CAPSTONE (Major) Project Report

on

# Policy Tracker- Policy Management System

at

# Cognizant Technology Solution

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Bhopal (MP) – 466 114

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# VIT BHOPAL UNIVERSITY, M P - 466114

## SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

### CANDIDATE'S DECLARATION

I hereby declare that the Dissertation entitled "Policy Tracker-Policy Management System" is my own work conducted under the supervision of Guide/Co-Guide Name, Designation, Name of School at VIT University, Bhopal.

I further declare that to the best of my knowledge this report does not contain any part of work that has been submitted for the award of any degree either in this university or in other university / Deemed University without proper citation.

Prince

(17MCA10005)

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Date:_____

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## CERTIFICATE

This is to certify that the work embodied in this Capstone Project Report entitled **"Policy Tracker- Policy Management System"** has been satisfactorily completed by **Mr. Prince** Registration No 17MCA10005 in the School Computing Science and Engineering at VIT University, Bhopal. This work is a bonafide piece of work, carried out under my/our guidance in the Organization "**Cognizant Technology Solution**" for the partial fulfilment of the degree of Master of Computer Application.

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**Name of Dean**

**Professor & Dean**


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## ACKNOWLEDGEMENT

The internship opportunity I had with **Cognizant Technology Solutions** was a great chance for learning and professional development. Therefore, I consider myself as a very lucky individual as I was provided with an opportunity to be a part of it. I am also grateful for having a chance to meet so many wonderful people and professionals who led me though this internship period.

Bearing in mind previous I am using this opportunity to express my deepest gratitude and special thanks to the **Ms. Shilpa Mahajani** at CTS, Pune who in spite of being extraordinarily busy with her duties, took time out to hear, guide and keep me on the correct path and allowing me to carry out my project at their esteemed organization and extending during the training.

# ABSTRACT

This is the web based Application Software for the client So, Vendor Portal ( hereafter will be referred as VP ) is very user friendly invoice submission system developed with an intention to automate complete AP process to reduce overall processing time & make entire process paperless, and to have better control of invoice receipt and approver's responsiveness, less hassles of managing paper based invoices. Easy retrieval & search of past invoices and related documents as images will be stored. Vendor can raise query directly to processing center i.e. SSC instead of buyer/initiator & will receive revert from SSC in VP. There will be separate dedicated VP helpdesk team. (Contact details are provided on last page). VP will provide various customized reports.

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# CHAPTER 1

# INTRODUCTION

Vendor Portal ( hereafter will be referred as VP ) is very user friendly invoice submission system developed with an intention to automate complete AP process to reduce overall processing time & make entire process paperless, and to have better control of invoice receipt and approver's responsiveness, less hassles of managing paper based invoices. Easy retrieval & search of past invoices and related documents as images will be stored. Vendor can raise query directly to processing center i.e. SSC instead of buyer/initiator & will receive revert from SSC in VP. There will be separate dedicated VP helpdesk team. (Contact details are provided on last page). VP will provide various customized reports.

As per existing standard practice vendor will continue to approach for onboarding and will submit required details for getting vendor code created/generated in concern ERP.

- In the Vendor system, vendor can upload the bill for separate unit by one vendor code.
- It is less complicated the existing system.
- In the new proposed system time complexity is less than existing system.
- It is digitalization portal for uploading the bills.

## 1.1 Existing System:-

- In the Existing system, if one vendor approaches the several unit of L&T. than vendor have different vendor code for the several unit.
- For invoicing the bill ,vendor have to login with the different vendoruser id
- But in case of single vendor approaches the different unit than he have to register with the different vendor code and for all the unit he will get a different vendor user id for login.
- So it's complicated for the user to remember the several user id.

## 1.2 Proposed System

This Project is aimed at:

- In the Proposed System, if one vendor approaches the several unit of L&T than he can put the all bills by the single vendor code for different units.
- In the proposed system, there is no need of any vendor user id. vendor code is sufficient for the login on the portal.
- It will be easy for the vendor and organization also.
- Only one vendor code is sufficient for the every unit of L&T.

## 1.3 Steps for making the proposed system

1. Firstly, Log In portal will be open and if you are registered vendor than you have to fill Vendor code and Password.
2. If vendor are not registered on the portal than he will press on register tab and enter on the registration page.
3. Than vendor enter the vendor code and press Activate tab.
4. After press Activate tab, vendor will get the mail(mail id fetch through the master table) , In the mail vendor will get the link which link is useful for set password.
5. After set password, Invoice submit tab will be enabled and after pressing this tab vendor move to choose a unit page.
6. If vendor already registered than after fill vendor code and password, vendor directly move to choose a unit page.
7. In a choose a unit page, all shown to vendor which unit is served by vendor.
8. After select the unit, vendor will press the GO tab and move to the dashboard.

## 1.4 Special instructions w.r.t. vendor master

While uploading data from ERP thru FTP server care should be taken of removing special characters **& and #** as the same **are not allowed/captured** in VP. We can use

any special character available on keyboard (QWERTY) except & and # in vendor details updation.

On receipt of necessary documents for onboarding concern vendor will get details of VP link either thru email or verbal communication from concern buyer/initiator. On receipt of the same vendor can log in thru the link provided of Vendor Portal for creation of users.

It will be mandatory to send hard copy of mandatory documents (Invoice and its relevant supporting's) physically to respective Buyer / Buyer's Department.

## 1.4.1 Assumptions and Dependencies –

• Cases initiated through any other system will not be available in Vendor Portal. (E.g. Hard copy Invoices submitted directly to buyer/initiator without entering in to VP)

• Internet Explorer version should be IE 8.0, 9.0, 10.0, 11.0 and above. Also works on browsers - Chrome Version 67.0.3396.99, Firefox 56.0, and Safari 5.1.7.Screen resolution should be 1028 X 768 pixels to view properly.

• For better performance of system user will clear Cache every day

# CHAPTER - 2

# ORGANIZATION PROFILE

Larsen & Toubro is a US$14.3 billion technology, engineering, construction and manufacturing and financial services conglomerate. It addresses critical needs in key sectors including infrastructure, construction, hydrocarbon, power, defense and aerospace. Its footprint extends across seven countries in addition to India. A strong, customer-focused approach, conformance to global HSE standards and the constant quest for top-class quality have enabled the Company to sustain leadership in its major lines of business for over 75 years. L&T was rated 58th Most Innovative Company by Forbes International, and 4th in the global list of 'green companies' in the industrial sector by Newsweek. It was voted among the most admired companies in the country by Fortune India, and rated 8th Most Powerful Brand in India by Brand Finance. It won The Economic Times Corporate Citizen of the Year Award - 2013, instituted by one of the world's most widely sold business newspapers - The Economic Times. A survey by a leading HR consultancy affirmed its reputation as a people-focused company, leading to the award for the 'Most Attractive Employer' in the industrial sector.

## 2.1.History

The evolution of L&T into a major engineering and construction organization is among the more remarkable success stories in Indian industry. It was founded in Mumbai (then Bombay) in 1938 by two Danish engineers, Henning Holck-Larsen and Soren Kristian Toubro. Beginning with the import of machinery from Europe, L&T took on engineering and construction assignments of increasing sophistication. Today, the company sets engineering benchmarks in terms of scale and complexity.

## 2.2. Corporate sustainibilty

L&T was the first company in India in the engineering & construction space to publicly disclose its sustainability performance. The Company's annual Sustainability

Reports highlight achievements and objectives across the traditional three ‘Ps’ of Planet, People and Profits. All our Reports are rated A+ by Global Reporting Initiatives, indicating the highest level of disclosure. The recognition that the Company has secured from forums around the world affirm public perception of L&T as an organization that contributes significantly to the wellbeing of people.

## 2.3. Record of achievement

- Technological support in the launch and tracking systems for Mangalyaan – India’s Mars Mission, and the only mission to successfully enter Martian orbit in its maiden attempt. Earlier L&T had also contributed to India’s lunar mission.
- Metro projects being executed in Riyadh and Qatar as part of international consortiums.
- Engaged in building major new airports in Delhi, Mumbai, Bangalore, Hyderabad and internationally, in Sharjah, Oman.
- Mass Rapid Transit Systems including India’s first monorail in Mumbai, and critical sections of metro systems in New Delhi, Hyderabad, Bangalore, Chennai, Kolkata, Kochi, Lucknow.
- Building major infrastructure projects including ports, specialized bridges and highway projects.
- Building of INS Arihant – India’s first nuclear powered submarine.
- The world's largest coal gasifier made in India and exported to China.
- The world’s biggest EO reactor for a petrochemical complex in the Gulf
- The world’s largest FCC regenerator for a refinery.
- Design & manufacture of a wide range of switchgear products and systems exported to over 30 countries.

## 2.4. Information technology

Larsen & Toubro Infotech, a 100% subsidiary of L&T, offers comprehensive, end-to-end software solutions and services with a focus on Manufacturing, BFSI and Communications & Embedded Systems. It provides a cost cutting partnership in the realm of offshore outsourcing, application integration and package implementation.

Leveraging the heritage and domain expertise of the parent company, its services encompass a broad technology spectrum, catering to leading international companies across the globe.

## 2.5. Technology service

L&T Technology Services provides leading-edge engineering solutions to multiple industry sectors like automotive, aerospace, consumer electronics, consumer packaged goods, marine, medical devices, off-highway equipment, railways, pharmaceuticals, oil & gas, utilities, infrastructure and industrial products. With its global headquarters at Vadodara, the Company operates through dedicated engineering centres in tandem with onsite teams worldwide. Its client base includes several Fortune 500 companies.

# CHAPTER - 3

# PROBLEM ANALYSIS

## 3.1. Product definition

Vendor Portal ( hereafter will be referred as VP ) is very user friendly invoice submission system developed with an intention to automate complete AP process to reduce overall processing time & make entire process paperless, and to have better control of invoice receipt and approver's responsiveness, less hassles of managing paper based invoices. Easy retrieval & search of past invoices and related documents as images will be stored. Vendor can raise query directly to processing center i.e. SSC instead of buyer/initiator & will receive revert from SSC in VP. There will be separate dedicated VP helpdesk team. (Contact details are provided on last page). VP will provide various customized reports. As per existing standard practice vendor will continue to approach for onboarding and will submit required details for getting vendor code created/generated in concern ERP.

## 3.2. Feasibility analysis

A feasibility study is an analysis used in measuring the ability and likelihood to complete a project successfully including all relevant factors. It must account for factors that affect it such as economic, technological, legal and scheduling factors. Project managers use feasibility studies to determine potential positive and negative outcomes of a project before investing a considerable amount of time and money into it.

