

## **DECLARATION**

We hereby declare that the project entitled "**ROAD TRANSPORT**" submitted to the department of Information Technology, Hyderabad for partial fulfillment of the requirement for the award of Bachelor of Technology in Information Technology is a result of original work carried out by us.

This work in original has not been submitted so far in part or full for any other institute or University.

## **ACKNOWLEDGEMENT**

We thank the almighty for giving us the courage & perseverance in completing the project. This project itself is an acknowledgement for all those who have given us their heart-felt-co-operation in making it a grand success.

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Last but not the least; we would like to express our deep sense and earnest thanks giving to our dear parents for their moral support and heartfelt cooperation in doing the project. We would also like to thank our friends, whose direct or indirect help has enabled us to complete this work successfully.

## **COMPANY PROFILE**

Datapoint has been actively in the profession of sourcing IT professionals from the year 2000. We have since placed scores of candidates from different skill sets, with varying levels of experience. Having established a reputation as a good placement organization, we are constantly approached by adept professionals, in pursuit of better opportunities, which helps us maintain an updated database of present and potential IT connoisseurs in demand home and abroad

Datapoint endeavors to be a pioneer in Recruiting and manpower consulting thanks to strategic alliances with leading multinational companies in India and US of America. Our technically competent, experienced, and certified consultants will help our clientele to get the right manpower at the right time. We take pride in having top-notch companies who make enable us to have faith in the future through maintaining high quality in screening, hiring and management.

Datapoint has identified a number of areas of thrust in the emerging and ever growing IT industry and virtue of which, we would focus all our energies to get on to the fast track in the shortest possible period. We pursue requirements from leading Corporate in India and abroad. The company is also entering into a memorandum of understanding with leading companies in India & USA for placements.

## ABSTRACT

RTA Information System (RTA) is an online information source developed for Road Transport Authority to facilitate the users in applying for various licenses and registrations. This tool has been designed to facilitate the flow of information within the organization. RTA provides the facility of applying licenses online, issuance of permanent license, tax challans, and receiving payments against challans.

In the Previous System It is not efficient in performing office work in RTO services, It includes much manual process and time consuming, It is not user friendly, Maintains local data base. It is not Generating Accurate Reports.

The Existing system of RTA services has been in usage for two years. The existing system is not giving accurate results while doing transactions. It doesn't provide security, anyone enter into the system and can do their own transactions. It is not flexible in generating reports and many manual processes are made computerized.

To overcome problems in the existing System a new RTO services "Road Transport Authority Information System" is proposed after study of system. The objectives of proposed system are: Ensure data integrity and security, less manpower, Generate accurate reports, Accurate handling in multiple details.

RTA has the following modules

- Application for learner license.
- Issuance of permanent license.
- Issuance of road tax challans for transport vehicles.
- Receiving payments against challans.

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# **1. INTRODUCTION**

## **2.1 Process Model**

The System keeps track of the transactions in the RTO office. It maintains Renewal of learner's License, Renewal of permanent license, Issue of learner's license, Online LLR Form, Registration Form, Issue of permanent license, payment against challan and finally it produce printouts to payment of customers.

## **2.2 Purpose of the project**

This project Deals with the transactions of RTO services office:-

- ☞ Renewal of learner's license.
- ☞ Renewal of permanent license.
- ☞ Issue of learner's license.
- ☞ Issue of permanent license.
- ☞ Registration Form
- ☞ Payment against challan.
- ☞ Online LLR Form

## **2.3 Problem in Existing System**

The Existing system of RTO services has been in usage for two years. The existing system is not giving accurate results while doing transactions. It doesn't provide security, anyone enter into the system and can do their own transactions. It is not flexible in generating reports. and many manual processes are made computerized.

The present system has following drawbacks:

- ⇒ It is not efficient in performing office work in RTO services.
- ⇒ It includes much manual process and time consuming.
- ⇒ It is not user friendly.
- ⇒ Maintains local data base.

⇒ It is not Generating Accurate Reports.

## 2.4 Solution of these Problems

To overcome problems in the existing System a new RTO services “Road Transport Authority Information System” is proposed after study of system. **The objectives of proposed system are:**

- ▶ Facilities ease of operation.
- ▶ Ensure data integrity and security.
- ▶ Less manpower.
- ▶ Generate accurate reports.
- ▶ Accurate handling in multiple details of multiple customers.

## 3. H/W AND S/W SPECIFICATION

### SOFTWARE CONFIGURATION

OPERATING PLATFORM	:	WINDOWS 2000/NT/XP
RDBMS	:	SQLSERVER 2000
SOFTWARE	:	VS.NET 2003
FRONT END TOOL	:	ASP.NET

### HARDWARE CONFIGURATION

RAM	:	128MB
HARD DISK	:	MINIMUM 20 GB

## **SYSTEM DEVELOPMENT ENVIRONMENT**

### **1.HTML**

#### **WHAT IS HTML?**

To publish information for global distribution, one needs a university-understood language, a kind of publishing mother tongue that all computers may potentially understand. The publishing language used by the World Wide Web is HTML (Hyper Text Markup Language)

#### **HTML Gives Authors The Means To**

1. Publish online documents with headings, text, tables, list, photos etc.
2. Retrieve online information via hypertext links, at the click of a button
3. Design forms for conducting transactions with remote services, for use in searching information, making reservation, ordering products etc.;
4. Includes spreadsheets, video clips, sound clips, and other applications directly in the documents.

#### **Some HTML Tags**

<HTML> :Starting an HTML tag

<HEAD> : Creating a web page's head

<TITLE> : Giving a web page 's body

</HEAD> : Ending a web pages head

</BODY> : Ending a web pages body

</HTML> : Ending a web page

<FORM> : Creating a HTML forms

<INPUT TYPE=BUTTON> : Creating a buttons

<INPUT TYPE=CHECKBOX> : Creating a checkboxes

<INPUT TYPE=SUBMIT> : Creating a submit button

<INPUT TYPE=TEXT> : Creating a text fields

## **HTML 4.0**

HTML 4.0 extends with mechanisms for style sheets, scripting, frames embedding objects, improved support for right to left and mixed direction texts, richer tables and enhancements to form, offering improved accessibilities for people with disability

## **2. INTRODUCTION TO JAVA SCRIPT**

### **WHAT IS JAVA SCRIPT?**

JavaScript, originally supported by Netscape Navigator, is the most popular Web scripting language today. JavaScript lets you embed programs right in your Web pages and run these programs using the Web browser. You place these

programs in a <SCRIPT> element. If you want the script to write directly to the Web page, place it in the <BODY> element.

EX: <HTML>

```
<HEAD>
  <TITLE></TITLE>
</HEAD>
<BODY>
  <SCRIPT LANGUAGE="JavaScript">
  </SCRIPT>
</BODY></HTML>
```

## **JAVASCRIPTS OBJECTS**

JavaScript is an object-oriented language. JavaScript comes with a number of predefined objects.

### **Objects of the JavaScript**

1. Document: Corresponds to the current Web page's body. Using this object, you have access to the HTML of the page itself, including the all links, images and anchors in it.
2. Form: Holds information about HTML forms in the current page.
3. Frame: Refers to a frame in the browser's window.
4. History: Holds the records of sites the Web browser has visited before reaching the current page.
5. Location: Holds information about the location of the current web page.
6. Navigator: Refers to the browser itself, letting you determine what browser the user has.
7. Window: Refers to the current browser window.

## **JAVASCRIPTS EVENTS**

Some of the events of JavaScript

1. on Change: Occurs when data in a control, like a text field, changes.
2. on Click: Occurs when an element is clicked.
3. on Focus: Occurs when an element gets the focus.
4. on Mouse Down: Occurs when a mouse button goes down.
5. on Reset: Occurs when the user clicks the reset button.

## **JAVASCRIPTS FUNCTIONS**

### **Declaration of function**

Syntax: function function name ()

```
{  
...  
...  
}
```

Write these functions in <SCRIPT> tag.

## **2. ANALYSIS**

### **SYSTEM:**

- Designing and implementing the new links.
- Designing and implementing the users.
- Arranging new links as subject wise.

#### **a. Study of the System**

System analysis will be performed to determine if it is feasible to design information based on policies and plans of the organization and on user requirements and to eliminate the weaknesses of the present system.

- The new system should be cost effective.
- To augment management, improve productivity and services.
- To enhance user / system interface.
- To improve information quality and usability.
- To upgrade systems reliability, availability, flexibility and growth potential.

## b. Feasibility Study

### **3.1 Economic Feasibility**

Economic feasibility attempts to weigh the costs of developing and implementing a new system, against the benefits that would accrue from having the new system in place. This feasibility study gives the top management the economic justification for the new system. A simple economic analysis which gives the actual comparison of costs and benefits are much more meaningful in this case. In addition, this proves to be a useful point of reference to compare actual costs as the project progresses. There could be various types of intangible benefits on account of automation. These could include increased customer satisfaction, improvement in product quality, better decision making, timeliness of information, expediting activities, improved accuracy of operations, better documentation and record keeping, faster retrieval of information, better employee morale.

### **3.2 Operational Feasibility**

Proposed project is beneficial only if it can be turned into information systems that will meet the organization's operating requirements. Simply stated, this test of feasibility asks if the system will work when it is developed and installed. Are there major barriers to implementation? Here are questions that will help test the operational feasibility of a project:

Is there sufficient support for the project from management and users? If the current system is well liked and used to the extent that persons will not be able to see reasons for change, there may be resistance. Are the current business methods acceptable to the user? If they are not, users may welcome a change that will bring about a more operational and useful system.

Have the user been involved in the planning and development of the project? Early involvement reduces the chances of resistance to the system and in general and increases the likelihood of a successful project.

Since the proposed system was to help reduce the hardships encountered. In the existing manual system, the new system was considered to be operational feasible.

### **3.3 Technical Feasibility**

Evaluating the technical feasibility is the trickiest part of a feasibility study. This is because, at this point in time, not too many detailed design of the system, making it difficult to access issues like performance, costs on (on account of the kind of technology to be deployed) etc. A number of issues have to be considered while doing a technical analysis.

Understand the different technologies involved in the proposed system before commencing the project we have to be very clear about what are the technologies that are to be required for the development of the new system. Find out whether the organization currently possesses the required technologies. Is the required technology available with the organization.

# SOFTWARE DESIGN

### **3.SELECTED SOFTWARE**

#### **Microsoft.NET Framework**

The .NET Framework is a new computing platform that simplifies application development in the highly distributed environment of the Internet. The .NET Framework is designed to fulfill the following objectives:

- To provide a consistent object-oriented programming environment whether object code is stored and executed locally, executed locally but Internet-distributed, or executed remotely.
- To provide a code-execution environment that minimizes software deployment and versioning conflicts.
- To provide a code-execution environment that guarantees safe execution of code, including code created by an unknown or semi-trusted third party.
- To provide a code-execution environment that eliminates the performance problems of scripted or interpreted environments.
- To make the developer experience consistent across widely varying types of applications, such as Windows-based applications and Web-based applications.
- To build all communication on industry standards to ensure that code based on the .NET Framework can integrate with any other code.

