A
Summer Internship Report
On
"C# Software Development"

(IT346 – Summer Internship - I)

Prepared by

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Under the Supervision of

Prof. Khushi Patel

Submitted to

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for Semester 5

Submitted at

CHARUSAT
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY
Accredited with Grade A by NAAC
Accredited with Grade A by KCG

DEPSTAR

DEPARTMENT OF INFORMATION & TECHNOLOGY
Devang Patel Institute Of Advance Technology And Research (DEPSTAR)
Faculty of Technology & Engineering (FTE), CHARUSAT
At: Changa, Dist: Anand, Pin: 388421.

July, 2019

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CERTIFICATE

This is to certify that the report entitled "**C# Software Development**" is a bonafied work carried out by **Rushi Patel (17dit053)** under the guidance and supervision of **Prof. Khushi Patel** & **Mr. Shyamal Shah** for the subject **Summer Internship – I (IT346)** of 5th Semester of Bachelor of Technology in **Information Technology** at Devang Patel Institute of Advance Technology and Research (DEPSTAR), Faculty of Technology & Engineering (FTE) – CHARUSAT, Gujarat.

To the best of my knowledge and belief, this work embodies the work of candidate himself, has duly been completed, and fulfills the requirement of the ordinance relating to the B.Tech. Degree of the University and is up to the standard in respect of content, presentation and language for being referred by the examiner(s).

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Certificate of Training

Date: 29 Jun, 2019

TO WHOM SO EVER IT MAY CONCERN

This is to certify that *Mr./Miss **Rushi Patel***, has successfully completed his/her training as a **'Software Developer (C#)'** with Ellipsis Infotech.

Training Period: From 13 May, 2019 To 29 Jun, 2019

The **training** of the candidate was **supervised / monitored by** **Mr. Bhumin Mashruwala (Tech. Head)** and Rushi's performance has been found very **satisfactory** and he/she worked with great **dedication.**

ELLIPSIS INFOTECH AHMEDABAD

Authorized Signatory

ACKNOWLEGEMENT

With immense pleasure, I would like to present this project report on, “Ellipsis Portal”, developed in C# and SQL. It has been an enriching experience for me to undergo my summer training at Ellipsis Infotech, which would not have possible without the goodwill and support of the people around.

As a student of Devang Patel Institute of Advance Technology and Research, I am highly thankful to **Dr. Amit Ganatra** (Principal of DEPSTAR, Charusat University, Changa.) who allowed me for this project at Ellipsis Infotech.

I would like to give my heartily thanks to Shyamal Shah and Bhumin Mashruwala who guided me and support throughout the project. Without them I would not be able to complete this project successfully. I am very thankful to whole staff that helped me at every step whenever needed.

I sincerely thanks to my faculty guide Prof..Khushi Patel, for providing understanding on the ways of preparing a project report and for the guidance and support for Summer Training.

Lastly, I convey my regards to the whole staff, which made my stay at ELLIPSIS INFOTECH, a memorandum part of life.

ABSTRACT

Summer Internship/Training plays an integral part in developing the required skills for working in the industry. The objective of such an exercise is to get a first-hand exposure to the realities of industry work standards and gain an insight into the working of the I.T sector.

The summer training gives an opportunity to apply theoretical concepts into practice, and to become aware of my strengths and weakness as required for potential managers. It also teaches to understand coordination process of different important areas.

The project allotted to me by my guide at ELLIPSIS INFOTECH was to build a portal for the management and allocation of work for all the employees in a company. As part of training for the project, my guide assigned me a task to make a windows form for student registration and store the details in database. The first four chapters of the report comprises of details from the two weeks training period in C# provided by my external mentor and the later chapters of my report comprises details about the project I developed at the company in a time period of five weeks.

The portal that I helped develop was built with the purpose to assign tasks to all the employees, monitored and supervised under the administrator/head of the company. The employees can work on these tickets and after completion of work; these will be passed on for testing. The number of levels of testing will be decided by the administrator. If the work is not up to the mark, the work will be reassigned until it is approved on all levels of testing. Every employee can maintain a daily work report, on the basis of which attendance will be marked and there is a separate performance module where an employee can review their efficiency, effectiveness, attendance and overall performance report.

ORGANISATIONAL PROFILE

INTRODUCTION

NAME OF THE COMPANY	**"ELLIPSIS INFOTECH"**
ADDRESS	403, Corporate House, Opp. Dinesh Hall Near Income Tax, Vijay Cross Rd, Navrangpura, Ahmedabad, Gujarat 380009
TELEPHONE	+91 098242 12974
E-MAIL	info@icasterp.com
LOCATION	Ahmedabad
NATURE OF THE COMPANY	The nature of company is Software, ERP Development.

ABOUT THE COMPANY/ ORGANISATION

The main product developed by Ellipsis Infotech is iCast. It is software built by foundrymen for foundrymen. iCast is product that has been come out from the need of foundry industry, developed by foundrymen themselves. The product was initially started getting developed as custom IT project by the group of foundry people to cater their own need in the industry. Its basic purpose was to serve a few foundries which needed a data capturing system of their own at a lower cost. So, this group of foundry people hired IT guys to get the software of their need to be developed so that the cost could be distributed. There were other products out there developed by software developers but there were mainly two issues (1) Lack of domain expertise and (2) High cost.

This software was initially developed as a web based product but eventually it turned out that users of foundry industry needed a product which should be relatively fast and can be customized as per their requirements. The identification of the need came as turning point and the IT guys who developed the product as a custom project now started to re-develop a robust, fast, scalable and customizable solution for foundries with the help of professional consultants under the company name Ellipsis Infotech. One of the founders of the Ellipsis Infotech is one of the foundry professionals.