### 3.2.1. Technical feasibility

All the technology's that are required are open source and are freely available to use like ASP.NET8, C sharp and Bootstrap along with all the learning materials. Eclipse is use as an IDE to develop the project along with C Sharp for dependency injection in the project.

### 3.2.2. Financial feasibility

All the software used to develop this application is freely available so no cost is spent in the development process. Since the software's are open source we will get free update and new features in the future for free.

# CHAPTER - 4

# SOFTWARE REQUIREMENT ANALYSIS

## 4.1. Technologies

### 4.1.1. ASP.NET

ASP.NET is a web application framework developed and marketed by Microsoft to allow programmers to build dynamic web sites. It allows you to use a full featured programming language such as C# or VB.NET to build web applications easily.

Understanding the page cycle helps in writing codes for making some specific thing happen at any stage of the page life cycle. It also helps in writing custom controls and initializing them at right time, populate their properties with view-state data and run control behavior code.

Following are the different stages of an ASP.NET page:

- **Page request** - When ASP.NET gets a page request, it decides whether to parse and compile the page, or there would be a cached version of the page; accordingly the response is sent.
- **Starting of page life cycle** - At this stage, the Request and Response objects are set. If the request is an old request or post back, the IsPostBack property of the page is set to true. The UICulture property of the page is also set.
- **Page initialization** - At this stage, the controls on the page are assigned unique ID by setting the UniqueID property and the themes are applied. For a new request, postback data is loaded and the control properties are restored to the view-state values.
- **Page load** - At this stage, control properties are set using the view state and control state values.
- **Validation** - Validate method of the validation control is called and on its successful execution, the IsValid property of the page is set to true.

- **Postback event handling** - If the request is a postback (old request), the related event handler is invoked.
- **Page rendering** - At this stage, view state for the page and all controls are saved. The page calls the Render method for each control and the output of rendering is
- **Unload** - The rendered page is sent to the client and page properties, such as written to the OutputStream class of the Response property of page.Response and Request, are unloaded and all cleanup done.

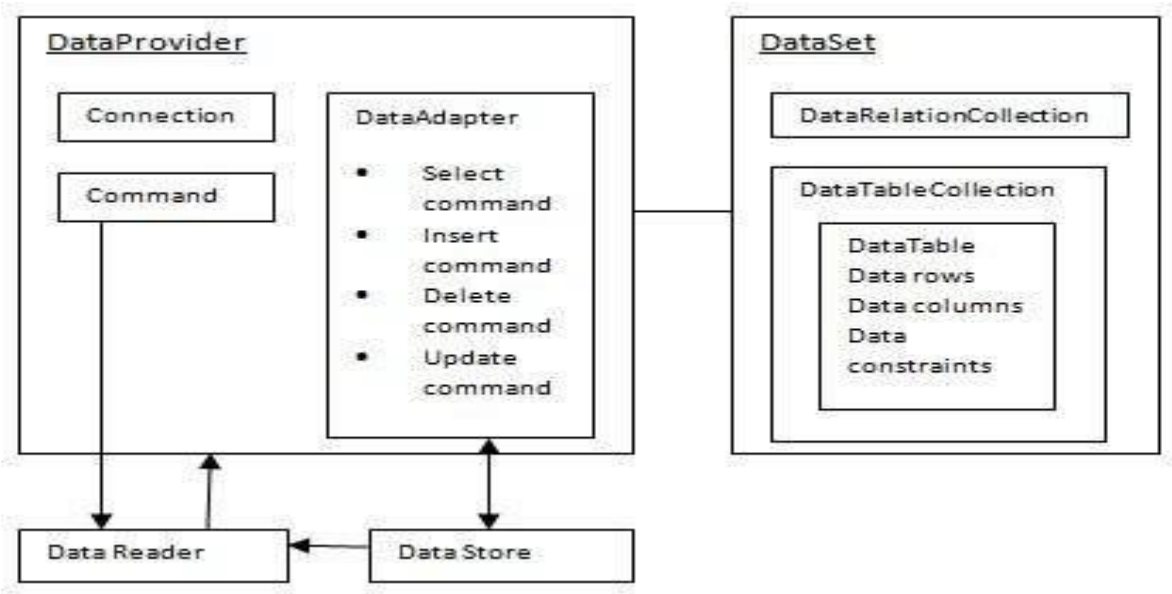
### 4.1.2. Ado.net

ADO.NET provides a bridge between the front end controls and the back end database. The ADO.NET objects encapsulate all the data access operations and the controls interact with these objects to display data, thus hiding the details of movement of data.

Data provider is used to connect to the database, execute commands and retrieve the record. It is lightweight component with better performance. It also allows us to place the data into DataSet to use it further in our application.

The .NET Framework provides the following data providers that we can use in our

| ramework data provider | ption |
|---|---|
| amework Data Provider for SQL | des data access for Microsoft SQL Server. It requires **tem.Data.SqlClient**namespace. |
| amework Data Provider for OLE | d to connect with OLE DB. It requires the **System.Data.OleDb** namespace. |
| amework Data Provider for ODBC | d to connect to data sources by using ODBC. It requires **tem.Data.Odbc**namespace. |
| amework Data Provider for | d for Oracle data sources. It uses the **System.Data.OracleClient** namespace. |
| ient Provider | des data access for Entity Data Model applications. It requires **tem.Data.EntityClient** namespace. |
| amework Data Provider for SQL Compact 4.0. | des data access for Microsoft SQL Server Compact 4.0. It requires **tem.Data.SqlServerCe** namespace. |




### 4.1.2.1. The data adapter object

The DataAdapter object acts as a mediator between the DataSet object and the database. This helps the Dataset to contain data from multiple databases or other data source.

### 4.1.2.2. The datareader Object

The DataReader object is an alternative to the DataSet and DataAdapter combination. This object provides a connection oriented access to the data records in the database. These objects are suitable for read-only access, such as populating a list and then breaking the connection.

## 4.1.3. C-sharp(c#)

C# is a simple, modern, general-purpose, object-oriented programming language developed by Microsoft within its .NET initiative led by Anders Hejlsberg. This tutorial will teach you basic C# programming and will also take you through various advanced concepts related to C# programming language.

C# is a modern, general-purpose, object-oriented programming language developed by Microsoft and approved by European Computer Manufacturers Association (ECMA) and International Standards Organization (ISO).

C# was developed by Anders Hejlsberg and his team during the development of .Net Framework.

C# is designed for Common Language Infrastructure (CLI), which consists of the executable code and runtime environment that allows use of various high-level languages on different computer platforms and architectures.

The following reasons make C# a widely used professional language −

- It is a modern, general-purpose programming language
- It is object oriented.
- It is component oriented.
- It is easy to learn.
- It is a structured language.
- It produces efficient programs.
- It can be compiled on a variety of computer platforms.
- It is a part of .Net Framework.

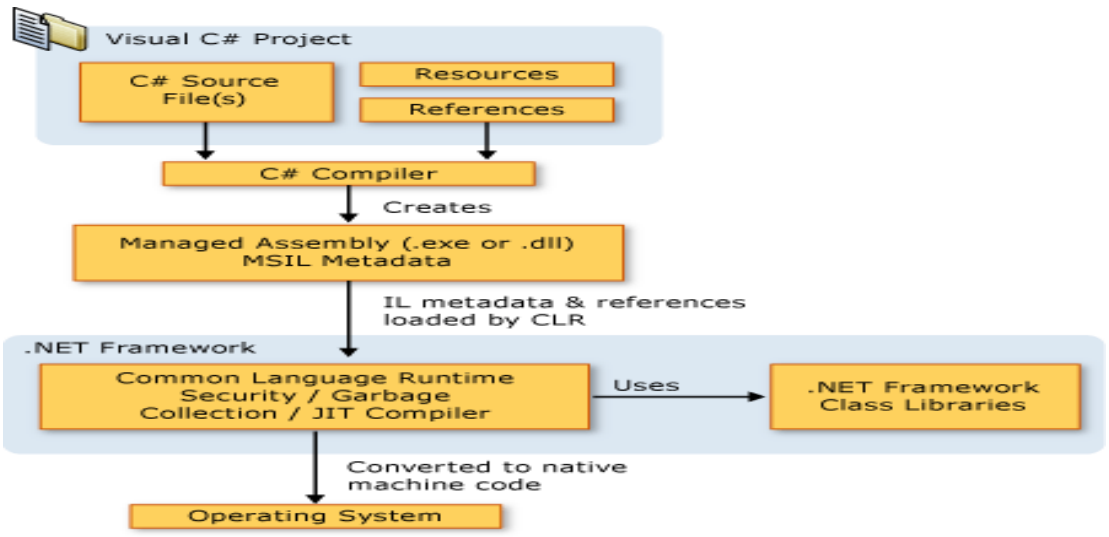



Figure 1: C# Flow in application

### 4.1.4. HTML

HTML stands for **H**yper**t**ext **M**arkup **L**anguage, and it is the most widely used language to write Web Pages.

- **Hypertext** refers to the way in which Web pages (HTML documents) are linked together. Thus, the link available on a webpage is called Hypertext.
- As its name suggests, HTML is a **Markup Language** which means you use HTML to simply "mark-up" a text document with tags that tell a Web browser how to structure it to display.

  Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers.

  Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

### 4.1.5. CSS

**C**ascading **S**tyle **S**heets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs,variations in display for different devices and screen sizes as well as a variety of other effects.

CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.

- **Selector** − A selector is an HTML tag at which a style will be applied. This could be any tag like <h1> or <table> etc.

- **Property** − A property is a type of attribute of HTML tag. Put simply, all the HTML attributes are converted into CSS properties. They could be *color*, *border* etc.

## 4.2. Tools used

### 4.2.1. Eclipse

Eclipse is an integrated development environment (IDE) used in computer programming, and is the most widely used Asp.net IDE. It contains a base workspace and an extensible plug-in system for customizing the environment. Eclipse is written mostly in Asp.net and its primary use is for developing Asp.net applications.

### 4.2.2. Visual studio code

Visual Studio Code is a source-code editor developed by Microsoft for Windows, Linux and macOS. It includes support for debugging, embedded Git control, syntax highlighting, intelligent code completion, snippets, and code refactoring. It is also customizable, so users can change the editor's theme, keyboard shortcuts, and preferences. The source code is free and open source and released under the permissive MIT License. The compiled binaries are freeware and free for private or commercial use.