The .NET Framework has two main components: the common language runtime and the .NET Framework class library. The common language runtime is the foundation of the .NET Framework. You can think of the runtime as an agent that manages code at execution time, providing core services such as memory management, thread management, and remoting, while also enforcing strict type safety and other forms of

code accuracy that ensure security and robustness. In fact, the concept of code management is a fundamental principle of the runtime. Code that targets the runtime is known as managed code, while code that does not target the runtime is known as unmanaged code. The class library, the other main component of the .NET Framework, is a comprehensive, object-oriented collection of reusable types that you can use to develop applications ranging from traditional command-line or graphical user interface (GUI) applications to applications based on the latest innovations provided by ASP.NET, such as Web Forms and XML Web services.

The .NET Framework can be hosted by unmanaged components that load the common language runtime into their processes and initiate the execution of managed code, thereby creating a software environment that can exploit both managed and unmanaged features. The .NET Framework not only provides several runtime hosts, but also supports the development of third-party runtime hosts.

For example, ASP.NET hosts the runtime to provide a scalable, server-side environment for managed code. ASP.NET works directly with the runtime to enable Web Forms applications and XML Web services, both of which are discussed later in this topic.

Internet Explorer is an example of an unmanaged application that hosts the runtime (in the form of a MIME type extension). Using Internet Explorer to host the runtime enables you to embed managed components or Windows Forms controls in HTML documents. Hosting the runtime in this way makes managed mobile code (similar to Microsoft® ActiveX® controls) possible, but with significant improvements that only managed code can offer, such as semi-trusted execution and secure isolated file storage.

The following illustration shows the relationship of the common language runtime and the class library to your applications and to the overall system. The illustration also shows how managed code operates within a larger architecture.

## **Features of the Common Language Runtime**

The common language runtime manages memory, thread execution, code execution, code safety verification, compilation, and other system services. These features are intrinsic to the managed code that runs on the common language runtime.

With regards to security, managed components are awarded varying degrees of trust, depending on a number of factors that include their origin (such as the Internet, enterprise network, or local computer). This means that a managed component might or might not be able to perform file-access operations, registry-access operations, or other sensitive functions, even if it is being used in the same active application.

The runtime enforces code access security. For example, users can trust that an executable embedded in a Web page can play an animation on screen or sing a song, but cannot access their personal data, file system, or network. The security features of the runtime thus enable legitimate Internet-deployed software to be exceptionally feature rich.

The runtime also enforces code robustness by implementing a strict type- and code-verification infrastructure called the common type system (CTS). The CTS ensures that all managed code is self-describing. The various Microsoft and third-party language compilers generate managed code that conforms to the CTS. This means that managed code can consume other managed types and instances, while strictly enforcing type fidelity and type safety.

In addition, the managed environment of the runtime eliminates many common software issues. For example, the runtime automatically handles object layout and manages references to objects, releasing them when they are no longer being used. This automatic memory management resolves the two most common application errors, memory leaks and invalid memory references.

The runtime also accelerates developer productivity. For example, programmers can write applications in their development language of choice, yet take full advantage of the runtime, the class library, and components written in other languages by other developers. Any compiler vendor who chooses to target the runtime can do so. Language compilers that target the .NET Framework make the features of the .NET Framework available to existing code written in that language, greatly easing the migration process for existing applications. While the runtime is designed for the software of the future, it also supports software of today and yesterday. Interoperability between managed and unmanaged code enables developers to continue to use necessary COM components and DLLs.

The runtime is designed to enhance performance. Although the common language runtime provides many standard runtime services, managed code is never interpreted. A feature called just-in-time (JIT) compiling enables all managed code to run in the native machine language of the system on which it is executing. Meanwhile, the memory manager removes the possibilities of fragmented memory and increases memory locality-of-reference to further increase performance.

Finally, the runtime can be hosted by high-performance, server-side applications, such as Microsoft® SQL Server™ and Internet Information Services (IIS). This infrastructure enables you to use managed code to write your business logic, while still enjoying the superior performance of the industry's best enterprise servers that support runtime hosting.

## **.NET Framework Class Library**

The .NET Framework class library is a collection of reusable types that tightly integrate with the common language runtime. The class library is object oriented, providing types from which your own managed code can derive functionality. This not only makes the .NET Framework types easy to use, but also reduces the time associated with learning new

features of the .NET Framework. In addition, third-party components can integrate seamlessly with classes in the .NET Framework.

For example, the .NET Framework collection classes implement a set of interfaces that you can use to develop your own collection classes. Your collection classes will blend seamlessly with the classes in the .NET Framework.

As you would expect from an object-oriented class library, the .NET Framework types enable you to accomplish a range of common programming tasks, including tasks such as string management, data collection, database connectivity, and file access. In addition to these common tasks, the class library includes types that support a variety of specialized development scenarios. For example, you can use the .NET Framework to develop the following types of applications and services:

- Console applications.
- Scripted or hosted applications.
- Windows GUI applications (Windows Forms).
- ASP.NET applications.
- XML Web services.
- Windows services.

For example, the Windows Forms classes are a comprehensive set of reusable types that vastly simplify Windows GUI development. If you write an ASP.NET Web Form application, you can use the Web Forms classes.

## **Client Application Development**

Client applications are the closest to a traditional style of application in Windows-based programming. These are the types of applications that display windows or forms on the desktop, enabling a user to perform a task. Client applications include applications such as word processors and spreadsheets, as well as custom business applications such as data-entry tools, reporting tools, and so on. Client applications usually employ windows, menus, buttons, and other GUI elements, and they likely access local resources such as the file system and peripherals such as printers.

Another kind of client application is the traditional ActiveX control (now replaced by the managed Windows Forms control) deployed over the Internet as a Web page. This application is much like other client applications: it is executed natively, has access to local resources, and includes graphical elements.

In the past, developers created such applications using C/C++ in conjunction with the Microsoft Foundation Classes (MFC) or with a rapid application development (RAD) environment such as Microsoft® Visual Basic®. The .NET Framework incorporates aspects of these existing products into a single, consistent development environment that drastically simplifies the development of client applications.

The Windows Forms classes contained in the .NET Framework are designed to be used for GUI development. You can easily create command windows, buttons, menus, toolbars, and other screen elements with the flexibility necessary to accommodate shifting business needs.

For example, the .NET Framework provides simple properties to adjust visual attributes associated with forms. In some cases the underlying operating system does not support changing these attributes directly, and in these cases the .NET Framework automatically recreates the forms. This is one of many ways in which the .NET Framework integrates the developer interface, making coding simpler and more consistent.

Unlike ActiveX controls, Windows Forms controls have semi-trusted access to a user's computer. This means that binary or natively executing code can access some of the resources on the user's system (such as GUI elements and limited file access) without being able to access or compromise other resources. Because of code access security, many applications that once needed to be installed on a user's system can now be safely deployed through the Web. Your applications can implement the features of a local application while being deployed like a Web page.

## **C#.NET**

### **ADO.NET Overview**

ADO.NET is an evolution of the ADO data access model that directly addresses user requirements for developing scalable applications. It was designed specifically for the web with scalability, statelessness, and XML in mind.

ADO.NET uses some ADO objects, such as the **Connection** and **Command** objects, and also introduces new objects. Key new ADO.NET objects include the **DataSet**, **DataReader**, and **DataAdapter**. The important distinction between this evolved stage of ADO.NET and previous data architectures is that there exists an object -- the **DataSet** -- that is separate and distinct from any data stores. Because of that, the

**DataSet** functions as a standalone entity. You can think of the **DataSet** as an always disconnected recordset that knows nothing about the source or destination of the data it contains. Inside a **DataSet**, much like in a database, there are tables, columns, relationships, constraints, views, and so forth.

A **DataAdapter** is the object that connects to the database to fill the **DataSet**. Then, it connects back to the database to update the data there, based on operations performed while the **DataSet** held the data. In the past, data processing has been primarily connection-based. Now, in an effort to make multi-tiered apps more efficient, data processing is turning to a message-based approach that revolves around chunks of information. At the center of this approach is the **DataAdapter**, which provides a bridge to retrieve and save data between a **DataSet** and its source data store. It accomplishes this by means of requests to the appropriate SQL commands made against the data store.

The XML-based **DataSet** object provides a consistent programming model that works with all models of data storage: flat, relational, and hierarchical. It does this by having no 'knowledge' of the source of its data, and by representing the data that it holds as collections and data types. No matter what the source of the data within the **DataSet** is, it is manipulated through the same set of standard APIs exposed through the **DataSet** and its subordinate objects.

While the **DataSet** has no knowledge of the source of its data, the managed provider has detailed and specific information. The role of the managed provider is to connect, fill, and persist the **DataSet** to and from data stores. The OLE DB and SQL Server .NET Data Providers (System.Data.OleDb and System.Data.SqlClient) that are part of the .Net Framework provide four basic objects: the **Command**, **Connection**,

**DataReader** and **DataAdapter**. In the remaining sections of this document, we'll walk through each part of the **DataSet** and the OLE DB/SQL Server .NET Data Providers explaining what they are, and how to program against them.

The following sections will introduce you to some objects that have evolved, and some that are new. These objects are:

- **Connections**. For connection to and managing transactions against a database.
- **Commands**. For issuing SQL commands against a database.
- **DataReaders**. For reading a forward-only stream of data records from a SQL Server data source.
- **DataSets**. For storing, remoting and programming against flat data, XML data and relational data.
- **DataAdapters**. For pushing data into a **DataSet**, and reconciling data against a database.

When dealing with connections to a database, there are two different options: SQL Server .NET Data Provider (`System.Data.SqlClient`) and OLE DB .NET Data Provider (`System.Data.OleDb`). In these samples we will use the SQL Server .NET Data Provider. These are written to talk directly to Microsoft SQL Server. The OLE DB .NET Data Provider is used to talk to any OLE DB provider (as it uses OLE DB underneath).

## Connections

Connections are used to 'talk to' databases, and are represented by provider-specific classes such as **SQLConnection**. Commands travel over connections and resultsets are returned in the form of streams which can be read by a **DataReader** object, or pushed into a **DataSet** object.

## Commands

Commands contain the information that is submitted to a database, and are represented by provider-specific classes such as **SQLCommand**. A command can be a stored procedure call, an UPDATE statement, or a statement that returns results. You can also use input and output parameters, and return values as part of your command syntax. The example below shows how to issue an INSERT statement against the **Northwind** database.