CONTENTS

LIST OF FIGURES

CHAPTER- 1- BEGINNING

1.1 LET'S START

- Download of Visual Studio 2017.
- C# windows Application
- Getting Familiar with Visual Studio UI
- Opening different types of projects – Windows Form Application, .net Application, C# class, etc.
- Debugging option- F9 is short key to add a break point at any location and F10 allows to debug line by line.
- Toolbox – From where multiple Tools for building the form is available.
- Solution Explorer – Which Contains all the files in a particular project.

1.2 STARTING C#

- Syntax review (Different from C/C++ Syntax)

> Syntax for Input & Output for console - System.Console.WriteLine() & System.Console.ReadLine().

- Libraries to include.
    - using System;
    - using System.Collections.Generic;
    - using System.Linq;
    - using System.Text;
    - using System.Threading.Tasks;
    - using System.Data.SqlClient;

- Type Casting – One of the most essential in C#

METHOD	DESCRIPTION
ToBoolean	It will converts a type to Boolean value
ToChar	It will converts a type to a character value
ToByte	It will converts a value to Byte Value
ToDecimal	It will converts a value to Decimal point value
ToDouble	It will converts a type to double data type
ToInt16	It will converts a type to 16-bit integer
ToInt32	It will converts a type to 32 bit integer
ToInt64	It will converts a type to 64 bit integer
ToString	It will converts a given type to string
ToUInt16	It will converts a type to unsigned 16 bit integer
ToUInt32	It will converts a type to unsigned 32 bit integer
ToUInt64	It will converts a type to unsigned 64 bit integer

Fig. 1.1 Type Casting

- Making of basic Pattern in C# console application to get familiar with the syntax and functionalities

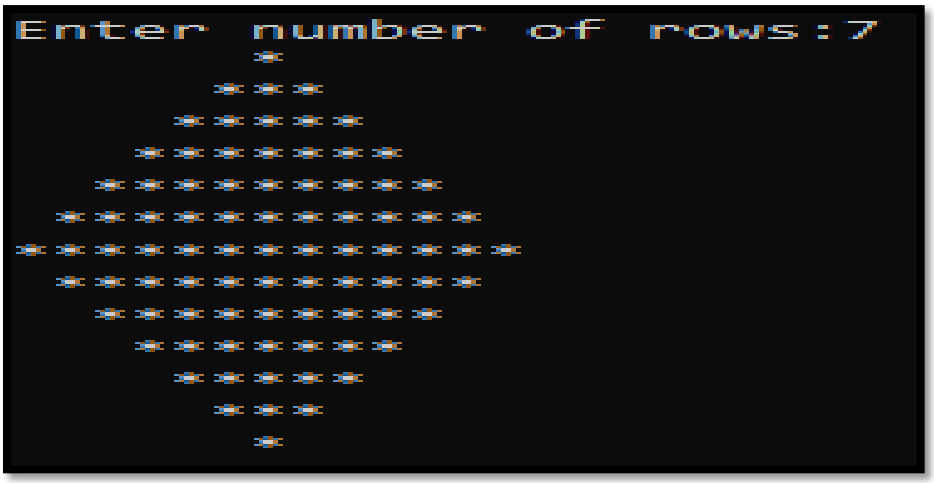


Fig. 1.2 C# Pattern

CHAPTER -2 – WINDOWS APPLICATION

2.1 FORM APPLICATION

- Started Working on “Windows Form Application”.
- Toolbox:

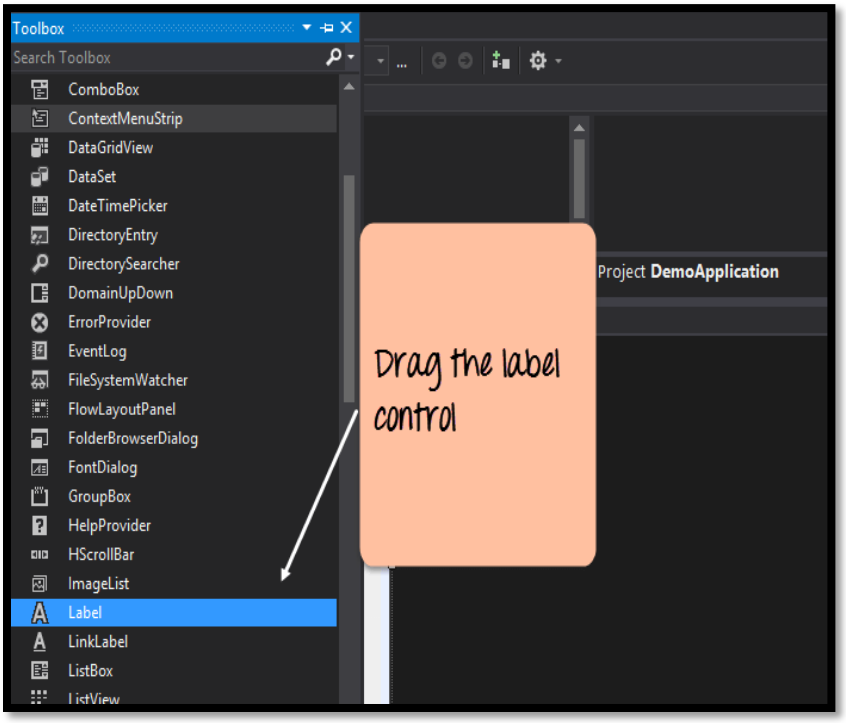


Fig. 2.1 Tool Box

2.2 DATA GRID VIEW

- The DataGridView control provides a powerful and flexible way to display data in a tabular format. You can use the DataGridView control to show read-only views of a small amount of data, or you can scale it to show editable views of very large sets of data. This control also let's you display data in a master-details view.