### 4.2.3. Ms-sql database

Ms-sql is a fast, easy-to-use RDBMS being used for many small and big businesses. Ms-sql is developed, marketed, and supported by Ms-sql AB, which is a Swedish company. Ms-sql is becoming so popular because of many good reasons:

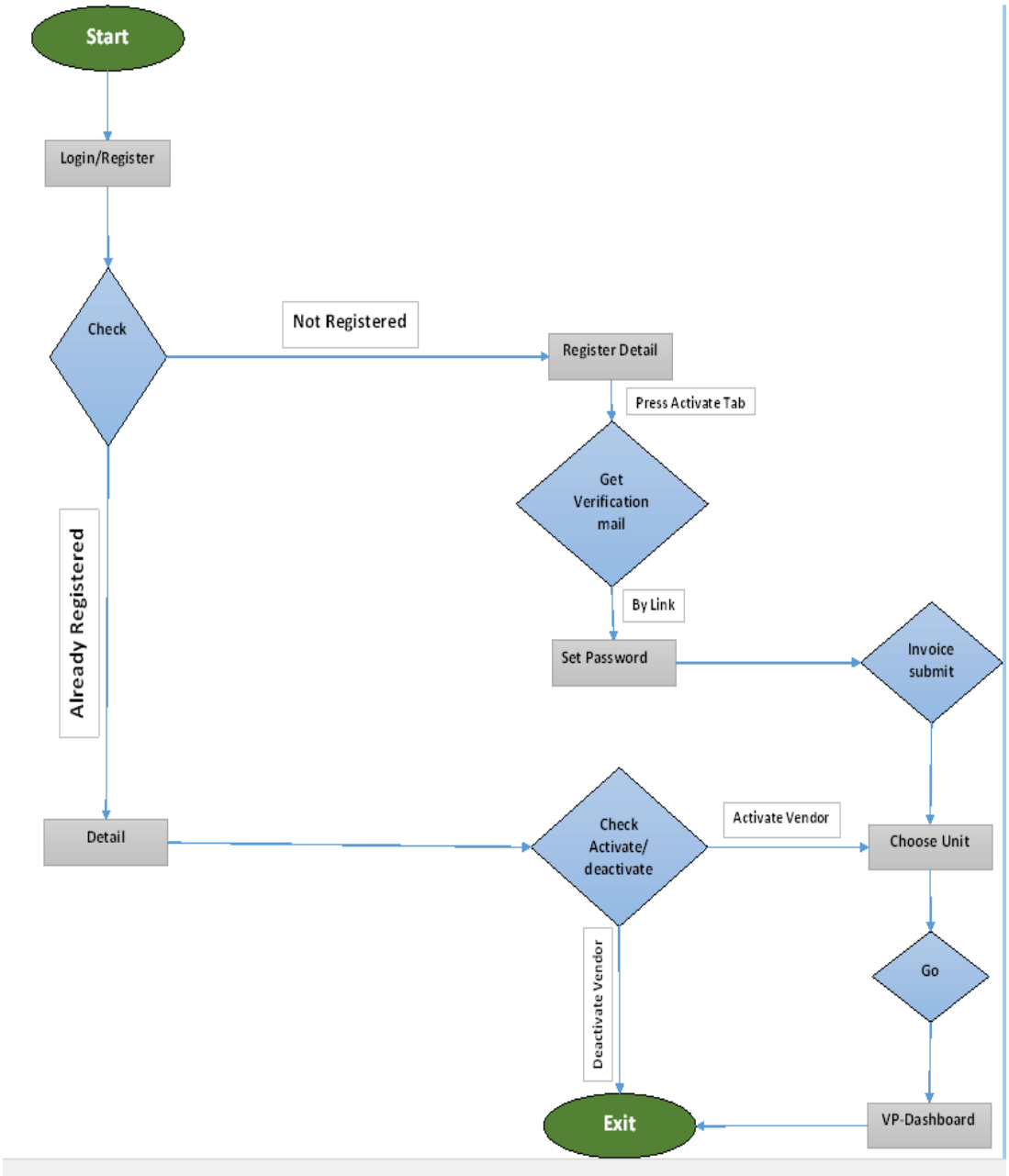
- Ms-sql is released under an open-source license. So you have nothing to pay to use it.
- Ms-sql is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- Ms-sql uses a standard form of the well-known SQL data language.

- Ms-sql works on many operating systems and with many languages including PHP, PERL, C, C++, ASP.NET, etc.
- Ms-sql works very quickly and works well even with large data sets.
- Ms-sql is very friendly to PHP, the most appreciated language for web development.
- Ms-sql supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).
- Ms-sql is customizable. The open-source GPL license allows programmers to modify the Ms-sql software to fit their own specific environments.

# CHAPTER - 5

# DESIGN

## 5.1. System design(flow chart)



## 5.2. Process architecture

### 5.2.1. Already register

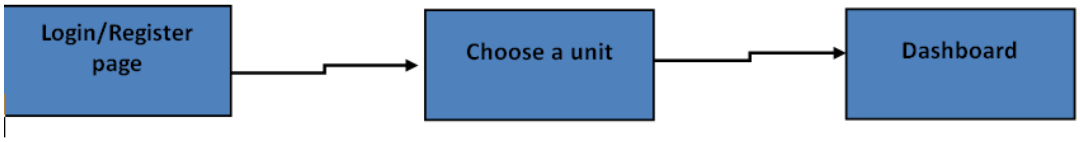
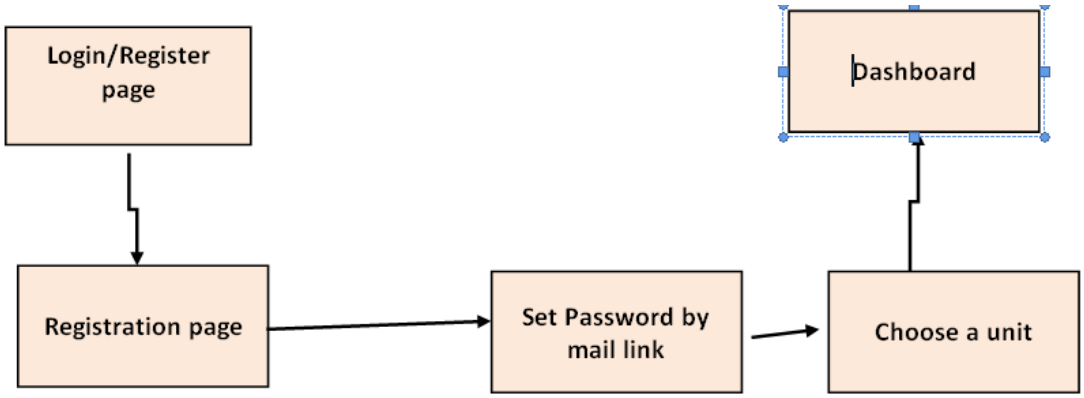



Figure 2: ALREADY REGISTER

### 5.2.2. New user




## 5.3. HIGH LEVEL BUISNESS REQUIREMENTS

| | ness Requirement | t Description | tion in detail | |
|---|---|---|---|---|
| | | istration | the User to submit the details | critical |
| | | e Unit Page | the select the unit page by hich must be already enrolled ferent unit of L&T | critical |
| | | number | upload the PO number by | critical |

| | | | | |
|---|---|---|---|---|
| | | d in Encrypted Form | d saved in database in encrypted form | high |
| | | ssword | an reset the password | high |

Figure 3:High Level Business Requirements

## 5.4. Functional requirement

| | Rating | Description |
|---|---|---|
| | | irement is critical to the success of the project. The project will not ble without this requirement. |
| | | irement is high priority, but the project can be implemented at a imum without this requirement. |
| | | irement is somewhat important, as it provides some value but the an proceed without it. |
| | | low priority requirement, or a “nice to have” feature, if time and v it. |
| | | irement is out of scope for this project, and has been here for a possible future release. |