## DataReaders

The **DataReader** object is somewhat synonymous with a read-only/forward-only cursor over data. The **DataReader** API supports flat as well as hierarchical data. A **DataReader** object is returned after executing a command against a database. The format of the returned **DataReader** object is different from a recordset. For example, you might use the **DataReader** to show the results of a search list in a web page.

## DataSets and DataAdapters

### DataSets

The **DataSet** object is similar to the ADO **Recordset** object, but more powerful, and with one other important distinction: the **DataSet** is always disconnected. The **DataSet** object represents a cache of data, with database-like structures such as tables, columns, relationships, and constraints. However, though a **DataSet** can and does behave much like a database, it is important to remember that **DataSet** objects do not interact directly with databases, or other source data. This allows the developer to work with a programming model that is always consistent, regardless of where the source data resides. Data coming from a database, an XML file, from code, or user input can all be placed into **DataSet** objects. Then, as changes are made to the **DataSet** they can be tracked and

verified before updating the source data. The **GetChanges** method of the **DataSet** object actually creates a second **DataSet** that contains only the changes to the data. This **DataSet** is then used by a **DataAdapter** (or other objects) to update the original data source.

The **DataSet** has many XML characteristics, including the ability to produce and consume XML data and XML schemas. XML schemas can be used to describe schemas interchanged via WebServices. In fact, a **DataSet** with a schema can actually be compiled for type safety and statement completion.

## **DataAdapters (OLEDB/SQL)**

The **DataAdapter** object works as a bridge between the **DataSet** and the source data. Using the provider-specific **SqlDataAdapter** (along with its associated **SqlCommand** and **SqlConnection**) can increase overall performance when working with a Microsoft SQL Server databases. For other OLE DB-supported databases, you would use the **OleDbDataAdapter** object and its associated **OleDbCommand** and **OleDbConnection** objects.

The **DataAdapter** object uses commands to update the data source after changes have been made to the **DataSet**. Using the **Fill** method of the **DataAdapter** calls the SELECT command; using the **Update** method calls the INSERT, UPDATE or DELETE command for each changed row. You can explicitly set these commands in order to control the statements used at runtime to resolve changes, including the use of stored procedures. For ad-hoc scenarios, a **CommandBuilder** object can generate these at run-time based upon a select statement. However, this run-time generation requires an extra round-trip to the server in order to gather required metadata, so explicitly providing the INSERT, UPDATE, and DELETE commands at design time will result in better run-time performance.

1. ADO.NET is the next evolution of ADO for the .Net Framework.
2. ADO.NET was created with n-Tier, statelessness and XML in the forefront. Two new objects, the **DataSet** and **DataAdapter**, are provided for these scenarios.
3. ADO.NET can be used to get data from a stream, or to store data in a cache for updates.
4. There is a lot more information about ADO.NET in the documentation.
5. Remember, you can execute a command directly against the database in order to do inserts, updates, and deletes. You don't need to first put data into a **DataSet** in order to insert, update, or delete it.
6. Also, you can use a **DataSet** to bind to the data, move through the data, and navigate data relationships

## **ASP.Net**

### **Server Application Development**

Server-side applications in the managed world are implemented through runtime hosts. Unmanaged applications host the common language runtime, which allows your custom managed code to control the behavior of the server. This model provides you with all the features of the common language runtime and class library while gaining the performance and scalability of the host server.

The following illustration shows a basic network schema with managed code running in different server environments. Servers such as IIS and SQL Server can perform standard operations while your application logic executes through the managed code.

## **Server-side managed code**

ASP.NET is the hosting environment that enables developers to use the .NET Framework to target Web-based applications. However, ASP.NET is more than just a runtime host; it is a complete architecture for developing Web sites and Internet-distributed objects using managed code. Both Web Forms and XML Web services use IIS and ASP.NET as the publishing mechanism for applications, and both have a collection of supporting classes in the .NET Framework.

XML Web services, an important evolution in Web-based technology, are distributed, server-side application components similar to common Web sites. However, unlike Web-based applications, XML Web services components have no UI and are not targeted for browsers such as Internet Explorer and Netscape Navigator. Instead, XML Web services consist of reusable software components designed to be consumed by other applications, such as traditional client applications, Web-based applications, or even other XML Web services. As a result, XML Web services technology is rapidly moving application development and deployment into the highly distributed environment of the Internet.

If you have used earlier versions of ASP technology, you will immediately notice the improvements that ASP.NET and Web Forms offers. For example, you can develop Web Forms pages in any language that supports the .NET Framework. In addition, your code no longer needs to share the same file with your HTTP text (although it can continue to do so if you prefer). Web Forms pages execute in native machine language because, like any other managed application, they take full advantage of the runtime. In contrast, unmanaged ASP pages are always scripted and interpreted. ASP.NET pages are faster, more functional, and easier to develop than unmanaged ASP pages because they interact with the runtime like any managed application.

The .NET Framework also provides a collection of classes and tools to aid in development and consumption of XML Web services applications. XML Web services are built on standards such as SOAP (a remote procedure-call protocol), XML (an extensible data format), and WSDL (the Web Services Description Language). The .NET Framework is built on these standards to promote interoperability with non-Microsoft solutions.

For example, the Web Services Description Language tool included with the .NET Framework SDK can query an XML Web service published on the Web, parse its WSDL description, and produce C# or Visual Basic source code that your application can use to become a client of the XML Web service. The source code can create classes derived from classes in the class library that handle all the underlying communication using SOAP and XML parsing. Although you can use the class library to consume XML Web services directly, the Web Services Description Language tool and the other tools contained in the SDK facilitate your development efforts with the .NET Framework.

If you develop and publish your own XML Web service, the .NET Framework provides a set of classes that conform to all the underlying communication standards, such as SOAP, WSDL, and XML. Using those classes enables you to focus on the logic of your service, without concerning yourself with the communications infrastructure required by distributed software development.

Finally, like Web Forms pages in the managed environment, your XML Web service will run with the speed of native machine language using the scalable communication of IIS.

## Active Server Pages.NET

ASP.NET is a programming framework built on the common language runtime that can be used on a server to build powerful Web applications. ASP.NET offers several important advantages over previous Web development models:

- **Enhanced Performance.** ASP.NET is compiled common language runtime code running on the server. Unlike its interpreted predecessors, ASP.NET can take advantage of early binding, just-in-time compilation, native optimization, and caching services right out of the box. This amounts to dramatically better performance before you ever write a line of code.
- **World-Class Tool Support.** The ASP.NET framework is complemented by a rich toolbox and designer in the Visual Studio integrated development environment. WYSIWYG editing, drag-and-drop server controls, and automatic deployment are just a few of the features this powerful tool provides.
- **Power and Flexibility.** Because ASP.NET is based on the common language runtime, the power and flexibility of that entire platform is available to Web application developers. The .NET Framework class library, Messaging, and Data Access solutions are all seamlessly accessible from the Web. ASP.NET is also language-independent, so you can choose the language that best applies to your application or partition your application across many languages. Further, common language runtime interoperability guarantees that your existing investment in COM-based development is preserved when migrating to ASP.NET.

- **Simplicity.** ASP.NET makes it easy to perform common tasks, from simple form submission and client authentication to deployment and site configuration. For example, the ASP.NET page framework allows you to build user interfaces that cleanly separate application logic from presentation code and to handle events in a simple, Visual Basic - like forms processing model. Additionally, the common language runtime simplifies development, with managed code services such as automatic reference counting and garbage collection.
- **Manageability.** ASP.NET employs a text-based, hierarchical configuration system, which simplifies applying settings to your server environment and Web applications. Because configuration information is stored as plain text, new settings may be applied without the aid of local administration tools. This "zero local administration" philosophy extends to deploying ASP.NET Framework applications as well. An ASP.NET Framework application is deployed to a server simply by copying the necessary files to the server. No server restart is required, even to deploy or replace running compiled code.
- **Scalability and Availability.** ASP.NET has been designed with scalability in mind, with features specifically tailored to improve performance in clustered and multiprocessor environments. Further, processes are closely monitored and managed by the ASP.NET runtime, so that if one misbehaves (leaks, deadlocks), a new process can be created in its place, which helps keep your application constantly available to handle requests.
- **Customizability and Extensibility.** ASP.NET delivers a well-factored architecture that allows developers to "plug-in" their code at the appropriate level. In fact, it is possible to extend or replace any subcomponent of the ASP.NET runtime with your own custom-written component. Implementing custom authentication or state services has never been easier.

- **Security.** With built in Windows authentication and per-application configuration, you can be assured that your applications are secure.

## Language Support

The Microsoft .NET Platform currently offers built-in support for three languages: C#, Visual Basic, and JScript.

## What is ASP.NET Web Forms?

The ASP.NET Web Forms page framework is a scalable common language runtime programming model that can be used on the server to dynamically generate Web pages.

Intended as a logical evolution of ASP (ASP.NET provides syntax compatibility with existing pages), the ASP.NET Web Forms framework has been specifically designed to address a number of key deficiencies in the previous model. In particular, it provides:

- The ability to create and use reusable UI controls that can encapsulate common functionality and thus reduce the amount of code that a page developer has to write.
- The ability for developers to cleanly structure their page logic in an orderly fashion (not "spaghetti code").
- The ability for development tools to provide strong WYSIWYG design support for pages (existing ASP code is opaque to tools).

ASP.NET Web Forms pages are text files with an .aspx file name extension. They can be deployed throughout an IIS virtual root directory tree. When a browser client requests .aspx resources, the ASP.NET runtime parses and compiles the target file into a .NET Framework class. This class can then be used to dynamically process incoming requests. (Note that the .aspx file is compiled only the first time it is accessed; the compiled type instance is then reused across multiple requests).

An ASP.NET page can be created simply by taking an existing HTML file and changing its file name extension to .aspx (no modification of code is required). For example, the following sample demonstrates a simple HTML page that collects a user's name and category preference and then performs a form postback to the originating page when a button is clicked:

ASP.NET provides syntax compatibility with existing ASP pages. This includes support for `<% %>` code render blocks that can be intermixed with HTML content within an .aspx file. These code blocks execute in a top-down manner at page render time.

## **Code-Behind Web Forms**

ASP.NET supports two methods of authoring dynamic pages. The first is the method shown in the preceding samples, where the page code is physically declared within the originating .aspx file. An alternative approach--known as the code-behind method--enables the page code to be more cleanly separated from the HTML content into an entirely separate file.

## **Introduction to ASP.NET Server Controls**

In addition to (or instead of) using `<% %>` code blocks to program dynamic content, ASP.NET page developers can use ASP.NET server controls to program Web pages. Server controls are declared within an .aspx file using custom tags or intrinsic HTML tags that contain a `runat="server"` attribute value. Intrinsic HTML tags are handled by one of the controls in the **System.Web.UI.HtmlControls** namespace. Any tag that doesn't explicitly map to one of the controls is assigned the type of **System.Web.UI.HtmlControls.HtmlGenericControl**.