- Created multiple Windows form.

- Form-1 – Selecting data from drop down (Combo box).

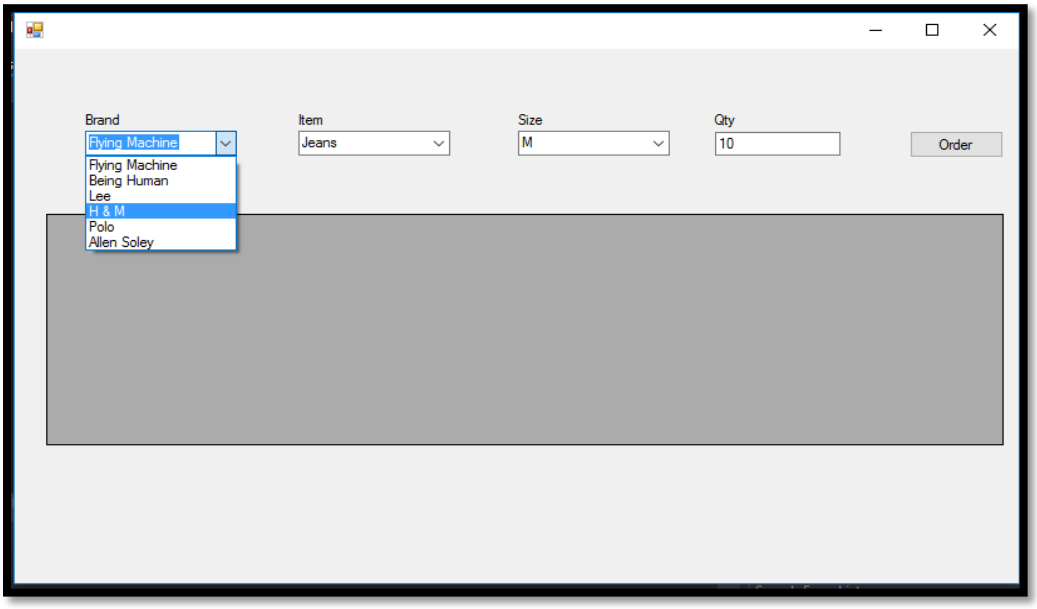


Fig. 2.2 Form-1

- Form -2 – Displayed Selected data in Data Grid View on click of "Order" button.

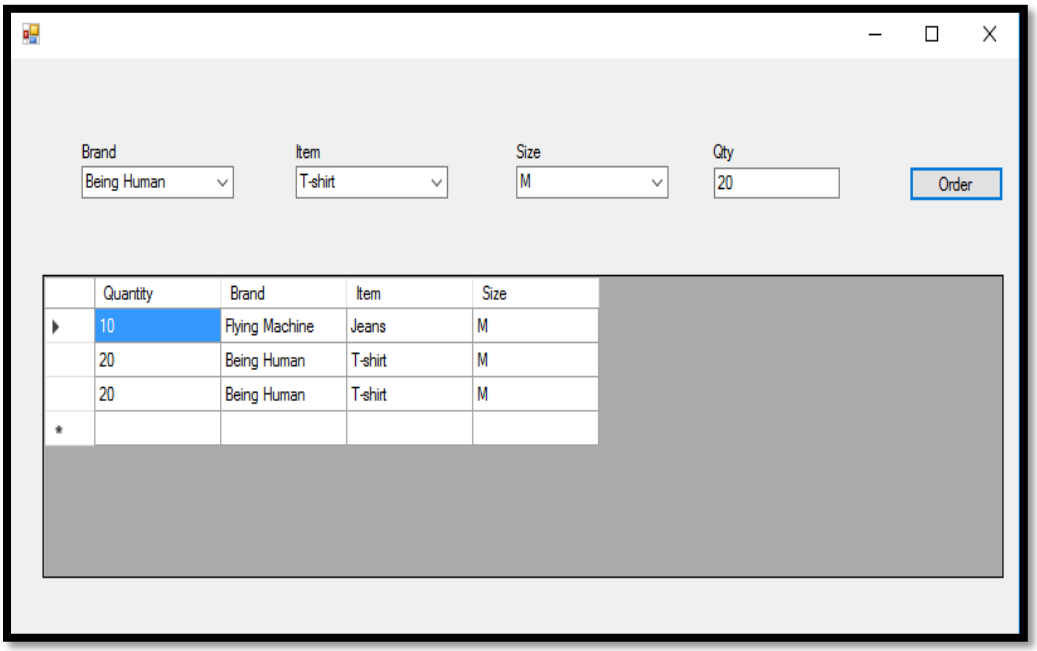


Fig. 2.3 Form-2

2.3 REGISTRATION FORM

- Complete Registration form for student, displaying data in grid view and also storing data in database on click of "Save" button.