Figure 4:Functional Requirement

## 5.5. Data flow diagram

### 5.5.1. Context level DFD

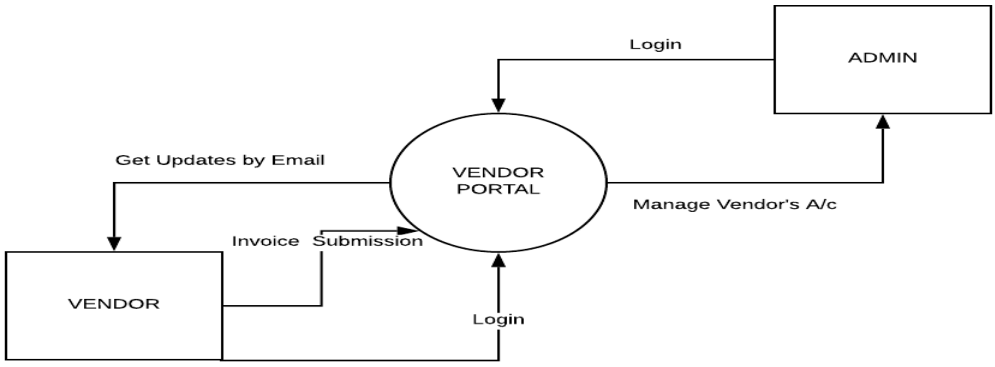



Figure 5: Context Level DFD

## 5.5. 2. First level DFD

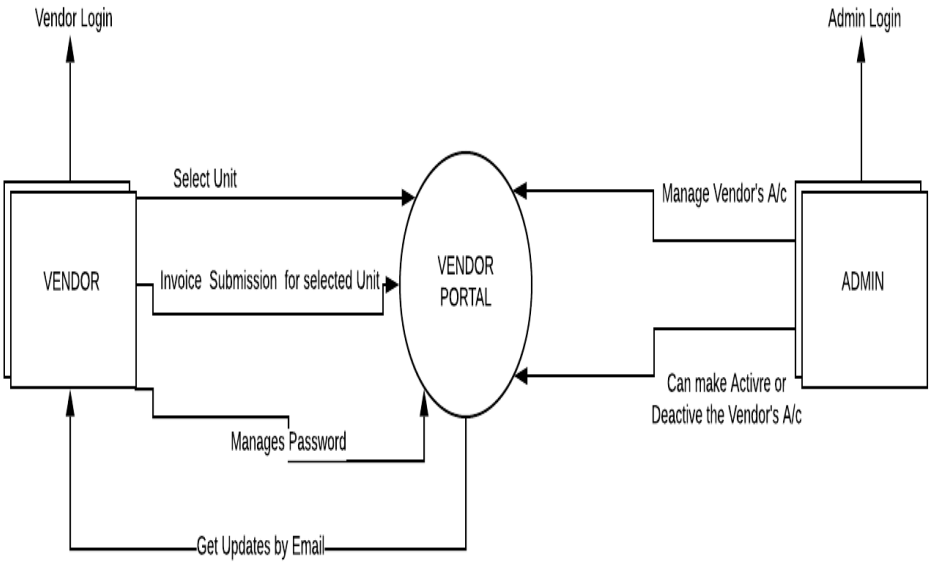
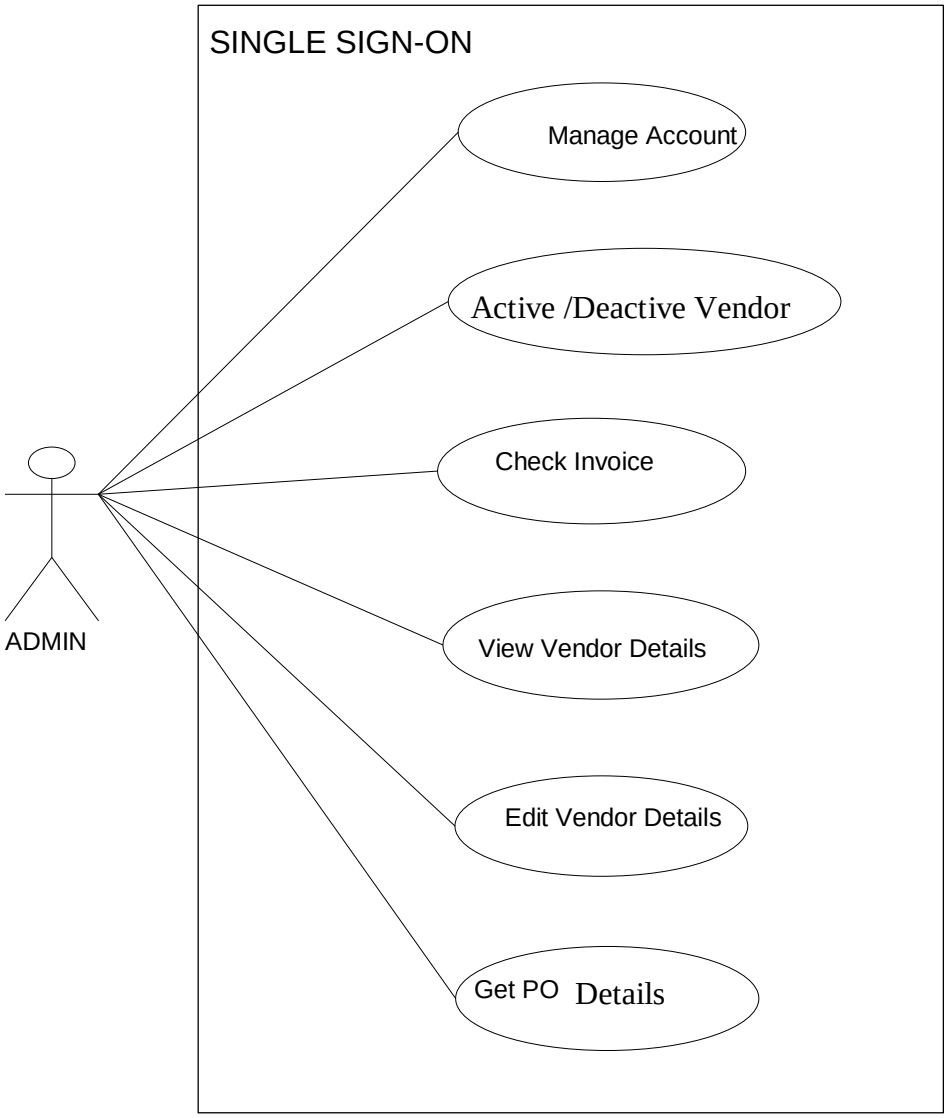


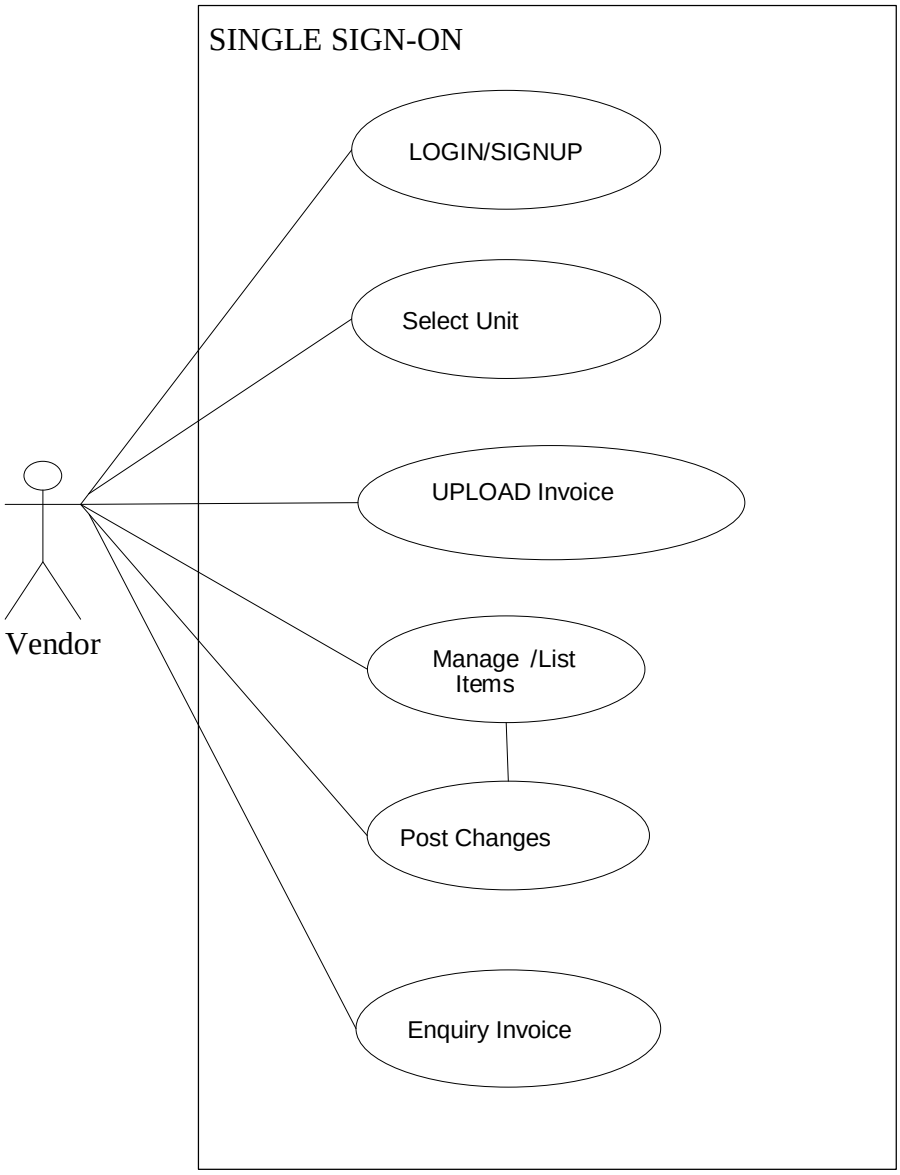

Figure 6:First level DFD

## 5.6. Use case diagram

### 5.6.1. Admin use case



## 5.6.2. Vendor use case



# CHAPTER – 6

# SYSTEM TESTING

Testing is the process of evaluating a system or its components with the intent to find that whether it satisfies the specified requirements or not. This activity results in the actual, expected and difference between their results i.e. testing is executing a system in order to identify any gaps, errors or missing requirements in contrary to the actual desire or requirements.

## 6.1. Testing strategies

In order to make sure that system does not have any errors, the different levels of testing strategies that are applied at different phases of software development are

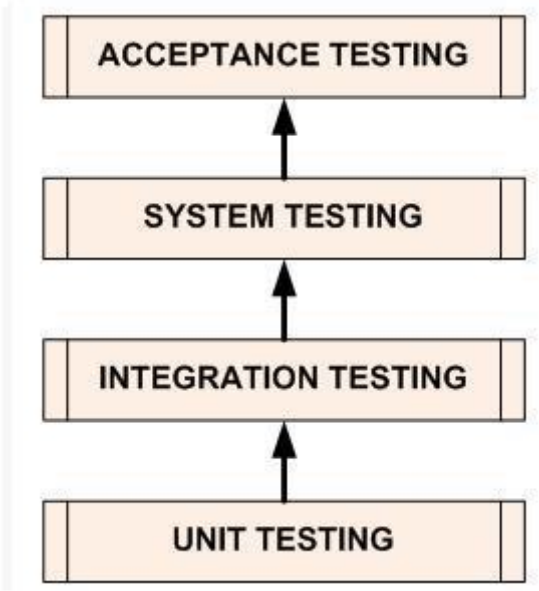



Figure 7: Testing Strategies

### 6.1.1. Unit testing

The goal of unit testing is to isolate each part of the program and show that individual parts are correct in terms of requirements and functionality.

### 6.1.2. Integration testing

The testing of combined parts of an application to determine if they function correctly together is Integration testing. This testing can be done by using two different methods

### 6.1.2.1. Top down integration testing

In Top-Down integration testing, the highest-level modules are tested first and then progressively lower-level modules are tested.

### 6.1.2.2. Bottom-up integration testing

Testing can be performed starting from smallest and lowest level modules and proceeding one at a time. When bottom level modules are tested attention turns to those on the next level that use the lower level ones they are tested individually and then linked with the previously examined lower level modules. In a comprehensive software development environment, bottom-up testing is usually done first, followed by top-down testing.

### 6.1.3. System testing

This is the next level in the testing and tests the system as a whole. Once all the components are integrated, the application as a whole is tested rigorously to see that it meets Quality Standards. 30

### 6.1.4. Acceptance testing

The main purpose of this Testing is to find whether application meets the intended specifications and satisfies the client's requirements. We will follow two different methods in this testing.

### 6.1.4.1. Alpha testing

This test is the first stage of testing and will be performed amongst the teams. Unit testing, integration testing and system testing when combined are known as alpha testing. During this phase, the following will be tested in the application:

- Broken Links.

- The Application will be tested on machines with the lowest specification to test loading times and any latency problems.

### 6.1.4.2. Beta testing

In beta testing, a sample of the intended audience tests the application and send their feedback to the project team. Getting the feedback, the project team can fix the problems before releasing the software to the actual users.

## 6.2. Testing methods

### 6.2.1. White box testing

White box testing is the detailed investigation of internal logic and structure of the Code. To perform white box testing on an application, the tester needs to possess knowledge of the internal working of the code. The tester needs to have a look inside the source code and find out which unit/chunk of the code is behaving inappropriately.

### 6.2.2. Black box testing

The technique of testing without having any knowledge of the interior workings of the application is Black Box testing. The tester is oblivious to the system architecture and does not have access to the source code. Typically, when performing a black box test, a tester will interact with the system's user interface by providing inputs and examining outputs without knowing how and where the inputs are worked upon.