Server controls automatically maintain any client-entered values between round trips to the server. This control state is not stored on the server (it is instead stored within an `<input type="hidden">` form field that is round-tripped between requests). Note also that no client-side script is required.

In addition to supporting standard HTML input controls, ASP.NET enables developers to utilize richer custom controls on their pages. For example, the following sample demonstrates how the `<asp:adrotator>` control can be used to dynamically display rotating ads on a page.

1. ASP.NET Web Forms provide an easy and powerful way to build dynamic Web UI.
2. ASP.NET Web Forms pages can target any browser client (there are no script library or cookie requirements).
3. ASP.NET Web Forms pages provide syntax compatibility with existing ASP pages.
4. ASP.NET server controls provide an easy way to encapsulate common functionality.
5. ASP.NET ships with 45 built-in server controls. Developers can also use controls built by third parties.
6. ASP.NET server controls can automatically project both uplevel and downlevel HTML.
7. ASP.NET templates provide an easy way to customize the look and feel of list server controls.
8. ASP.NET validation controls provide an easy way to do declarative client or server data validation.

## SQL SERVER DATABASE

A database management, or DBMS, gives the user access to their data and helps them transform the data into information. Such database management systems include dBase, paradox, IMS, Sql Server and SQL Server. These systems allow users to create, update and extract information from their database.

A database is a structured collection of data. Data refers to the characteristics of people, things and events. SQL Server stores each data item in its own fields. In SQL Server, the fields relating to a particular person, thing or event are bundled together to form a single complete unit of data, called a record (it can also be referred to as raw or an occurrence). Each record is made up of a number of fields. No two fields in a record can have the same field name.

During an SQL Server Database design project, the analysis of your business needs identifies all the fields or attributes of interest. If your business needs change over time, you define any additional fields or change the definition of existing fields.

## **SQL Server Tables**

SQL Server stores records relating to each other in a table. Different tables are created for the various groups of information. Related tables are grouped together to form a database.

## **Primary Key**

Every table in SQL Server has a field or a combination of fields that uniquely identifies each record in the table. The Unique identifier is called the Primary Key, or simply the Key. The primary key provides the means to distinguish one record from all other in a table. It allows the user and the database system to identify, locate and refer to one particular record in the database.

## **Relational Database**

Sometimes all the information of interest to a business operation can be stored in one table. SQL Server makes it very easy to link the data in multiple tables. Matching an employee to the department in which they work is one example. This is what makes SQL Server a relational database management system, or RDBMS. It stores data in two or more tables and enables you to define relationships between the table and enables you to define relationships between the tables.

### **Foreign Key**

When a field in one table matches the primary key of another field is referred to as a foreign key. A foreign key is a field or a group of fields in one table whose values match those of the primary key of another table.

### **Referential Integrity**

Not only does SQL Server allow you to link multiple tables, it also maintains consistency between them. Ensuring that the data among related tables is correctly matched is referred to as maintaining referential integrity.

### **Data Abstraction:**

A major purpose of a database system is to provide users with an abstract view of the data. This system hides certain details of how the data is stored and maintained. Data abstraction is divided into three levels.

**Physical level:** This is the lowest level of abstraction at which one describes how the data are actually stored.

**Conceptual Level:** At this level of database abstraction all the attributes and what data are actually stored is described and entries and relationship among them.

**View level:** This is the highest level of abstraction at which one describes only part of the database.

### **Advantages of RDBMS**

- Redundancy can be avoided
- Inconsistency can be eliminated
- Data can be Shared
- Standards can be enforced
- Security restrictions can be applied
- Integrity can be maintained
- Conflicting requirements can be balanced
- Data independence can be achieved.

### **Disadvantages of DBMS**

A significant disadvantage of the DBMS system is cost. In addition to the cost of purchasing of developing the software, the hardware has to be upgraded to allow for the extensive programs and the workspace required for their execution and storage. While centralization reduces duplication, the lack of duplication requires that the database be adequately backed up so that in case of failure the data can be recovered.

### **FEATURES OF SQL SERVER (RDBMS)**

SQL SERVER is one of the leading database management systems (DBMS) because it is the only Database that meets the uncompromising requirements of today's most demanding information systems. From complex decision support systems (DSS) to the most rigorous online transaction processing (OLTP) application, even application that require simultaneous DSS and OLTP access to the same critical data, SQL Server leads the industry in both performance and capability.

SQL SERVER is a truly portable, distributed, and open DBMS that delivers unmatched performance, continuous operation and support for every database.

SQL SERVER RDBMS is high performance fault tolerant DBMS which is specially designed for online transactions processing and for handling large database application.

SQL SERVER with transactions processing option offers two features which contribute to very high level of transaction processing throughput, which are

- The row level lock manager

### **Enterprise wide Data Sharing**

The unrivaled portability and connectivity of the SQL SERVER DBMS enables all the systems in the organization to be linked into a singular, integrated computing resource.

### **Portability**

SQL SERVER is fully portable to more than 80 distinct hardware and operating systems platforms, including UNIX, MSDOS, OS/2, Macintosh and dozens of proprietary platforms. This portability gives complete freedom to choose the database sever platform that meets the system requirements.

### **Open Systems**

SQL SERVER offers a leading implementation of industry –standard SQL. SQL Server's open architecture integrates SQL SERVER and non –SQL SERVER DBMS with industries most comprehensive collection of tools, application, and third party software products SQL Server's Open architecture provides transparent access to data from other relational database and even non-relational database.

## **Distributed Data Sharing**

SQL Server's networking and distributed database capabilities to access data stored on remote server with the same ease as if the information was stored on a single local computer. A single SQL statement can access data at multiple sites. You can store data where system requirements such as performance, security or availability dictate.

## **Unmatched Performance**

The most advanced architecture in the industry allows the SQL SERVER DBMS to deliver unmatched performance.

## **Sophisticated Concurrency Control**

Real World applications demand access to critical data. With most database Systems application becomes “contention bound” – which performance is limited not by the CPU power or by disk I/O, but user waiting on one another for data access . SQL Server employs full, unrestricted row-level locking and contention free queries to minimize and in many cases entirely eliminates contention wait times.

## **No I/O Bottlenecks**

SQL Server's fast commit groups commit and deferred write technologies dramatically reduce disk I/O bottlenecks. While some database write whole data block to disk at commit time, SQL Server commits transactions with at most sequential log file on disk at commit time, On high throughput systems, one sequential writes typically group commit multiple transactions. Data read by the transaction remains as shared memory so that other transactions may access that data without reading it again from disk. Since fast commits write all data necessary to the recovery to the log file, modified blocks are written back to the database independently of the transaction commit, when written from memory to disk.

# DESIGN

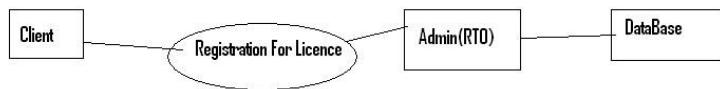
## **5.PROJECT DESIGN**

# DFD

## DFD Level 0



## DFD Level 1



## DFD Level2



### 5.1 DATA DICTIONARY

Data dictionary consists of descriptions of all the data used in the system. It consists of logical characteristic of current systems data stores including name, description, aliases, contents and organization. Data dictionary serves as basis for identifying databases requirements during requirements during system design. Data dictionary is a catalog a repository of the elements in the system. The Data dictionary is used to manage the detail in large systems, to communicate a common meaning for all system elements, to document the features of the system elements, to document the feature of the system, to locate errors and omissions in the system.

Data dictionary contains two types of description for the data flowing through the system: Data element and Data structure. Data Element are used to group together to make up the Data Structure. The most fundamental level is the data element. Data Structure is a set of data items data related to one another and collectively describe

a component in the system. The description of the data elements consists of data names, data description, aliases, and length and data values.

### 5.1.1 Table Name: Challana details

#### Table Name: Registration details

Column Name	Type	Size
regno	nvarchar	50
regdate	varchar	50
nameofapp	varchar	50
sdwof	varchar	50
age	varchar	50
Add1	varchar	50
Add2	varchar	50
city	varchar	50
state	varchar	50
phno	varchar	50
nameadd	varchar	50
typeofv	varchar	50
type	varchar	50
date1	varchar	50
chassisno	varchar	50
engineno	varchar	50
amount	nvarchar	50
Seatcap	varchar	50
paname	varchar	50
Fuel	varchar	50
Ides	varchar	50
Vfrom	Varchar	50
Vto	Varchar	50

### **5.1.2 Table Name: LLR details**

<b>Column Name</b>	<b>Type</b>	<b>Size</b>
Img_pk	Int	4
Img_title	varchar	50
Img_stream	Image	16
Img_type	Varchar	50
llrno	Varchar	50
ldate	Varchar	50
name	Varchar	50
swd	Varchar	50
dob	Varchar	50
bg	Varchar	50
a1	Varchar	50
a2	Varchar	50
City	Varchar	50
State	Varchar	50
Phone	Varchar	50
Mark	Varchar	50
Vfrom	Varchar	50
Vto	Varchar	50
Type	Varchar	50

### **5.1.3 Table Name: Admin**

<b>Column Name</b>	<b>Type</b>	<b>Size</b>
Id	nvarchar	50

Password	nvarchar	50
----------	----------	----

#### **5.1.4 Table Name: LLR Exam**

Column Name	Type	Size
Examno	Varchar	50
Ans1	Varchar	50
Ans2	Varchar	50
Ans3	Varchar	50
Ans4	Varchar	50
Ans5	Varchar	50
Ans6	Varchar	50
Ans7	Varchar	50
Ans8	Varchar	50
Ans9	Varchar	50
Ans10	Varchar	50
name	Varchar	50
Edate	Varchar	50
chalno	Varchar	50

#### **5.1.5 Table Name: Addemp**

Column Name	Type	Size
Id	nvarchar	50
Password	nvarchar	50
Name	varchar	50
Address	varchar	50
phno	varchar	50