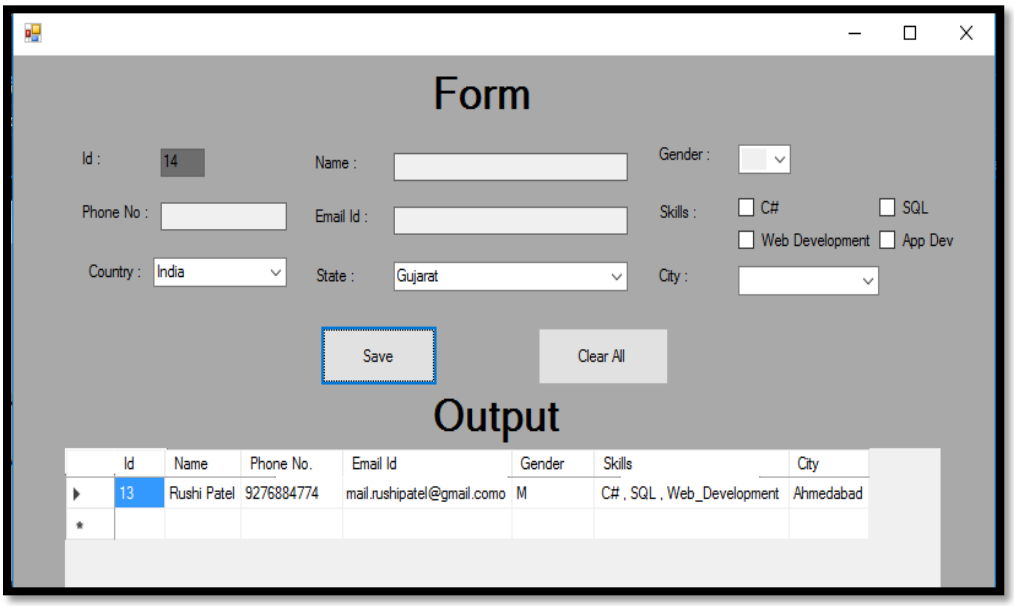


Fig. 2.4 Registration Form

- Added more button in Windows form.
  - Update – Updates the value of the row selected in database
  - Clear – Clear the fields
  - Cross – In case User didn't wish to update the row after accidently selecting a row

- Added "cell click" event
  - Which fills all form field on selection of particular record in data grid view

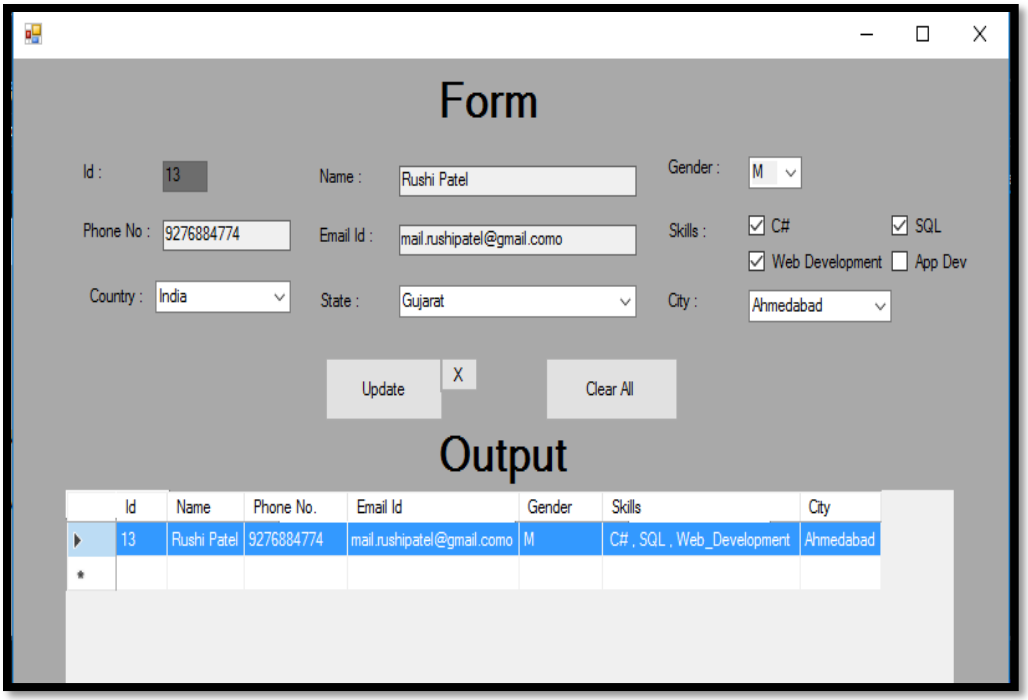


Fig. 2.5 Updated Registration Form

- Learnt to manage checkboxes & combo boxes
- Made form responsive and attractive.

CHAPTER -3 - DATABASE

3.1 MSSQL SERVER

- Download of “Microsoft SQL Server 2008”.
- Getting familiar with MSSQL UI.
- Creating database, table and writing queries in the script window.
- Connection of MSSQL with Visual Studio 2017 :

  1) Open Server Explorer (View -> Server Explorer)

  2) The Server Explorer should show up on the left hand side of the IDE

  3) Right click on "Data Connections" and select "Add Connection".

  4) Enter the Server Name in the first textbox (do not use the drop down box). MS SQL Server name can be found in the database manager section of the control panel.

  5) Check "Use a specific user name and password:"

  6) Enter your SQL username & password

  7) Select your database from the dropdown list.

  8) Click "Ok"

  9) Once connected, you should see a new entry in the Data Connections Section
- Fetching “Combo Box” values from database
- Using data binding, not with SQL connection query.