## 6.3. validation

All the levels in the testing (unit integration, system) and methods (black box, white box) are implemented on our application successfully and the results obtained as expected.

## 6.4. Limitations

The execution time for support vector machine is more so that the user may not receive the result fast.

## 6.5. Test results

The testing is done among the team members and by the end users. It satisfies the specified requirements and finally we obtained the results as expected.

| | | | | |
|---|---|---|---|---|
| | ister page enter valid first last name, email, mobile tching password. | st name and last name must the pattern specified (no umeric string), and email end with "@something". number should be exactly racters | he validation is all sful, the actor be forwarded to in page | |
| | in page Enter valid me and ord. Then submit. | edentials should match with se. Otherwise it will give nessage. | natching me and password forward it to the age. | |
| | bill page we can view the details of user and tour and the total amount that be paid | amount is calculated based mula which uses number s, pre estimated price of ace to another place and r of people. | otal amount yed is correct an click on d button to direct t page of nt. | |

Table 1:Test Case

# CHAPTER – 7

# IMPLEMENTATION

## 8.1.process model used

### Spiral model

The Spiral model originally proposed, is an evolutionary software process model that couples the iterative nature of prototyping with the controlled & systematic aspects of the linear sequential model. It provides the potential for rapid development of incremental version of the software.

Using the spiral model software is developed in a series of incremental releases. A spiral model is divided into a number of framework activities also called task regions.

A spiral model contains six task regions:

- **Customer Communication:** Tasks required to establish effective communication between developer & customer.
- **Planning:** Tasks required to define resources, timeline & timeline & another project related information.
- **Risk analysis:** Task required to access.
- **Engineering:** Tasks required to build one or more representation of the application.
- **Construction & release:** Task required to construct, test, install & provide user support (e.g., documentation & Training)
- **Customer evaluation:** Tasks required to obtain customer feedback based on evolution of the software representation created during the engineering stage & implemented during the installation stage.

## 7.2. Conversion plan

To make this project live, i.e., to build application file for the project followed:

- Installation of Eclipse IDE.
- Select a server at which you will host your web application.

- Once Eclipse is set, you need to create the maven project and select the suitable web-app.
- Select the Database which will serve the purpose of the application accordingly.
- We need to give the right to the admin who could change the database table and details.
- After all the business logic Is successfully written and implemented. The project is live!

## 7.3. Post implementation of project and maintainance

The Post Implementation Review (PIR) is conducted after a project has been completed. The purpose of the PIR is to evaluate how successfully the project objectives have been met and how effective the project management practices were in keeping the project on track.

In our project the all objectives met to the requirements and it is more affective as user wants. According to the user requirements the project functionality and objectives are made according to this. It is generally found that systems that are easy to use, require less manpower, saves the data entry and well received by people. But still the following points have to consider.

1. How have systems changed the way in which operations were performed?
2. How have systems changed the timeliness of information and reports user received?

# CHAPTER – 8

# CONCLUSION

## 8.1. Current state of project

The current status of our project is that all modules like login, home page, add new vendor page, edit details page, view all L&T Unit page of the project are completed and their design,
coding and testing are done. The application is completely developed and tested.

## 8.2. Remaining areas of concern

There are still, after a lot of efforts, the areas of concern in the project. Once the user is registered there is no way to edit the user details. In future release we can add this feature to the project.

## 8.3. Technical and managerial lessons learnt

We have learnt a lot of things while developing the project.

- Working with the Visual Basic.
- Working with server-side tasks.
- Style website using Bootstrap Framework.
- Connect Database with the web application.
- Creating and managing databases using MS-SQL and using it in Spring MVC.
- Working in a team and co-ordination among them.
- Problem Analysis and problem solving with the team mates.

## 8.4. Future scope

They can allow vendor to make corrections/changes with the submitted Invoice.
Payment Gateway system can be added to existing system.
For the convenience of vendor we can send the otp on mobile phone as well.
They can also launch it as a mobile app.
They can allow vendor to edit the registered details.

# DEMONSTRATION/SCREENSHOTS

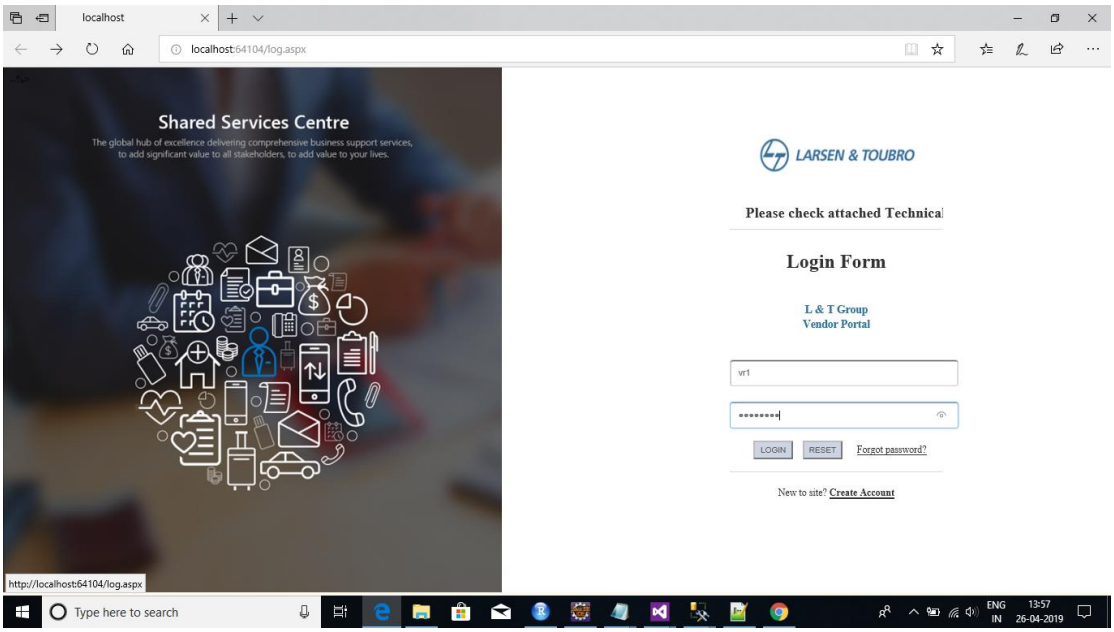



Figure 8: Admin Login Page

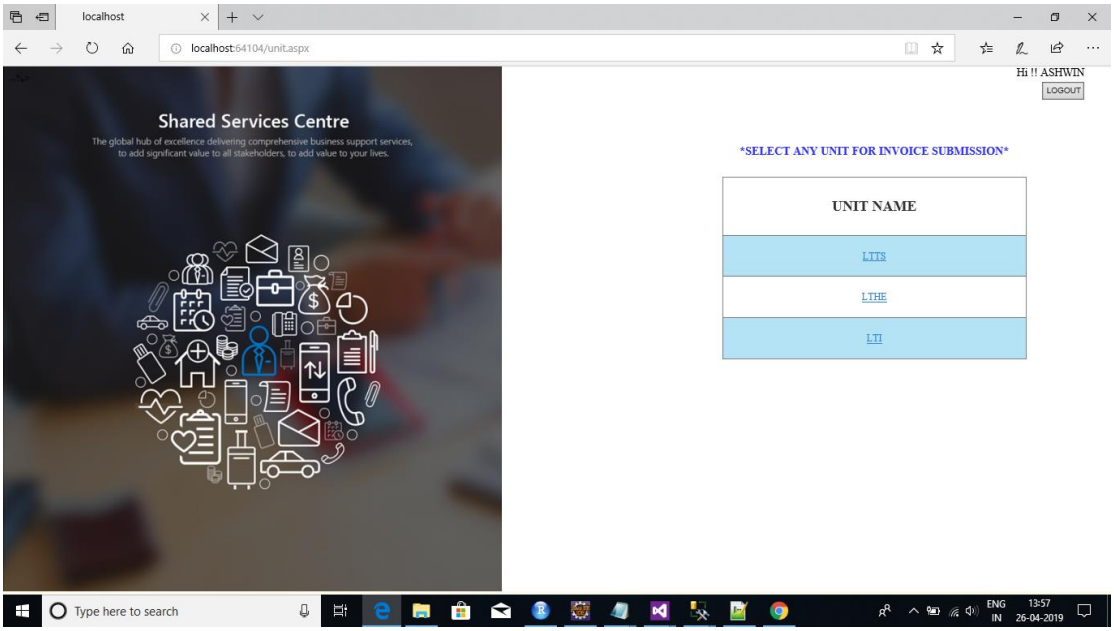



Figure 9 : Vendor Portal (Unit Selection)

