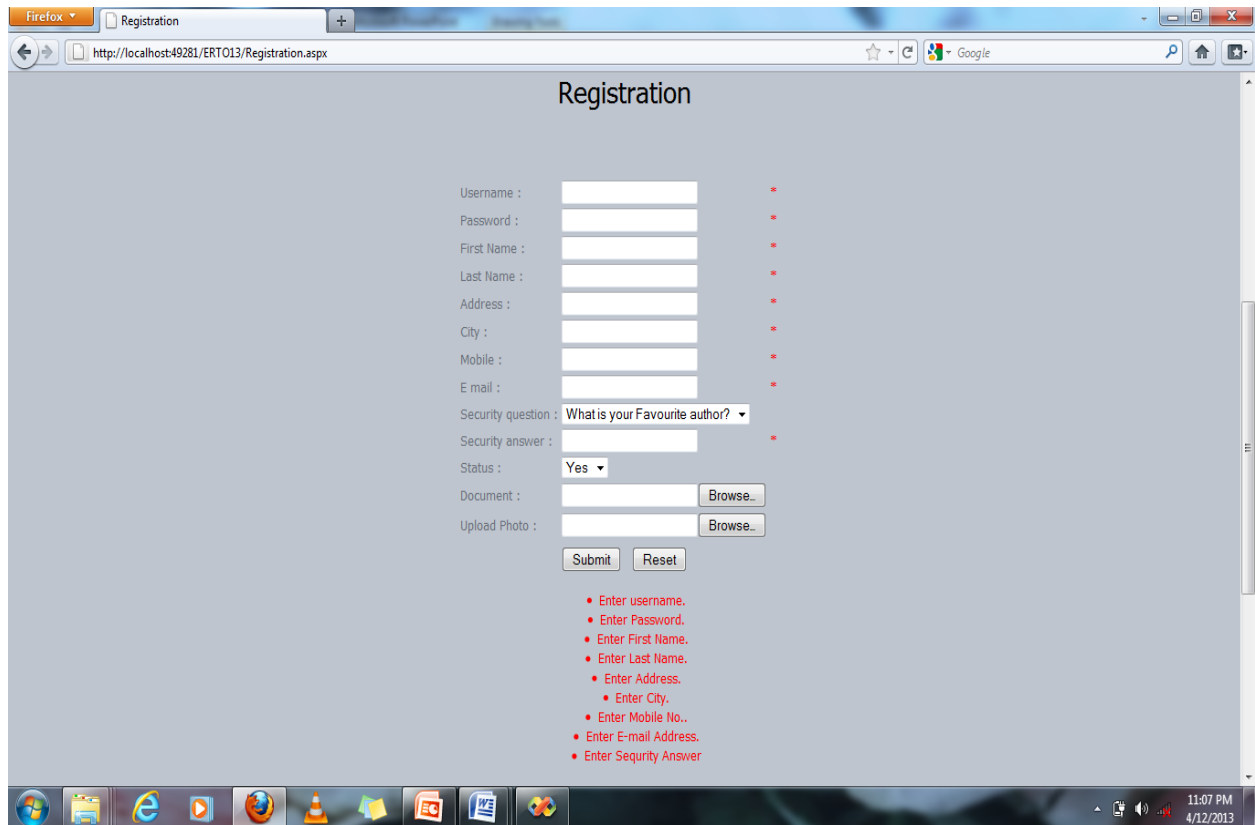
# Contact Us Page:



# Download Page:



# Validation Control Page:



The screenshot shows a web browser window titled "Registration" with the URL "http://localhost:49281/ERTO13/Registration.aspx". The form contains the following fields and controls:

- Username :
- Password :
- First Name :
- Last Name :
- Address :
- City :
- Mobile :
- E mail :
- Security question : What is your Favourite author?
- Security answer :
- Status : Yes
- Document :
- Upload Photo :

Below the form, a list of validation errors is displayed:

- Enter username.
- Enter Password.
- Enter First Name.
- Enter Last Name.
- Enter Address.
- Enter City.
- Enter Mobile No..
- Enter E-mail Address.
- Enter Security Answer

Chapter:-7

Summary

7.

**Summary**

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## 7.1 SUMMARY OF PROJECT WORK

### ❖ Project Title

e-Regional Transport Office System

### ❖ Software used

Microsoft Visual Studio 2008

Database-Microsoft SQL Server 2005

### ❖ Documentation Tools

Ms-Office 2007

### ❖ Internal Project Guide

Mr. Chandresh Patel

### ❖ External Project Guide

Mr. Chandresh Patel

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### ❖ Project Duration

YEAR-2012-2013



**Chapter:-8**

**Conclusion**

## **8.1 CONCLUSION**

In today's world with the increasing traffic and longer commuting distances it is becoming very difficult for people to travel for their particular licenses issue.

Also most of the people today work for longer hours and do not have the flexibility to take a break from work to give the licenses tests. People have not spent more time for licenses test.

The People want a facility where they can have easy to issue their licenses.

The facility to achieve schedule date by SMS, call or mail.

The people collect their license from post and travel from long distance for issuing license. So, the people waste their money.

We like this opportunity to convey our special thanks to all those who played role in making this project a success and a great learning experience for us.

### ❖ Reference

#### **Appendix –A List of Useful Websites**

- o [www.drivingschool.com](http://www.drivingschool.com)
- o [www.transportindia.in](http://www.transportindia.in)

#### **Appendix –B List of Useful Book**

- o C# BIBLE, WILEY
- o PRO ASP.NET IN C# 3.5
- o SQL SERVER 2005 BIBLE