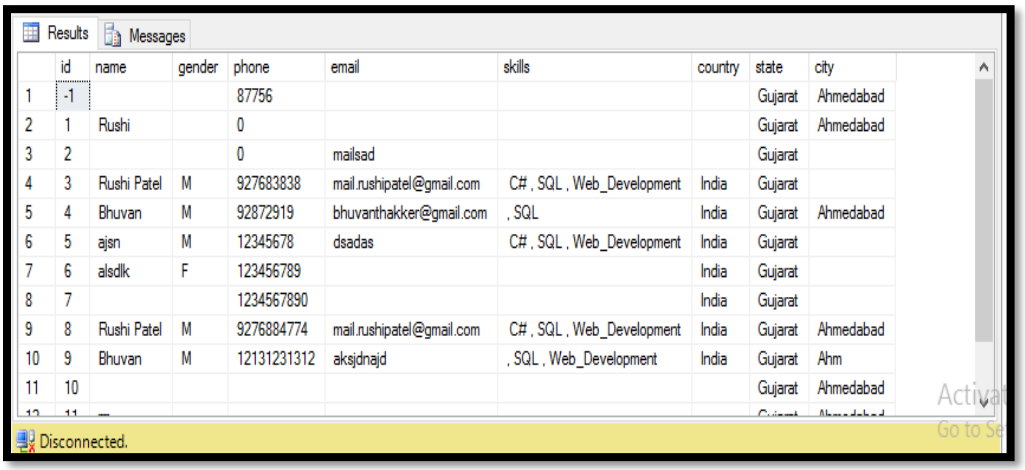
3.2 DATABASE TABLES FOR FORM

- Creating new table for Student Registration form:

Column Name	Data Type	Allow Nulls
id	int	☐
name	varchar(50)	☑
gender	varchar(1)	☑
phone	varchar(MAX)	☑
email	varchar(50)	☑
skills	varchar(MAX)	☑
country	varchar(50)	☑
state	varchar(50)	☑
city	varchar(50)	☑

Fig. 3.1 Table Design

- Syncing Form details in database.



Results | Messages

	id	name	gender	phone	email	skills	country	state	city
1	-1			87756				Gujarat	Ahmedabad
2	1	Rushi		0				Gujarat	Ahmedabad
3	2			0	mailsad			Gujarat	
4	3	Rushi Patel	M	927683838	mail.rushipatel@gmail.com	C# , SQL , Web_Development	India	Gujarat	
5	4	Bhuvan	M	92872919	bhuvanthakker@gmail.com	, SQL	India	Gujarat	Ahmedabad
6	5	ajsn	M	12345678	dsadas	C# , SQL , Web_Development	India	Gujarat	
7	6	alsdlk	F	123456789			India	Gujarat	
8	7			1234567890			India	Gujarat	
9	8	Rushi Patel	M	9276884774	mail.rushipatel@gmail.com	C# , SQL , Web_Development	India	Gujarat	Ahmedabad
10	9	Bhuvan	M	12131231312	aksjdnajd	, SQL , Web_Development	India	Gujarat	Ahm
11	10							Gujarat	Ahmedabad

Disconnected.

Fig. 3.2 Table Value

3.3 CONNECTING FORM WITH DATABASE

```
10  class clsDAL
11  {
12      string SERVER_Name = "DESKTOP-9361SGE\\SQLEXPRESS";
13      string DataBaseName = "db_EllipHR";
14      string UserID = "SA";
15      string Password = "4774";
16      public SqlConnection Con()
17      {
18          try
19          {
20              string connectionString = "Data Source=" + SERVER_Name + ";Initial Catalog=" + DataBaseName +
21
22              SqlConnection con = new SqlConnection(connectionString);
23              return con;
24          }
25          catch (Exception ex)
26          {
27              throw ex;
28          }
29      }
30
31
32  }
```

Fig. 3.3 Database Connection Code

- Performing CRUD Operations on data table.
- Bug fixes.
  - For Storing Updated value in database.
  - Fetching Id value form database.

3.4 COMBO BOX VALUES SYNCING WITH DATABASE

- Fetching Combo box values form database table using proper SQL query

	city	state	country
▶	Ahmedabad	Gujarat	India
	Mumbai	Maharastra	India
	Pune	Maharastra	India
	Delhi	Delhi	India
	Surat	Gujarat	India
	Rajkot	Gujarat	India
	Kingston	Ontario	Canada
	Jaipur	Rajasthan	India
	Bhopal	Madhya Pradesh	India
	Patna	Bihar	India
	Armstrong	British Columbia	Canada
	Vancouver	British Columbia	Canada
	Ottawa	Ontario	Canada
	Edmonton	Alberta	Canada
	New York City	New York	USA
	Los Angeles	California	USA
	Houston	Texas	USA
	Phoenix	Arizona	USA
	San Diego	California	USA
	Seattle	Washington	USA
	Detroit	Michigan	USA
	Las Vegas	Nevada	USA
	Baltimore	MaryLand	USA
*	*NULL*	*NULL*	*NULL*

Fig. 3.4 Combo box values table

- Event Handling – On clicking combo box, the database connection is established and values is fetched from the database table and displayed in the combo box (Drop down).
- Syncing Combo box with one another
  - Making State dependent on country
  - Making City Dependent on State
  - Make State blank on changing country
  - Make City blank on changing state
  - Removing redundancy
- Making form more Responsive - Setting “Anchor” for newly added fields.

CHAPTER – 4 – OPTIMIZATION USING THREADING

4.1 THREADING

- Optimization
  - Applying Threading on fetching of values for combo box from the database.
  - It's important because when there are 1000's of rows to be fetched from the database for multiple combo boxes, the application might suffer lag as it takes longer time for each combo box to fill.
  - Hence we require threading to fill all the combo box simultaneously to avoid the delay and application lag.
- Bug fixes
  - On applying threading in C# as java it didn't work as it throws the exception of "Trying to Access combo box multiple times".