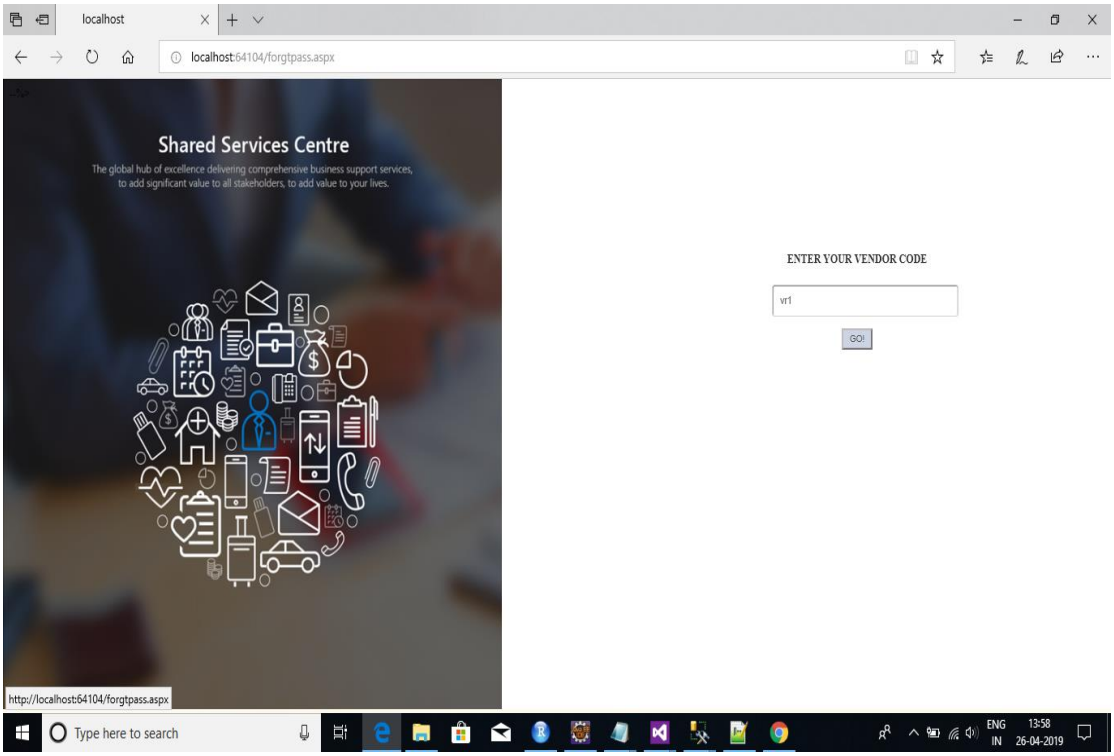



Figure 10 : Registration

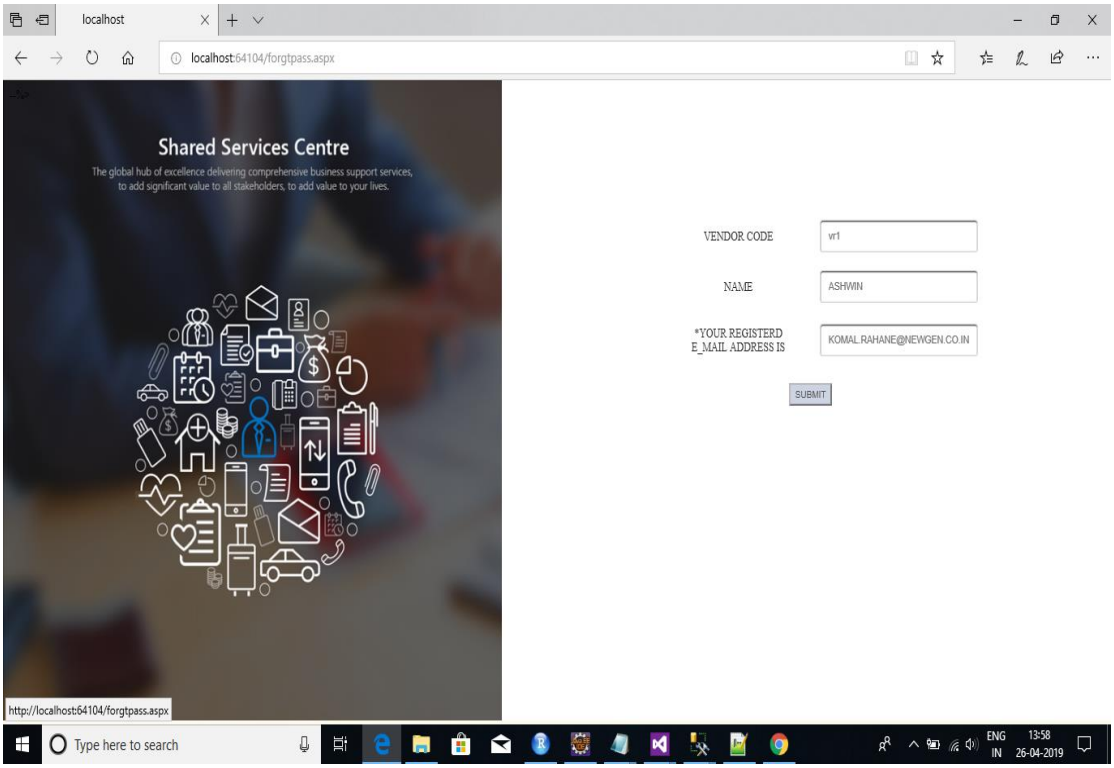



Figure 11 : Registered Fields

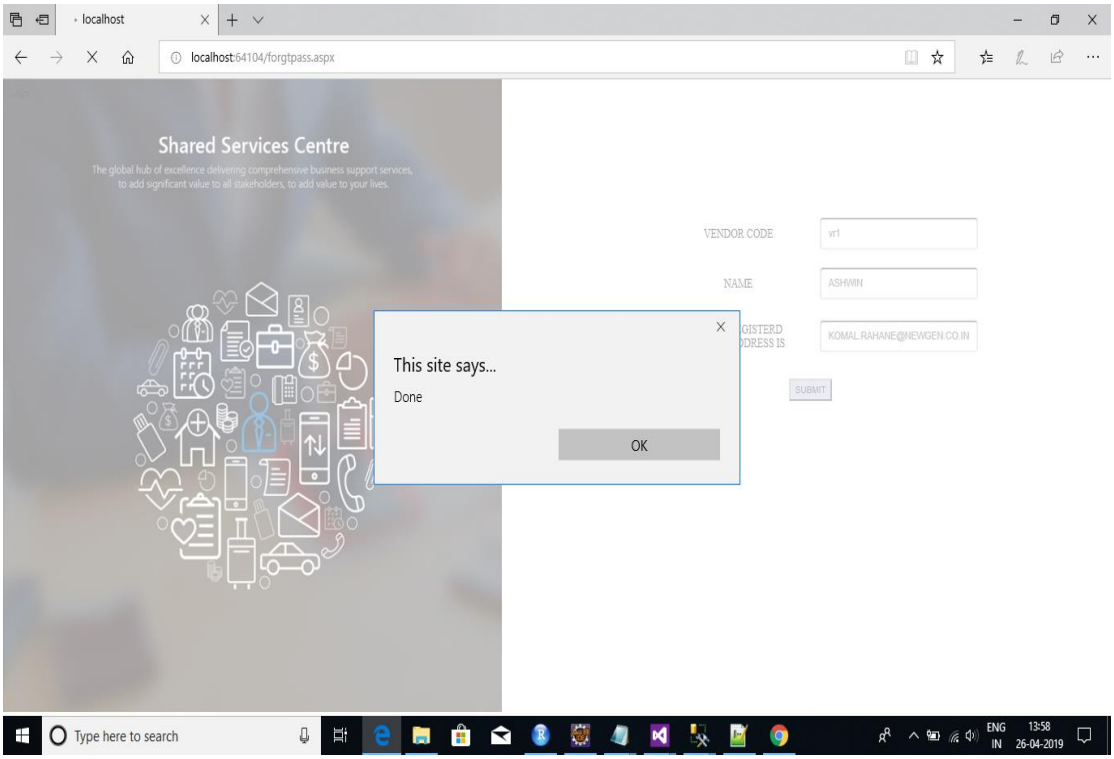



Figure 12 : Registered Successfully & OTP sent

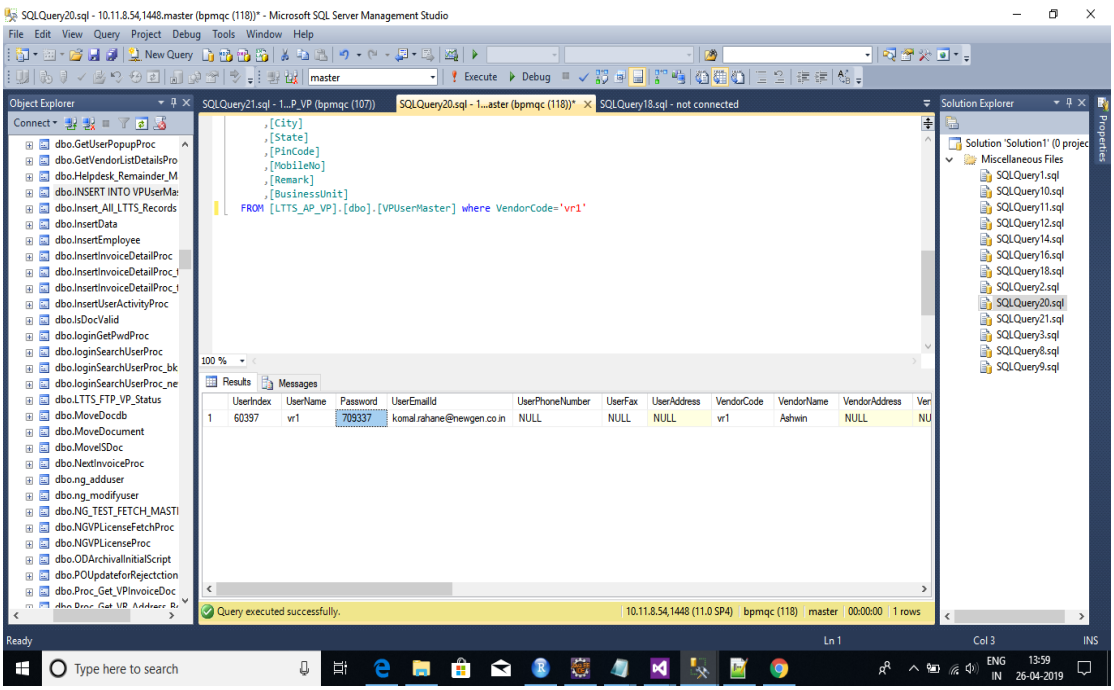



Figure 13 : OTP in Database

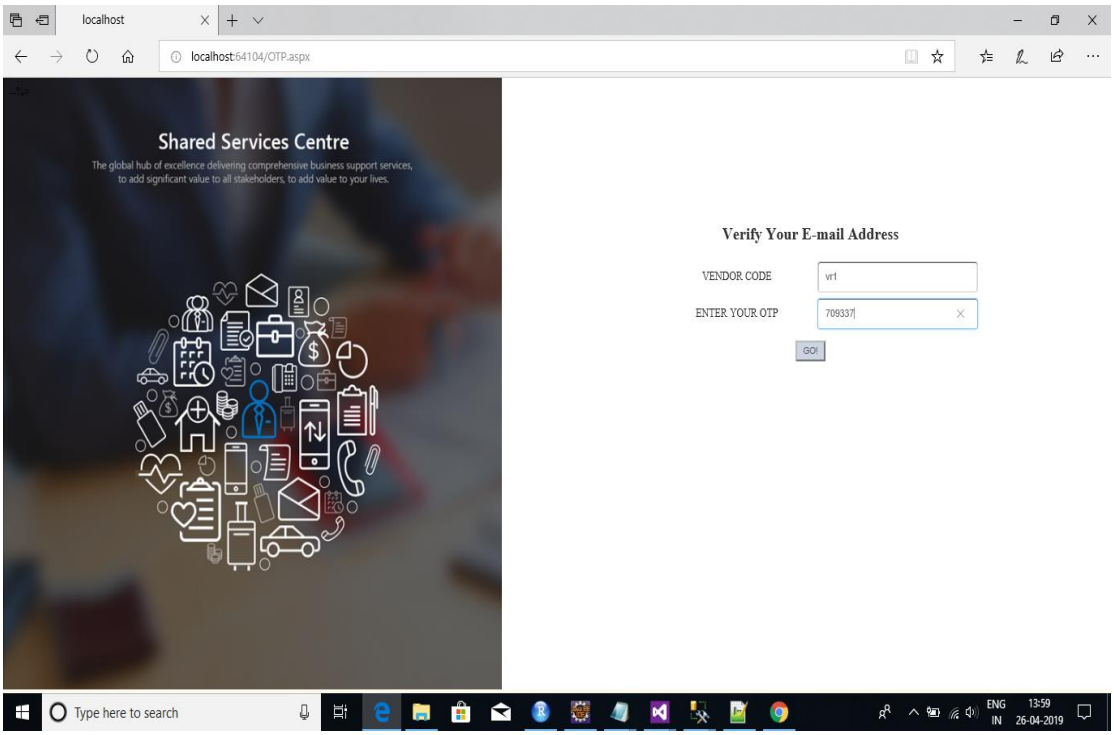