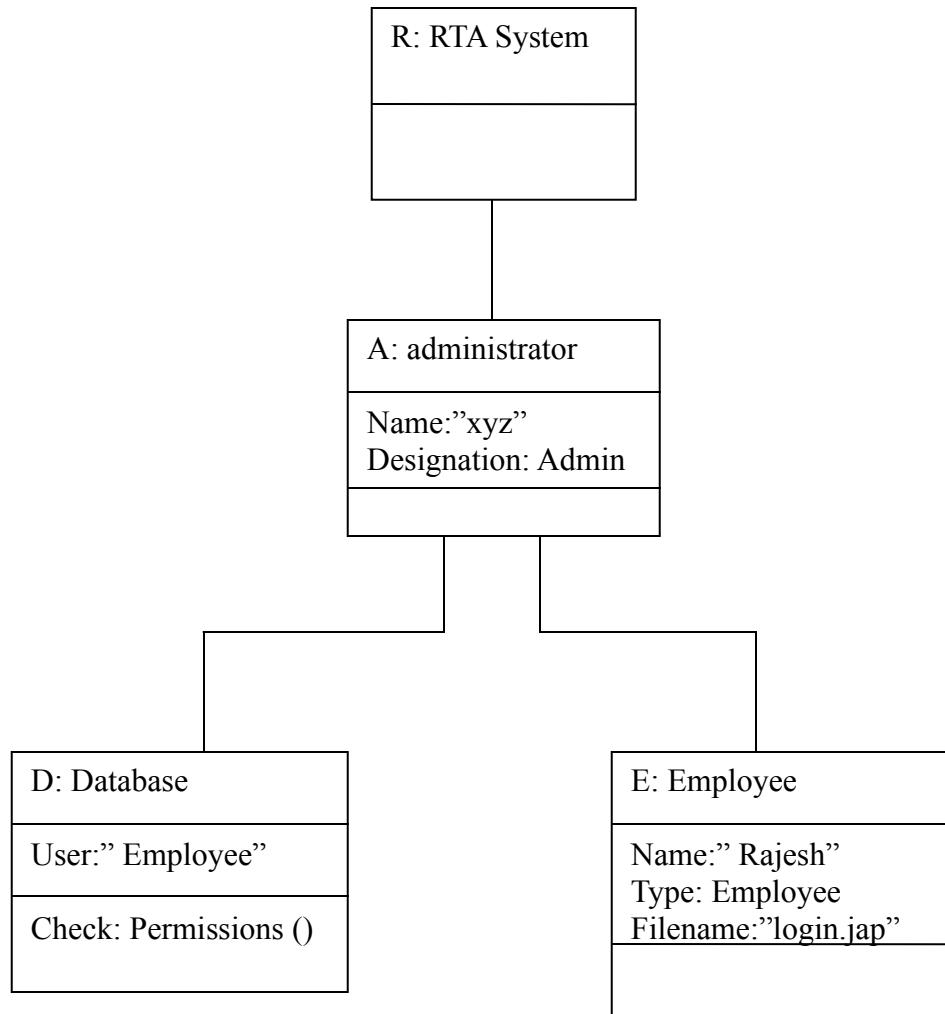
#### **5.1.6 Table Name: Renewal of LLR and PL**

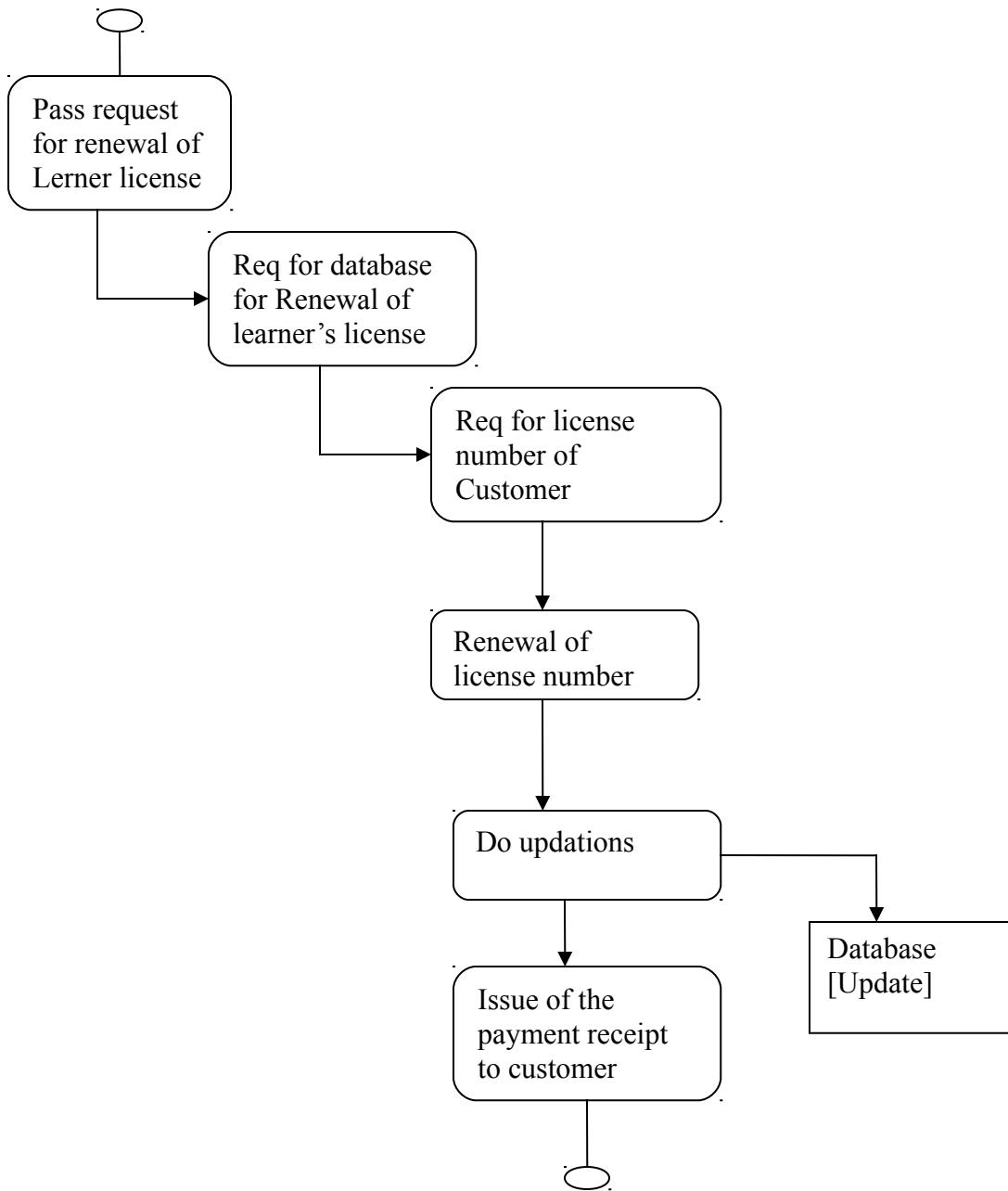
Column Name	Type	Size
llr	nvarchar	50
dateofiss	varchar	50
dateofren	varchar	50
typelicence	varchar	50
name	varchar	50
sdw	varchar	50
dob	varchar	50
bloodg	varchar	50
Add1	varchar	50
Add2	varchar	50
city	varchar	50
state	varchar	50
phno	varchar	50
Ident1	varchar	50
Ident2	varchar	50
vfrom	varchar	50
vto	varchar	50
chano	varchar	50
amount	varchar	50

### 5.1.7 Table Name:Result

Column Name	Type	Size
aname	nvarchar	50
examno	nvarchar	50
cno	varchar	50
edate	varchar	50
marks	varchar	50
result	Varchar	50

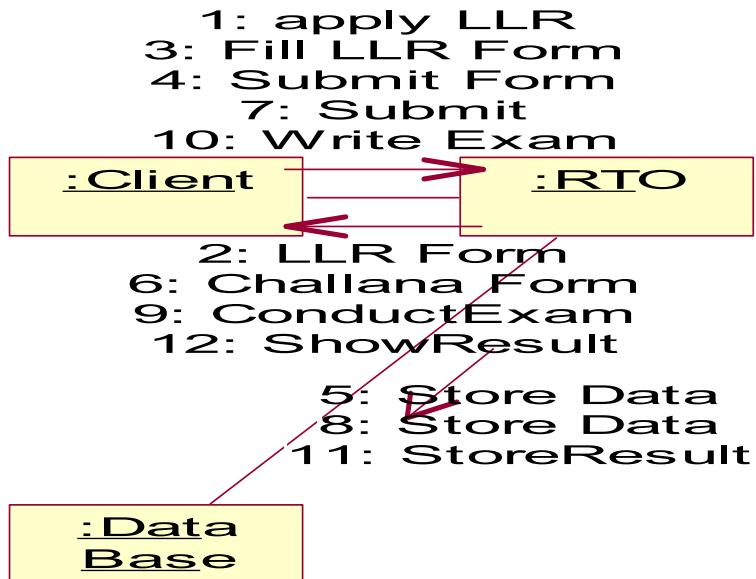
### Object Diagram:

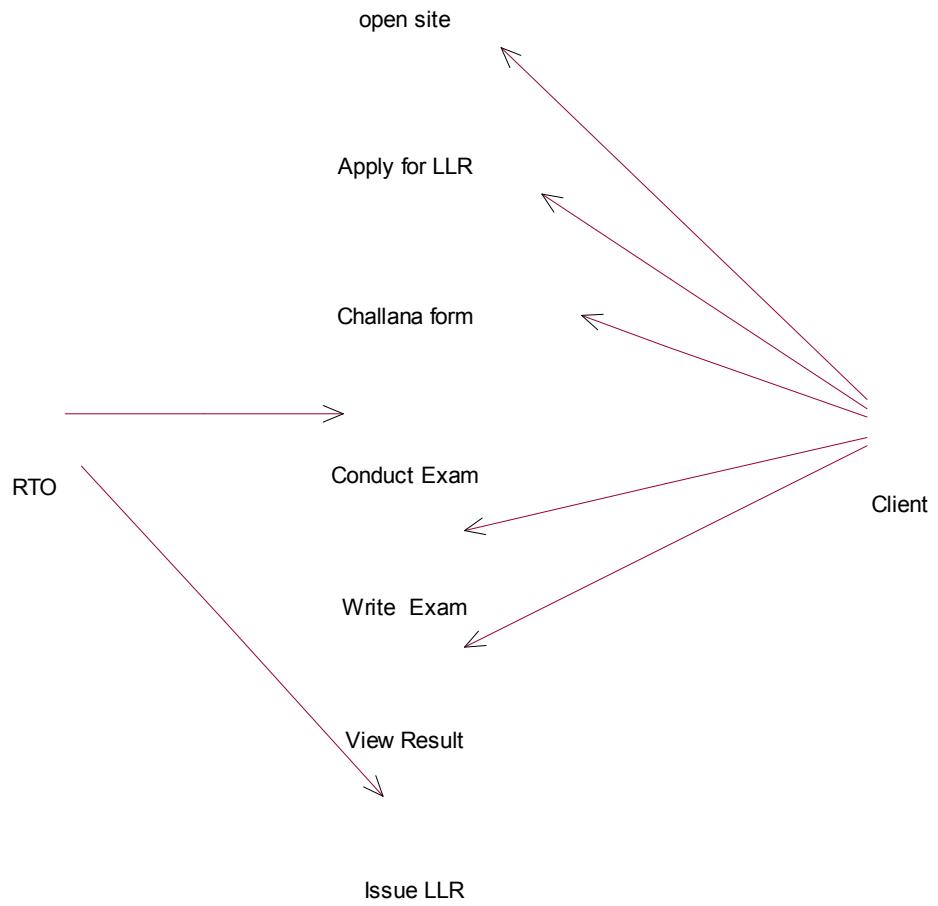


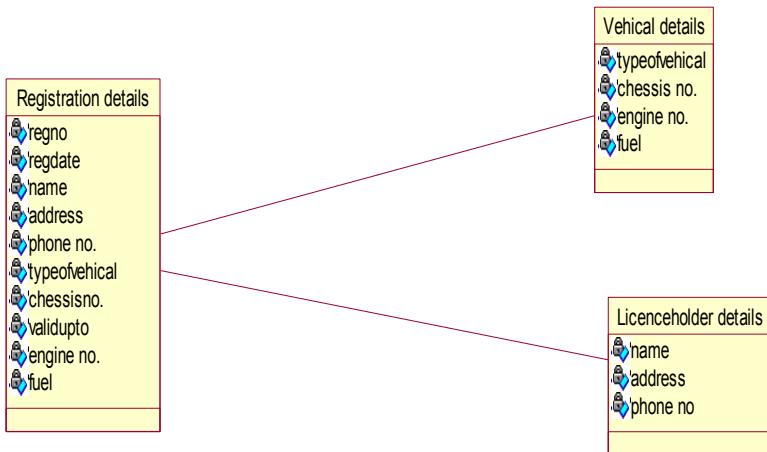


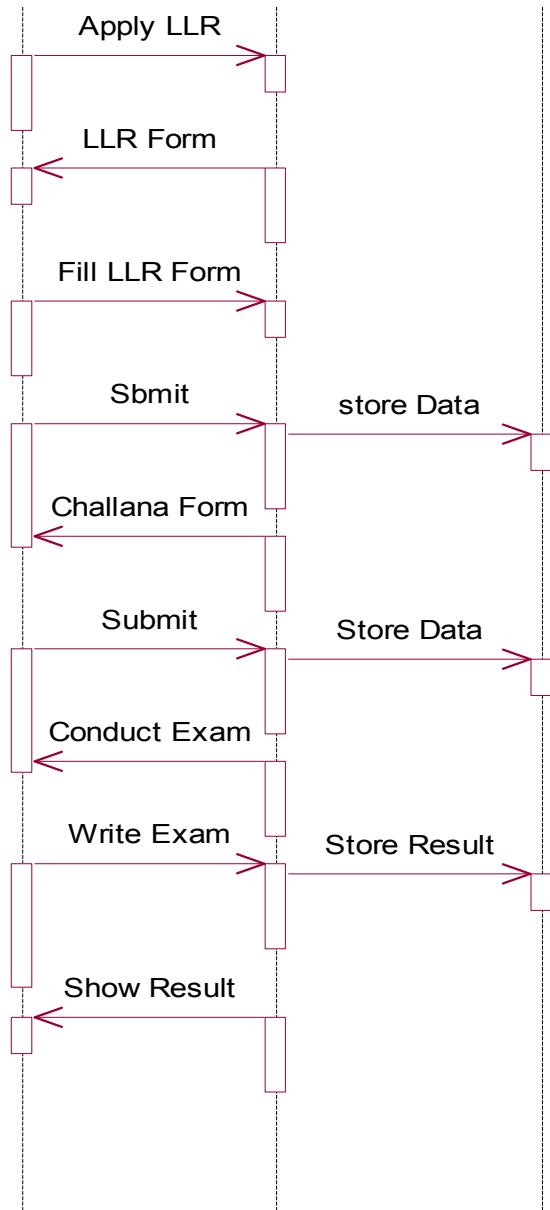
**Fig:Activity Diagram Renewal of Learner License And Permanent Licence**

## Collabration

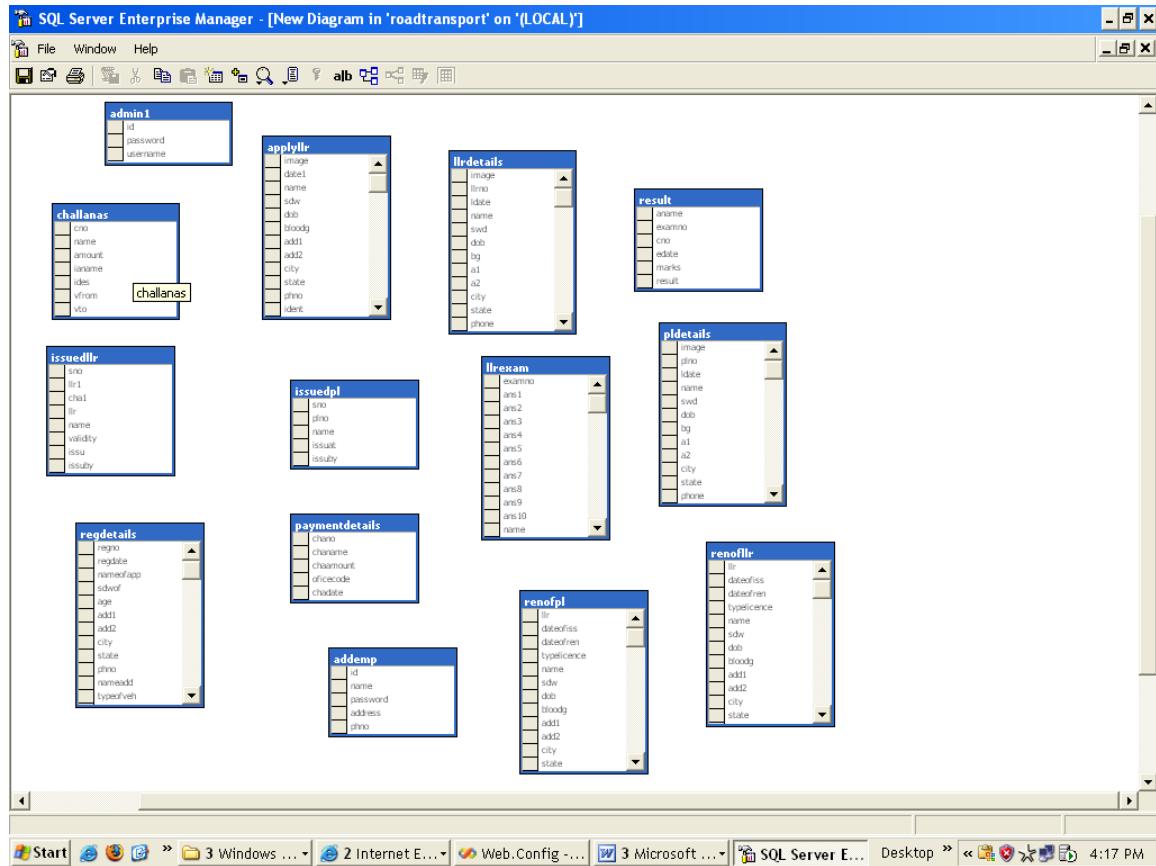




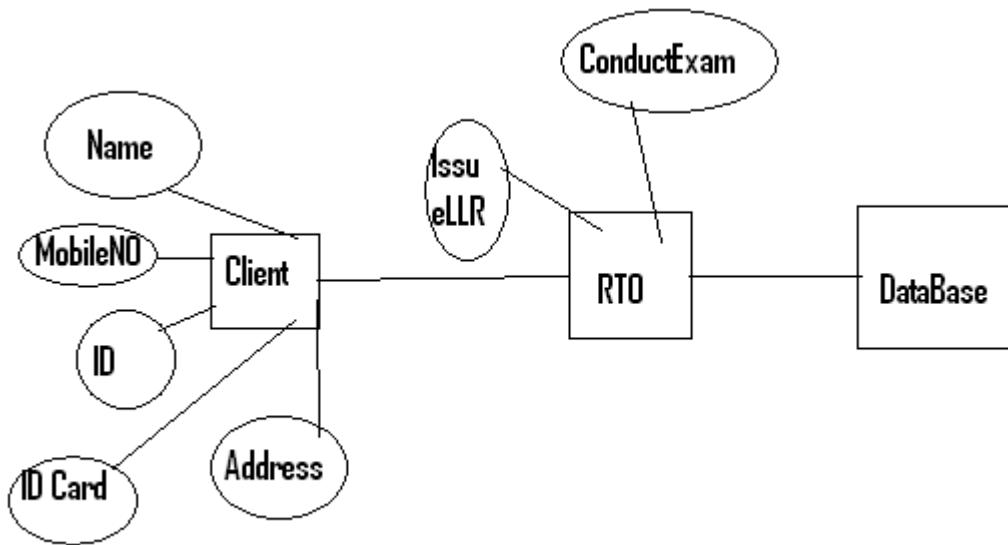




## 4.DATABASE DIAGRAM



## ER-Diagram



## 7. OUTPUT SCREENS

**R.T.A Road Transport Authority**

**Categories**

- Home
- RTO
- Employee
- Apply For LLR
- About Us
- Contact Us

**Registrations**

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

The Transport Department functions under the provisions of section 213 of the Motor Vehicle Act, 1988. The Transport Department is primarily established for enforcement of the provisions of the Motor Vehicle Act, 1988, Andhra Pradesh Motor Vehicles Taxation Act, 1963 and the rules framed there under. The major functions of the Transport Department are the Enforcement of the Motor Vehicles Act and Rules; Collection of taxes and fees and issuance of Driving Licences and Certificate of Fitness to Transport Vehicles; Registration of Motor Vehicles and granting regular and temporary permits to vehicles. The department also carries out road safety work by conducting awareness campaigns, pollution check of vehicles and enforce measures such as booking speeding vehicles through laser guns and interceptor vehicles and detect drunken drivers through breath analysers.

The Transport Department is regulated by the Government of Andhra Pradesh in terms of policy formulation and its implementation. The Department is administered by the Transport Commissioner who is the Head of the Transport Department.

**Details**

The Transport Department is regulated by the Government of Andhra Pradesh in terms of policy formulation and its implementation. The Department is administered by the Transport Commissioner who is the Head of the Transport Department.

### Details

- Vehical details
- licence holder details

### Hierarchy

The Transport Department is headed by the Transport Commissioner. He is assisted by 1 Additional Transport Commissioner, 4 Joint Transport Commissioners, 3 Regional Transport Officers, 1 Regional Transport Officer as State Representative before State Transport Appellate Tribunal and 1 Accounts Officer in the Head Office. In the field, he is assisted by 1 Joint Transport Commissioner in charge of Hyderabad, 14 Deputy Transport Commissioners, 45 Regional Transport Officers including 1 Secretary, STAT in the cadre of R.T.O, 2 Assistant Accounts Officers, 206 Motor Vehicles Inspectors and 218 - Assistant Motor Vehicle Inspectors besides other ministerial staff.