4.2 BACKGROUND WORKER

- Background worker is used for threading in C#.
- We often use background threads when a time-consuming process needed to be executed in the background without affecting the responsiveness of the user interface. This is where a BackgroundWorker component comes into play.
- A BackgroundWorker component executes code in a separate dedicated secondary thread.
- We can create the BackgroundWorker at design-time by dragging onto a Form or at run-time using the BackgroundWorker class.

- The following code is added when you drag a BackgroundWorker component onto a Form.

```
1. private System.ComponentModel.BackgroundWorker backgroundWorker1;
2. this.backgroundWorker1 = new System.ComponentModel.BackgroundWorker();
```

4.3 BACKGROUNDWORKER CLASS PROPERTIES.

- CancellationPending - Indicates if an application has requested cancellation of a BackgroundWorker.
- IsBusy - Indicates if a BackgroundWorker is running an asynchronous operation.
- WorkerReportsProgress - Indicates of a BackgroundWorker can report progress updates.
- WorkerSupportsCancellation - Indicates if a BackgroundWorker supports asynchronous cancellation.

4.4 BACKGROUND WORKER EVENTS

- “DoWork” event : The time consuming processes is placed in DoWork Event and hence till the time consuming process is being executed in the background, we can access other functionality of the application.
- “ReportProgress” event : It’s shows the progress of time consuming process placed in DoWork Event
- “RunWorkerCompleted” event : After the completion of time consuming process, it is being executed in RunWokerCompleted event.

CHAPTER – 5 – LIVE APPLICATION

5.1 ELLIPSIS PORTAL

- Analyzing “Ellipsis Portal”

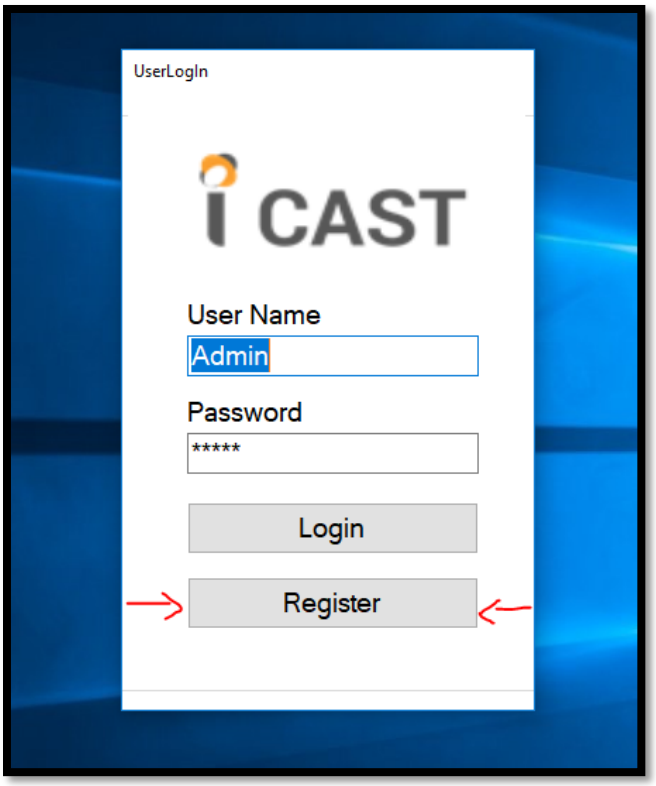


Fig. 5.1 Old Login

- Different modules :
  - Work Report
  - New Ticket
  - Due Ticket
  - My Ticket
  - Tickets Approved
  - Customer Master
  - Inquiry
  - Communication
  - Client Order
  - MasterUpload

- Logout

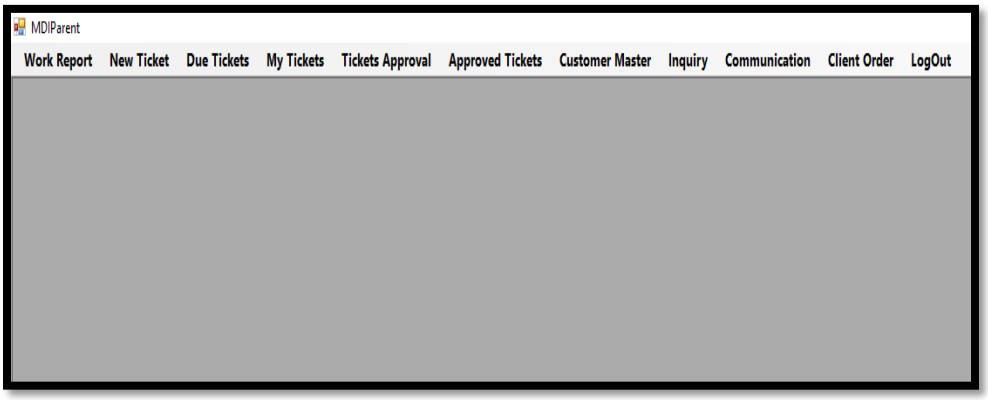


Fig. 5.2 Modules

5.2 MDI (Multiple Document Interface)

- The Multiple-Document Interface (MDI) is a specification that defines a user interface for applications that enable the user to work with more than one document at the same time under one parent form (window).

- MDI applications follow a parent form and child form relationship model. MDI applications allow you to open, organize, and work with multiple documents at the same time by opening them under the context of the MDI parent form; therefore, once opened, they can't be dragged out of it like an individual form.