Figure 14 : OTP Verification

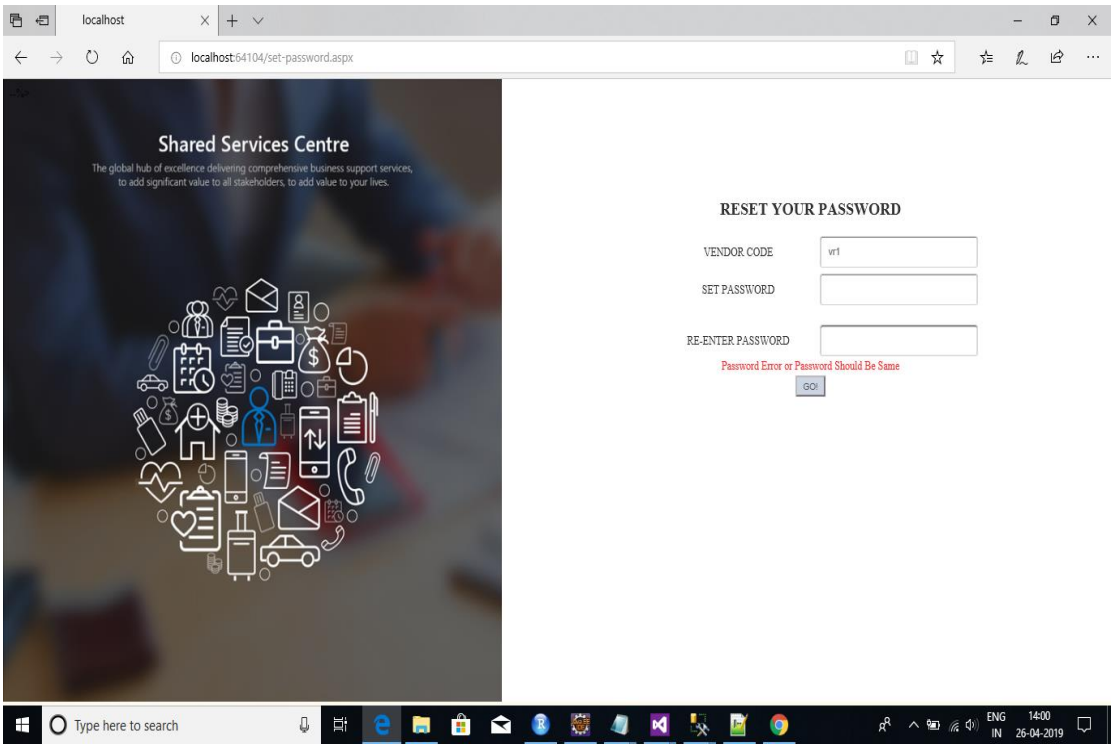



Figure 15 : Password Validation & Reset

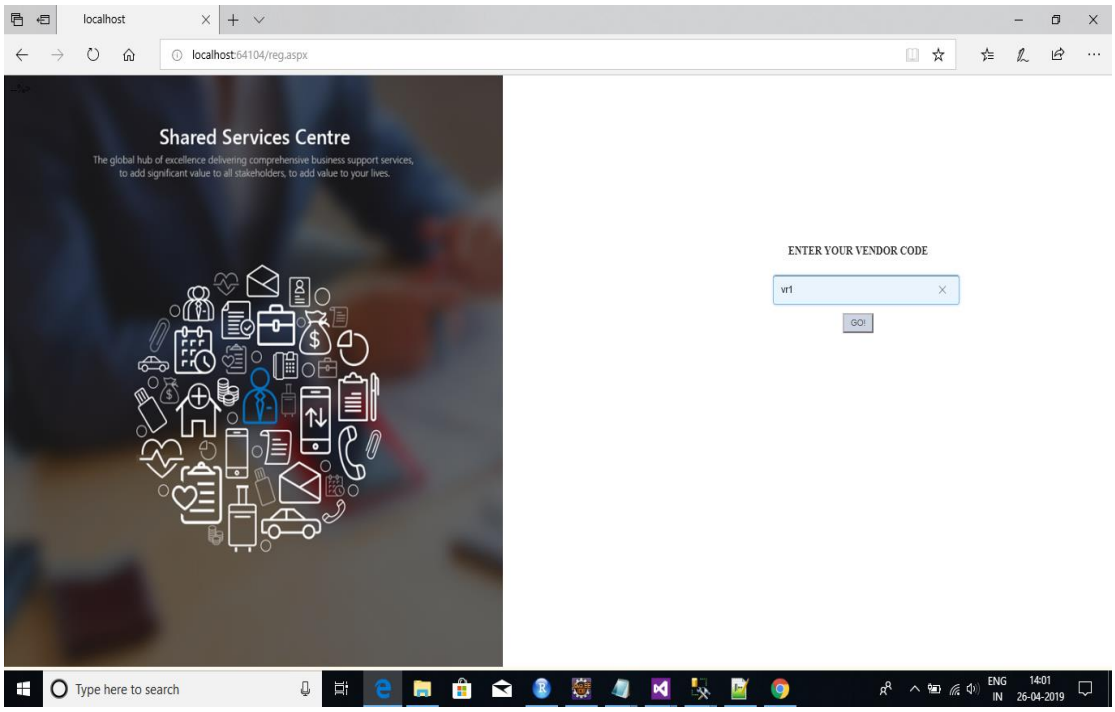



Figure 16 : Registration Page

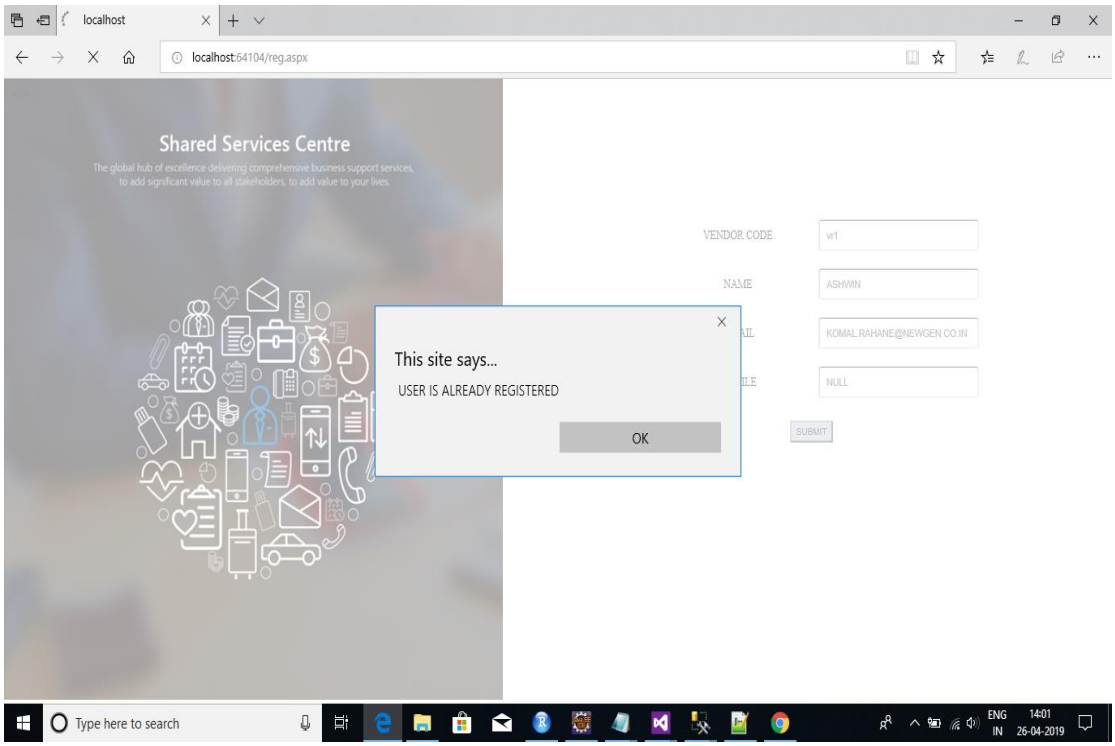



Figure 17 : Already Registered

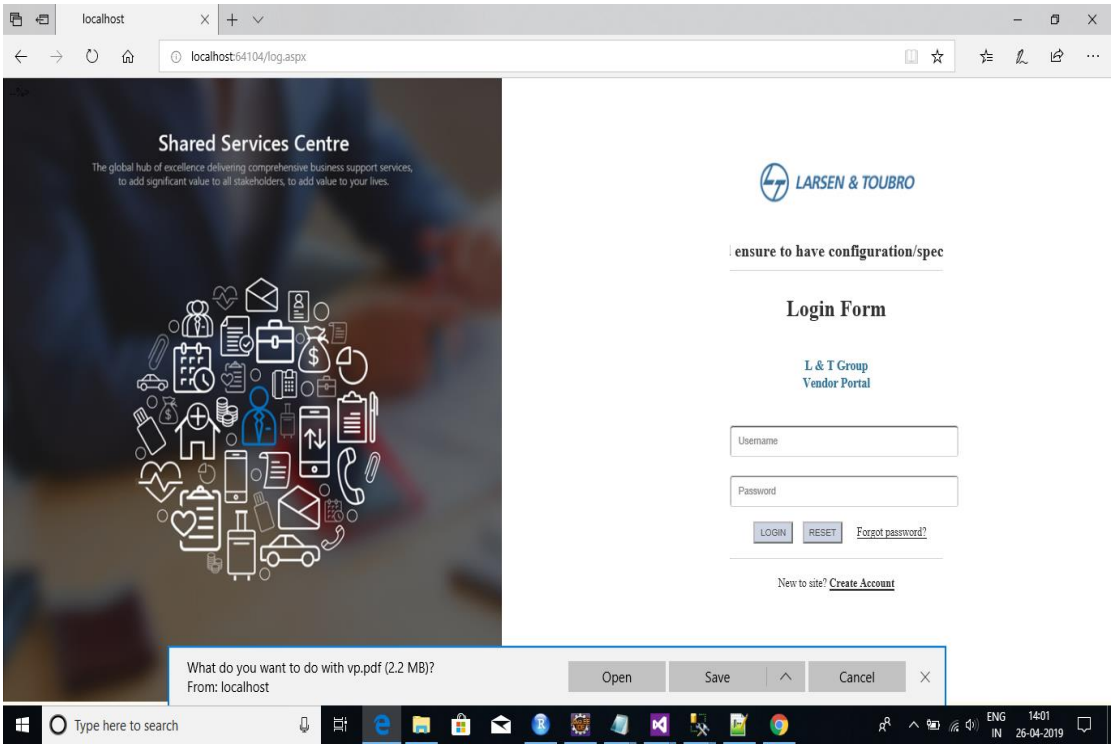



Figure 18 : VP Documentation (Blinking Link)