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The screenshot shows a Microsoft Internet Explorer window with the following details:

- Address Bar:** http://localhost:1289/jta11%20onrto.aspx
- Page Title:** R.T.A Road Transport Authority
- Left Sidebar (Red Background):**
  - Categories:**
    - Home
    - RTO
    - Employee
    - Apply For LLR
    - About Us
    - Contact Us
  - Registrations:**
    - January
    - February
    - March
    - April
    - May
    - June
    - July
    - August
    - September
    - October
    - November
    - December
- Main Content Area:**

## Road Transport Authority

**RTO Login**

**Id:** 561

**Password:**

**LOGIN**
- Page Footer:** ©2007 All Rights Reserved.

The screenshot shows a Microsoft Internet Explorer window with the following details:

- Header:** "Templates - Microsoft Internet Explorer" with standard menu options (File, Edit, View, Favorites, Tools, Help).
- Toolbar:** Includes Back, Forward, Stop, Refresh, Home, Search, Favorites, and other standard browser icons.
- Address Bar:** "http://localhost:1280/rta1%20on/employee.aspx" with a "Links" dropdown menu.
- Page Content:**
  - Header:** "R.T.A Road Transport Authority" in a green header area.
  - Left Sidebar:** "Categories" and "Registrations" sections with dropdown menus.
  - Main Content:** "Road Transport Authority" title, "EMP Login" form, and a "Label" placeholder.
  - Bottom:** "©2007 All Rights Reserved." and a "Local intranet" status bar.

Decorative by Free CSS Templates - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Favorites Address <http://localhost:1280/rtal1%20on/empaddllrdetails.aspx> Go Links

**R.T.A** *Road Transport Authority*

**Categories**

- \* Home
- \* Change Password
- \* Add Learning licence details
- \* Add Renewal of learning licence details
- \* Add permanent licence details
- \* Add Renewal of permanent license details
- \* Add Registration Details
- \* Issue of challanas Details
- \* Payment details
- \* View issued LLR details
- \* view permanent licence details
- \* view Renewal LLR details
- \* view Renewal PL details
- \* View Registration details
- \* View challana details
- \* View payment details
- \* Logout

**Road Transport Authority**

LLR Details

Image	<input style="width: 150px; height: 20px; border: 1px solid black;" type="text" value="E:\familyphotos\unit1"/>	<input type="button" value="Browse..."/>
LLR No	123	
Date	1/1/05	
Name	ramya	
Son/Daughter/Wife of	gupta	
Date Of Birth	1/6/88	
Blood Group	AB+ve	
Address 1	cjm	
Address 2	cjm	
City	ong	
State	ap	
Phone No	9000083843	
Mak Of Identification	g	
Licence Valid From	1/1/99	
To	1/1/09	
Type	<input type="button" value="MCWG"/>	

Decorative by Free CSS Templates - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Favorites Address <http://localhost:1280/rtal1%20on/EngAddnewLLRdetails.aspx> Go Links

**Road Transport Authority**

Renewal Of LLR

LLR No	132456	
Date Of Issue	1/1/05	
Date Of Renewal	1/3/09	
Type Of Licence	<input type="button" value="MCWG"/>	
Name	dsf	
Son/Daughter/Wife Of	dfs	
Date Of Birth	1/1/88	
Blood Group	sfd	
Address 1	xc	
Address 2	fgh	
City	fg	
State	fg	
Phone No	9491315876	
Marks Of Identification 1	gdh	
2	gh	
Licence Valid From	1/1/05	
To	1/1/09	
Challana No	54465	
Amount	600	

Decorative by Free CSS Templates - Microsoft Internet Explorer

File Edit View Favorites Tools Help

## Road Transport Authority

Registration form

Registration No: 104

Registration Date: 6/6/09

Owner Details

Full Name Of Applicant: sadf

Son/Daughter/Wife of:

Age: 20

Address 1: dgh

Address 2: dhg

City: dgh

State: gdh

Phone No: 9704997850

Vehicle Details

Name & Address Of Dealer or from whom the vehicle Purchased: dghg

Type of Vehicle: mc

Date Of Manufacture: 1/3/08

Chassis No: 4565

Engine No: 4665

Seating Capacity: 2

Fuel Used: petrol

Chillana Amount: 80000

**SUBMIT** **CLEAR**

Done

start RTAdocument - Micro... RTA FINAL - Micro... RTACERTIFICATE - M... Microsoft Visual Studio Decorative by Free C... SQL Server Enterpr... Local intranet 10:14 PM

Decorative by Free CSS Templates - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Address <http://localhost:1280/rtail1%20on/empISSUEofchallans.aspx> Go

## R.T.A Road Transport Authority

**Categories**

- \* Home
- \* Change Password
- \* Add Learning Ilicence details
- \* Add Renewal of learning licence details
- \* Add permanent licence details
- \* Add Renewal of permanent license details
- \* Add Registration Details
- \* Issue of challanas Details
- \* Payment details
- \* View issued LLR details
- \* view permanent licence details
- \* view Renewal LLR details
- \* view Renewal PL details
- \* View Registration details
- \* View challana details
- \* View payment details
- \* Logout

## Road Transport Authority

Issue Of Challan

Challan No: 2134

Challan Name: svgf

Challan Amount: 1000

Issue Authority Name: bdg

Issue Designation: ghg

Valid From: 1/1/88

To: 11/5/09

**SUBMIT** **CLEAR**

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Done

start RTAdocument - Micro... RTA FINAL - Micro... RTACERTIFICATE - M... Microsoft Visual Studio Decorative by Free C... SQL Server Enterpr... Local intranet 10:15 PM

The screenshot shows a Microsoft Internet Explorer window with the following details:

- Address Bar:** http://localhost:11280/rtal1%20onEM/viewRENEWALLRddet.aspx
- Page Title:** R.T.A Road Transport Authority
- Left Sidebar (Categories):**
  - Home
  - Change Password
  - Add Learning licence details
  - Add Renewal of learning licence details
  - Add permanent licence details
  - Add Renewal of permanent license details
  - Add Registration Details
  - Issue of challanas Details
  - Payment details
  - View issued LLR details
  - View permanent licence details
  - View Renewal LLR details
  - View Renewal PL details
  - View Registration details
  - View challana details
  - View payment details
  - Logout
- Main Content Area:**

## Road Transport Authority

### Renewal LLR Details

LLR No. 123

**SEARCH** **VIEW ALL**

llrno	dateofren	licencetype	name	address	phno	valid
123	1/3/09	MCWG	ramya long	9491315876	1/1/09	

The screenshot shows a Microsoft Internet Explorer window with the following details:

- Title Bar:** Decorative by Free CSS Templates - Microsoft Internet Explorer
- Address Bar:** http://localhost:1280/rtai1%20on/EMPlviewRenPLdetails.aspx
- Content Area:**
  - Header:** R.T.A Road Transport Authority
  - Left Sidebar (Categories):**
    - Home
    - Change Password
    - Add Learning Licence details
    - Add Renewal of learning licence details
    - Add permanent licence details
    - Add Renewal of permanent license details
    - Add Registration Details
    - Issue of challanas Details
    - Payment details
    - View issued LLR details
    - View permanent licence details
    - View Renewal LLR details
    - View Renewal PL details
    - View Registration details
    - View challana details
    - View payment details
    - Logout
  - Main Content:** Road Transport Authority
  - Sub-Content:** Renewal PL Details
  - Form:** License No.
  - Table:** A table showing renewal PL details for license numbers 123 and 656.

lrno	dateofiss	typeoflicence	name	address	phno	valid
123	1/1/02	grf	fgh	xbg	9490023318	1/1/10
656	5/6/08	hgj	ijk	hj	9640668351	6/3/11

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Back Address <http://localhost:1280/rtal1%20try/EMPviewREGdetails.aspx> Go

**R.T.A** *Road Transport Authority*

**Categories**

- \* Home
- \* Change Password
- \* Add Learning licence details
- \* Add Renewal of learning licence details
- \* Add permanent licence details
- \* Add Renewal of permanent license details
- \* Add Registration Details
- \* Issue of challana Details
- \* Payment details
- \* View issued LLR details
- \* view permanent licence details
- \* view Renewal LLR details
- \* view Renewal PL details
- \* View Registration details
- \* View challana details
- \* View payment details
- \* Logout

**Road Transport Authority**

**Registration Details**

REGISTRATION No

**SEARCH** **VIEW ALL**

regno	regdate	nameofapp	address	phno	typeofveh	seatcapacity
101	09/16/88	ramya	cjm	9490023318	hmc	2
1254	4/3/09	desf	daf	9704997850	hmc	5
104	6/6/09	sadf	dgh	9704997850	mc	2

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- \* Add permanent licence details
- \* Add Renewal of permanent license details
- \* Add Registration Details
- \* Issue of challana Details
- \* Payment details
- \* View issued LLR details
- \* view permanent licence details
- \* view Renewal LLR details
- \* view Renewal PL details
- \* View Registration details
- \* View challana details
- \* View payment details
- \* Logout

**Road Transport Authority**

**Challan Details**

CHALANA No  2134

**SEARCH** **VIEW ALL**

cno	name	amount	laname	ides	vfrom	vto
2134	svgf	1000	bdg	ghg	1/1/88	11/5/09

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Address <http://localhost:1136/rta11%20on/RtoviewissuedLlr.aspx>

**Road Transport Authority**

Categories

- ◆ Home
- ◆ View LLR Applications
- ◆ Exam Result
- ◆ Issue of Learning license
- ◆ Issue of permanent license
- ◆ View issued LLR details
- ◆ permanent license details
- ◆ Renew LLR details
- ◆ Renew LLR details
- ◆ Registration details
- ◆ vehicle details
- ◆ payment details
- ◆ Employee Details
- ◆ Change Password
- ◆ Logout

View LLR Details

LLR No.

  
1a 05-28-83 q 994883253703-27-24 MCWG

  
2asfd12/12/09fad994883259712/12/09HMC

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**R.T.A**  
Road Transport Authority

Categories

- ♦ Home
- ♦ Change Password
- ♦ Add Learning license details
- ♦ Add Renewal of learning license details
- ♦ Add permanent license details
- ♦ Add Renewal of permanent license details
- ♦ Add Registration Details
- ♦ Issue of chassis details
- ♦ Payment details
- ♦ View issued LLR details
- ♦ View permanent license details
- ♦ View Renewal LLR details
- ♦ View Renewal LL details
- ♦ View Registration details
- ♦ View chassis details
- ♦ View payment details
- ♦ Logout

**Road Transport Authority**

Permanent Licence Details

License No.