- How to create MDI form :

1. Navigate to Solution Explorer, select the WinApp project, right-click, and select "Add" -> "Windows form". Change the Name value from "Form1.cs" to "ParentForm.cs", and click "Add".
2. Select the newly added ParentForm in the Design View. Select the ParentForm form by clicking the form's title bar, navigate to the Properties window, and set the following properties:
   - Set the "IsMdiContainer" property to True (the default value is False). Notice that the background color of the form has changed to dark gray.
   - Set the Size property's Width to 546 and Height to 411.

3. Drag a MenuStrip control to the ParentForm. In the top-left corner, you should now see a drop-down showing the text "Type Here". Enter the text "Open Forms" in the drop-down. This will be your main, top-level menu.
4. Now under the Open Forms menu, add a submenu by entering the text "Win App".
5. Under the Win App submenu, enter "User Info".
6. Now click the top menu, "Open Forms", and on the right side of it, type "Help". Under the Help menu, enter "Exit".
7. Now, click the top menu, on the right side of Help, type "Windows".
8. Under the Windows menu, add the following options as separate submenus: Cascade, Tile Horizontal, Tile Vertical, and Arrange Icons. These will help in arranging the child forms.
9. Now it's time to attach code to the submenus you have added under the main menu Open Forms. First, you'll add code for the submenu Win App, that basically will open the WinApp form. In the Design View, double-click the "Win App" submenu, that will take you to the Code View. Under the click event, add the following code:

   ```
   WinApp objWA = new WinApp();
   objWA.Show();
   ```

10. Now to associate functionality with the User Info submenu: double-click this submenu, and under the click event add the following code:

    ```
    UserInfo objUI = new UserInfo();
    objUI.Show();
    ```

11. To associate functionality with the Exit submenu located under the Help main menu, double-click "Exit", and under the click event add the following code:

    ```
    Application.Exit();
    ```

12. Now you have the form-opening code functionality in place, and you are nearly set to run the application. But first, you need to set the ParentForm as the start-up object. To do so, open Program.cs, and modify the "Application.Run(new UserInfo());" statement to the following:
    Application.Run(new ParentForm());

13. Now build the solution, and run the application by pressing F5; the MDI application will open

5.3 LOGIN

- Login through session in Live Application

```
29
30      public static void Create(int userId, int entityId, string userName, string userType, string companyNa
31      {
32          _Session = new Session()
33          {
34              UserId = userId,
35              EntityID = entityId,
36              UserName = userName,
37              UserType = userType,
38              CompanyName = companyName,
39              EmployeeId = EmployeeId
40          };
41      }
42
43      public static Session Get()
44      {
45          if (_Session == null)
46              _Session = new Session();
47
48          return _Session;
49      }
50
```

Fig. 5.3 Session

CHAPTER – 6 – ELLIPSIS PORTAL DATABASE

6.1 DATABASE TABLE

- Analyzing Tables for HR Portal.