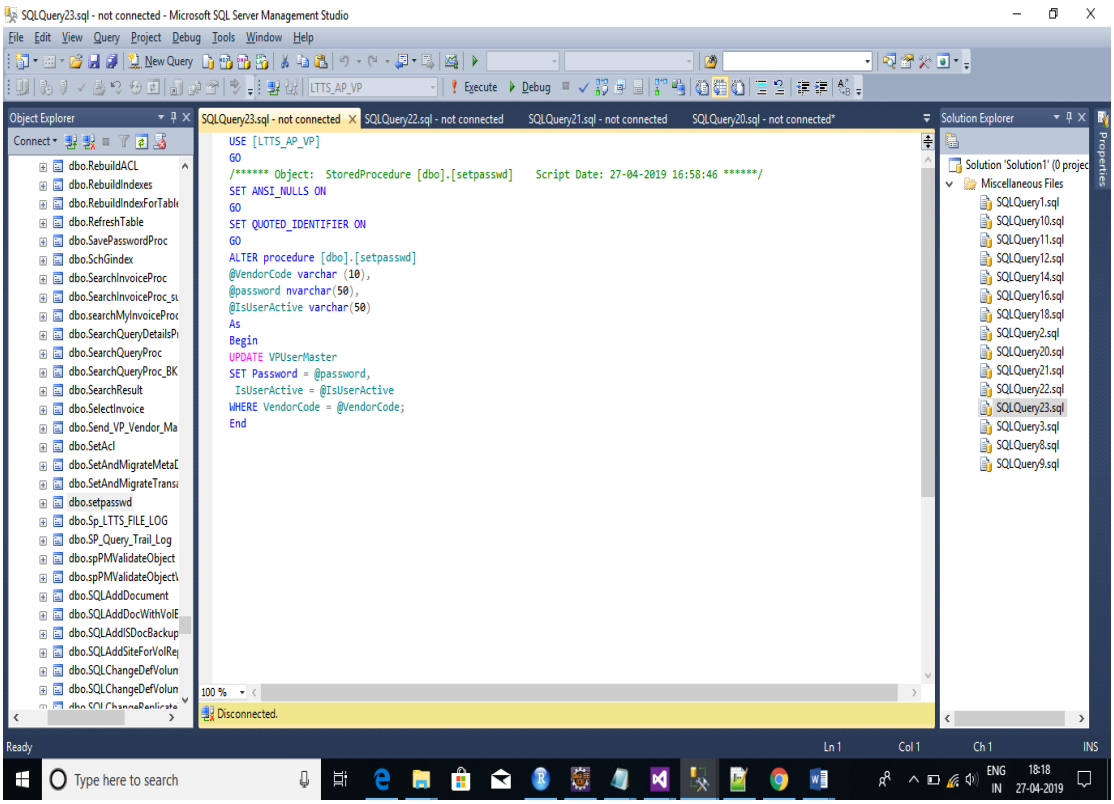



Figure 19 : Example of Store Procedure

# Admin View *(Existing System)*

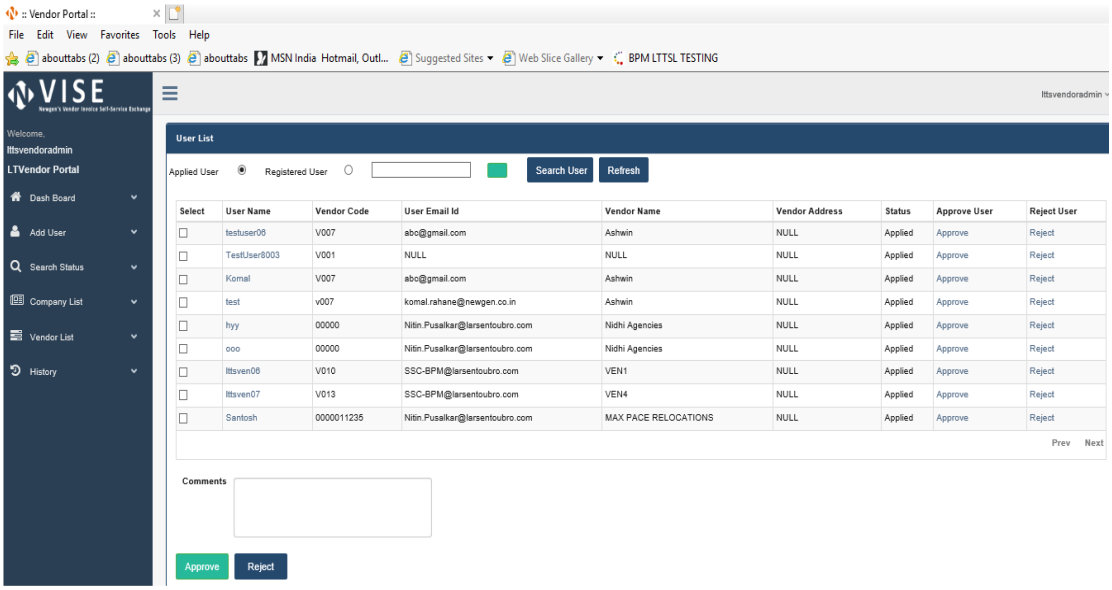
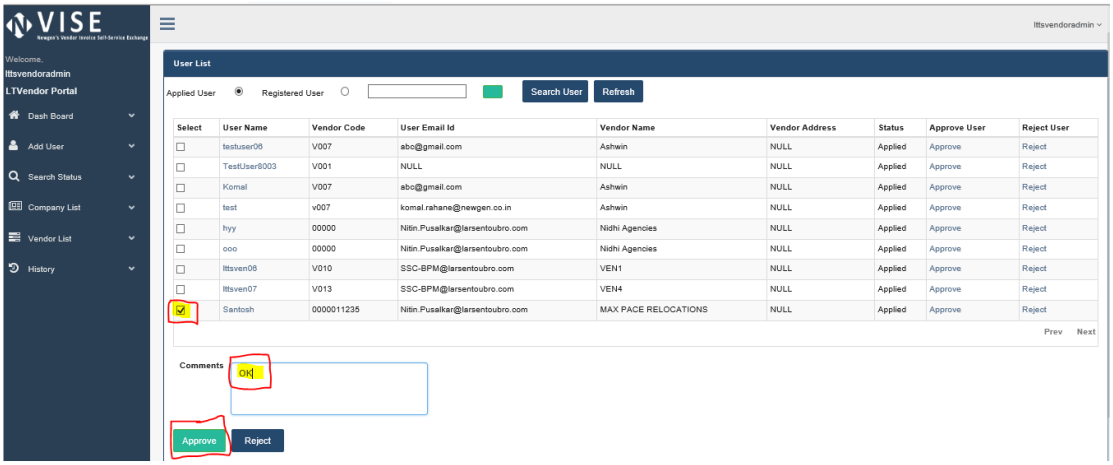
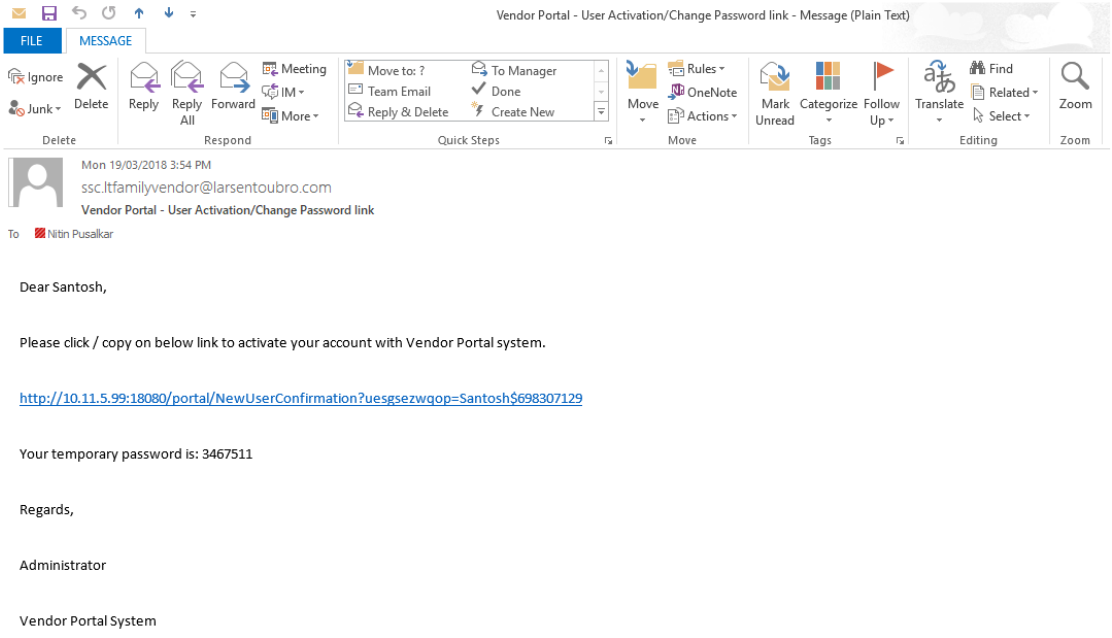



Figure 20 : Admin Side

Admin approver can approve or reject the user creation request. Approver can select single or multiple request and do approval or rejection.




Once admin approver approves request in VP then email will get triggered to concern vendor on his email id which is registered in L & T's ERP vendor master. Initial password will be shared along with link of vendor portal wherein vendor will have to log in and enter initial password and change the same in VP.




**On receipt of above mail when vendor will click on above link provided following screen will appear.(Existing System)**

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