 2a 03/13/2009 f 994883253703-27-24MCWG

 3sudha05-28-83 f 994883253703-27-24MCWG

Done Local intranet

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Road Transport Authority

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- ♦ Home
- ♦ RTO
- ♦ Employee
- ♦ Apply For LLR
- ♦ About Us
- ♦ Contact Us

Registrations

- ♦ January
- ♦ February
- ♦ March
- ♦ April
- ♦ May
- ♦ June
- ♦ July
- ♦ August
- ♦ September
- ♦ October
- ♦ November
- ♦ December

**Road Transport Authority**

December Details

regno	regdate	nameofapp	add1	phno	chassisno	engineno	seatcap	fuel
575	12/12/09	ss	aaad	9985010488	635467	45677	2	petrol
	12/1/09							

start Local intranet 3:45 PM

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Back Favorites Address <http://localhost:1280/rtal1%20ony/rtaddempdetails.aspx> Go

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- \* Home
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- \* Exam Result
- \* Issue of Learning licence
- \* Issue of permanent licence
- \* View issued LLR details
- \* permanent Licence details
- \* Renewal LLR details
- \* Renewal PL details
- \* Registration details
- \* challana details
- \* payment details
- \* Employee Details
- \* Change Password
- \* Logout

**Road Transport Authority**

Employee Details

Id	101
Name	ramya
Password	*****
Re Password	*****
Address	dfgd
Phone No	9000456789

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Back Favorites Address <http://localhost:1280/rtal1%20ony/applyllr.aspx> Go

**R.T.A** *Road Transport Authority*

**Categories**

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- \* Employee
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- \* About Us
- \* Contact Us

**Road Transport Authority**

LLR Details

Image	<input type="text" value="E:\familyphotos\unit1"/> <input type="button" value="Browse..."/>
Date	1/1/05
Name	sdfg
Son/Daughter/Wife of	fsg
Date Of Birth	1/6/88
Blood Group	er
Address 1	rgt
Address 2	fsg
City	fsg
State	fgs
Phone No	9492319357
Mak Of Identification	fsg
Licence Type	MCWG

Done start RTAdocument - Microsoft... RTA FINAL - Microsoft... RTACERTIFICATE - Microsoft... rtal1 on (Running) - Microsoft... Templates - Microsoft... SQL Server Enterprise... Local intranet 10:56 PM

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Back Home Search Favorites

Address: http://localhost:1280/rtai1%20n/paymentofchallana.aspx

**R.T.A** Road Transport Authority

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**Road Transport Authority**

Issue Of Challan

Challan No.

Challan Name

Challan Amount

Issue Authority Name

Issue Designation

Valid From

To

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File Edit View Favorites Tools Help

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# R.T.A *Road Transport Authority*

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## Road Transport Authority

Exam For LLR

No of Questions 10 Exam No \_\_\_\_\_

Passmark 4 Name gdf

Challana No 1234 Date 1/1/05

Questions

1. What signal color is used to stop vehicle?

Red  Green  Yellow  Orange

2. Mobiles can be used while driving?

No  Some times  By Stopping aside  Yes

3. What signal is used to drive?

File Edit View Favorites Tools Help

Address: http://localhost:1280/rtal1%20onyExamforlk.aspx

No  Some times  By Stopping aside  Yes

3. What signal is used to drive?

Green  Orange  Yellow  Red

4. On a divided highway, vehicles travelling in the same direction as a stopped schoolbus must:

Slow down and pass on the  Stop Until the stop signal on the bus is withdrawn  Travel at the posted speed limit  Stop then proceed with caution

5. If you approach a red light at an intersection and a traffic officer directs you to proceed through the intersection, you should:

Stop and proceed carefully  stop until the lights turn green  Proceed through the intersection  make u turn

6. When driving in the rain, fog or smoke in the daytime, and visibility is reduced to 1,000 feet or less, you must

Turn on your lower beam(dim) headlights  Turn on your high beam headlights  do not use lights  turn on your parking lights

7. If you are being tailgated, the best thing to do is:

File Edit View Favorites Tools Help

Address: http://localhost:1280/rtal1%20onyExamforlk.aspx

visibility is reduced to 1,000 feet or less, you must

Turn on your lower beam(dim) headlights  Turn on your high beam headlights  do not use lights  turn on your parking lights

7. If you are being tailgated, the best thing to do is:

Break check the person following you  Speed Up  Move to the right lane and let the vehicle pass  Throw the coke out the window at them

8. What signal is used to ready for driving?

Red  Green  Black  Orange

9. More than 3 people can go on byke

Yes  Sometimes  No  Our wish

10. While driving we can go on our own speed?

No  Yes  Our wish  according to signals

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File Edit View Favorites Tools Help

Back Favorites Address <http://localhost:1280/rtal1%20onyResult.aspx> Go

**R.T.A** *Road Transport Authority*

**Categories**

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- \* July
- \* August
- \* September
- \* October
- \* November
- \* December

**Road Transport Authority**

EXAM RESULT

Name	gdf
Roll No	
Chalan No	1234
Date	1/1/05
Marks	7
Result	Pass

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# TESTING

## 8.PROJECT TESTING

Testing is the process of detecting errors. Testing performs a very critical role for quality assurance and for ensuring the reliability of software. The results of testing are used later on during maintenance also Psychology of Testing.

The aim of testing is often to demonstrate that a program works by showing that it has no errors. The basic purpose of testing phase is to detect the errors that may be present in the program. Hence one should not start testing with the intent of showing that a program works, but the intent should be to show that a program doesn't work.

Testing is the process of executing a program with the intent of finding errors.

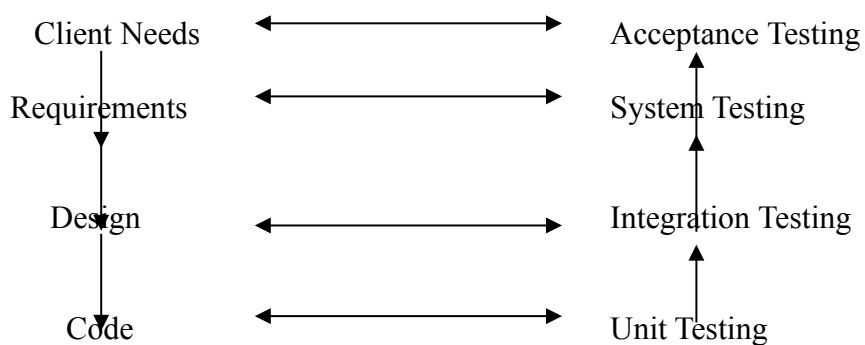
### Testing Objectives:

**The main objective of testing is to uncover a host of errors, systematically and with minimum effort and time. Stating formally, we can say,**

- Testing is a process of executing a program with the intent of finding an error.
- A successful test is one that uncovers an as yet undiscovered error.
- A good test case is one that has a high probability of finding error, if it exists.
- The tests are inadequate to detect possibly present errors.
- The software more or less confirms to the quality and reliable standards.

### 8.1 Levels Of Testing

In order to uncover the errors present in different phases we have the concept of levels of testing. The basic levels of testing are



A series of testing is done for the proposed system before the system is ready for the user acceptance testing.

The steps involved in Testing are:

◆ **Unit Testing:**

Unit testing focuses verification efforts on the smallest unit of the software design, the module. This is also known as “Module Testing”. The modules are tested separately. This testing carried out during programming stage itself. In this testing each module is found to be working satisfactorily as regards to the expected output from the module.

◆ **Integration Testing:**

Data can be grossed across an interface; one module can have adverse effects on another. Integration testing is systematic testing for construction the program structure while at the same time conducting tests to uncover errors associated with in the interface. The objective is to take unit tested modules and build a program structure. All the modules are combined and tested as a whole. Here correction is difficult because the isolation of cause is complicate by the vast expense of the entire program. Thus in the integration testing stop, all the errors uncovered are corrected for the text testing steps.

◆ **System testing:**

System testing is the stage of implementation that is aimed at ensuring that the system works accurately and efficiently for live operation commences. Testing is vital to the success of the system. System testing makes a logical assumption that if all the parts of the system are correct, then goal will be successfully achieved.

◆ **Validation Testing:**

At the conclusion of integration testing software is completely assembled as a package, interfacing errors have been uncovered and corrected and a final series of software tests begins, validation test begins. Validation test can be defined in many ways. But the simple definition is that validation succeeds when the software function in a

manner that can reasonably expected by the customer. After validation test has been conducted one of two possible conditions exists.

One is the function or performance characteristics confirm to specifications and are accepted and the other is deviation from specification is uncovered and a deficiency list is created. Proposed system under consideration has been tested by using validation testing and found to be working satisfactorily.

## **8.2 Output Testing:**

After performing validation testing, the next step is output testing of the proposed system since no system could be useful if it does not produce the required output in the specified format. Asking the users about the format required by them tests the outputs generated by the system under consideration. Here the output format is considered in two ways, one is on the screen and other is the printed format. The output format on the screen is found to be correct as the format was designed in the system designed phase according to the user needs. For the hard copy also the output comes as the specified requirements by the users. Hence output testing does not result any corrections in the system.

### **◆ User Acceptance Testing:**

User acceptance of a system is the key factor of the success of any system. The system under study is tested for the user acceptance by constantly keeping in touch with the prospective system users at the time of developing and making changes wherever required.

### **◆ Test Data:**

Taking various kinds of test data does the above testing. Preparation of test data plays a vital role in the system testing after preparing the test data the system under study is tested using the test data. While testing the system by using the test data errors are again uncovered and corrected by using above testing steps and corrections are also noted from the future use.

### **◆ Testing:**

The testing done here was System Testing—checking whether the user requirements were satisfied. The code for the new system has been written completely using JSP as the coding language, HTML as the interface for front-end designing and Java Script for validating the client-side applications. The new system has been tested well with the help of the users and all the applications have been verified from every nook and corner of the user.

Although some applications were found to be erroneous these applications have been corrected before being implemented. The flow of the forms has been found to be very much in accordance with the actual flow of data.

# CONCLUSION

## **8. CONCLUSION**

RTA provides the facility of applying licenses online, issuance of permanent license, tax challans, and receiving payments against challans.

- ✓ The project has been appreciated by all the users in the organization.
- ✓ It is easy to use, since it uses the **GUI** provided in the user dialog.
- ✓ User friendly screens are provided.
- ✓ The usage of software increases the efficiency, decreases the effort.
- ✓ It has been efficiently employed as a project management mechanism.

# REFERENCES

## 9. REFERENCES

**The following books were referred during the analysis and execution phase of the project**

- ☞ **SOFTWARE ENGINEERING** By Roger.S. Pressman
- ☞ **COMPLETE HTML** Steven Holzner
- ☞ **UNIFIED MODELING LANGUAGE** By Grady Booch,Ranbaugh,Jacobson
- ☞ **SQL FOR PROFESSIONALS** By Jain
- ☞ **C#.NET Black Book** By Evangelous Petereous
- ☞ **MSDN 2005** By Microsoft