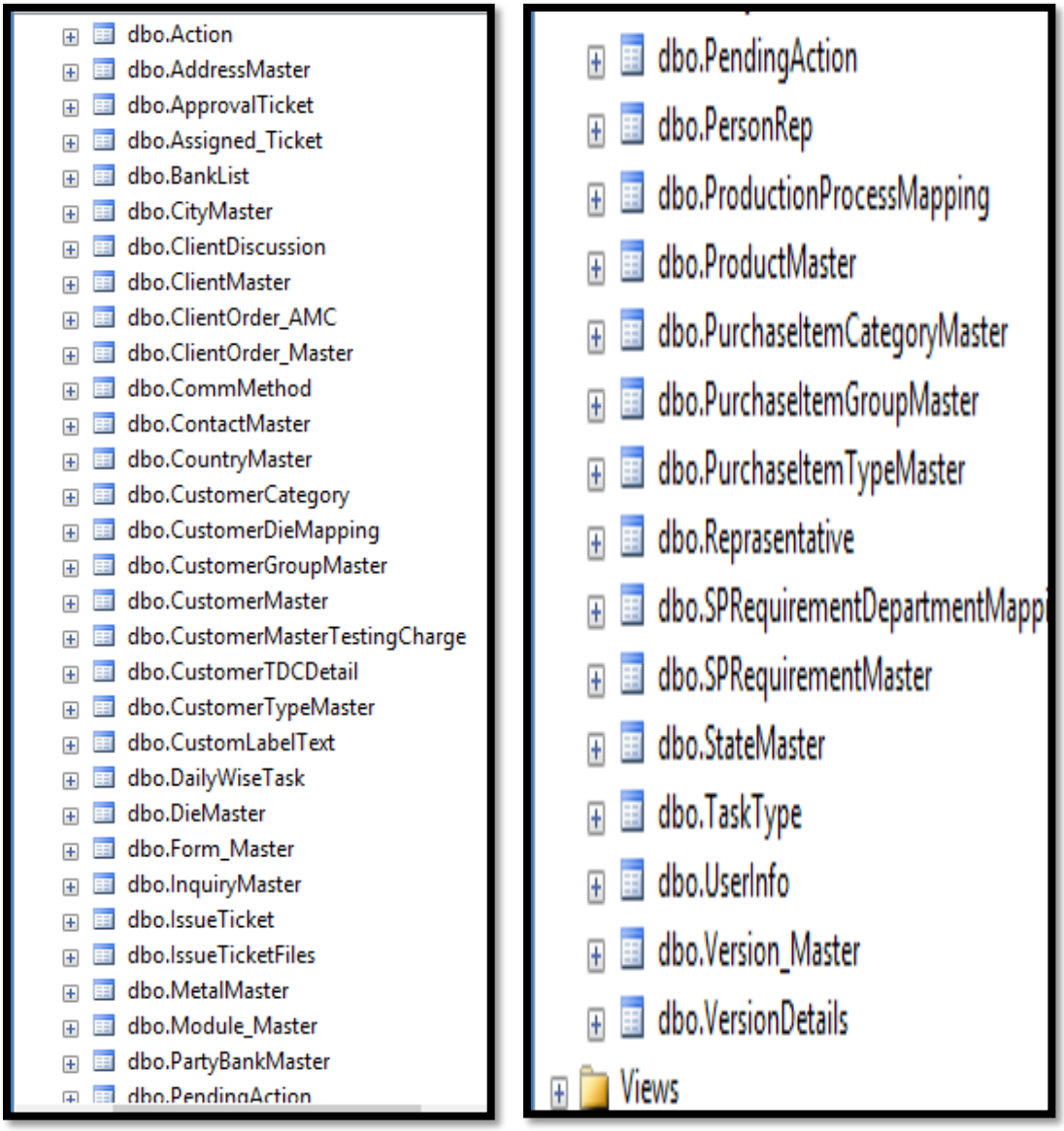


Fig. 6.1 Portal Database Tables

6.2 DATABASE STORED PROCEDURE

- Analyzing Stored Procedure:
  - We normally write SQL statements, like select, inserts, updates to access your data from database. If you find yourself using the same query over and over again, it would make sense to put it into a stored procedure.
  - Every time you write a query it is parsed in database. If you have written a stored procedure for it, it will be parsed once and can be executed N number of times.
  - Stored procedures can also improve performance. All the conditional logic and is written into a stored procedure which is a single execution block on the database server.

- Example of Stored Procedure :

```
alter procedure insertData
    (@RollNo int,
    @Name varchar(50),
    @Fees float)
    as
    begin
    insert into student values(@RollNo,@Name,@Fees)
    select * from student
    end
```

- Stored Procedure in Ellipsis Portal

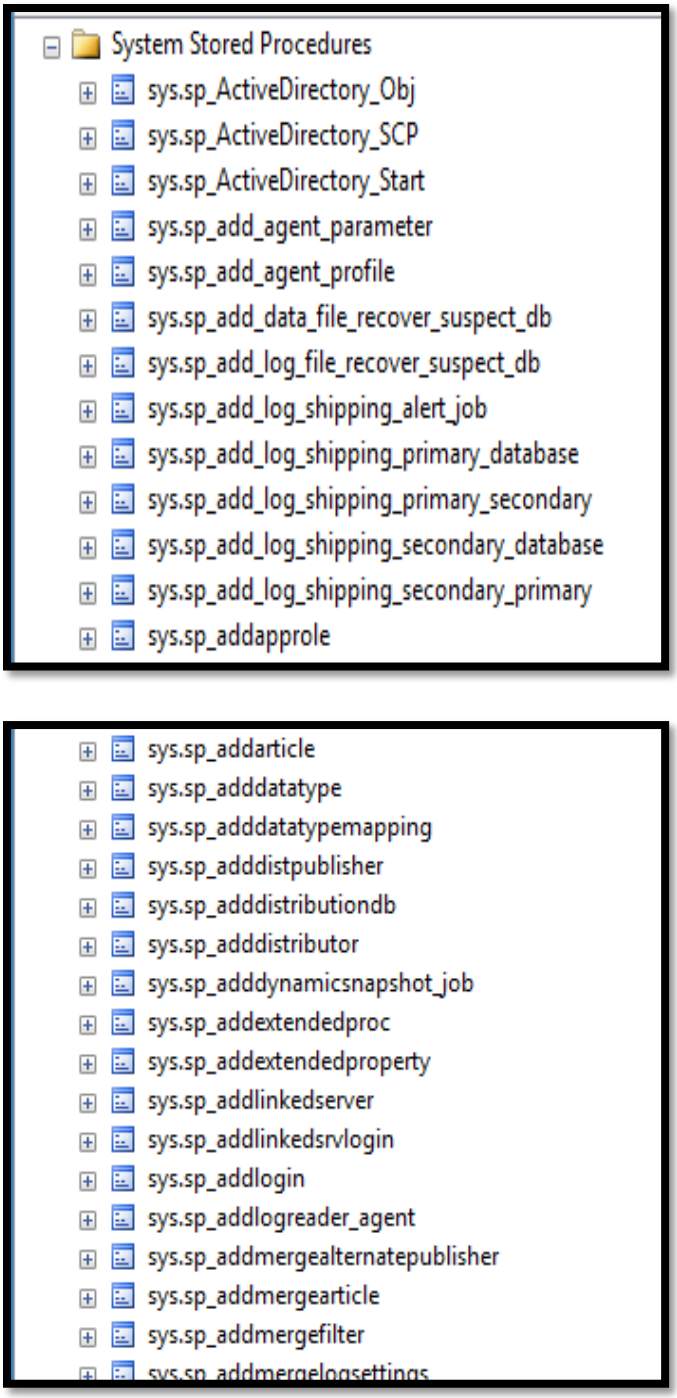


Fig. 6.2 Stored Procedures of Portal

CHAPTER – 7 – QA OF ELLIPSIS PORTAL

7.1 FINDING BUGS IN THE PORTAL

- Listing all the bugs:

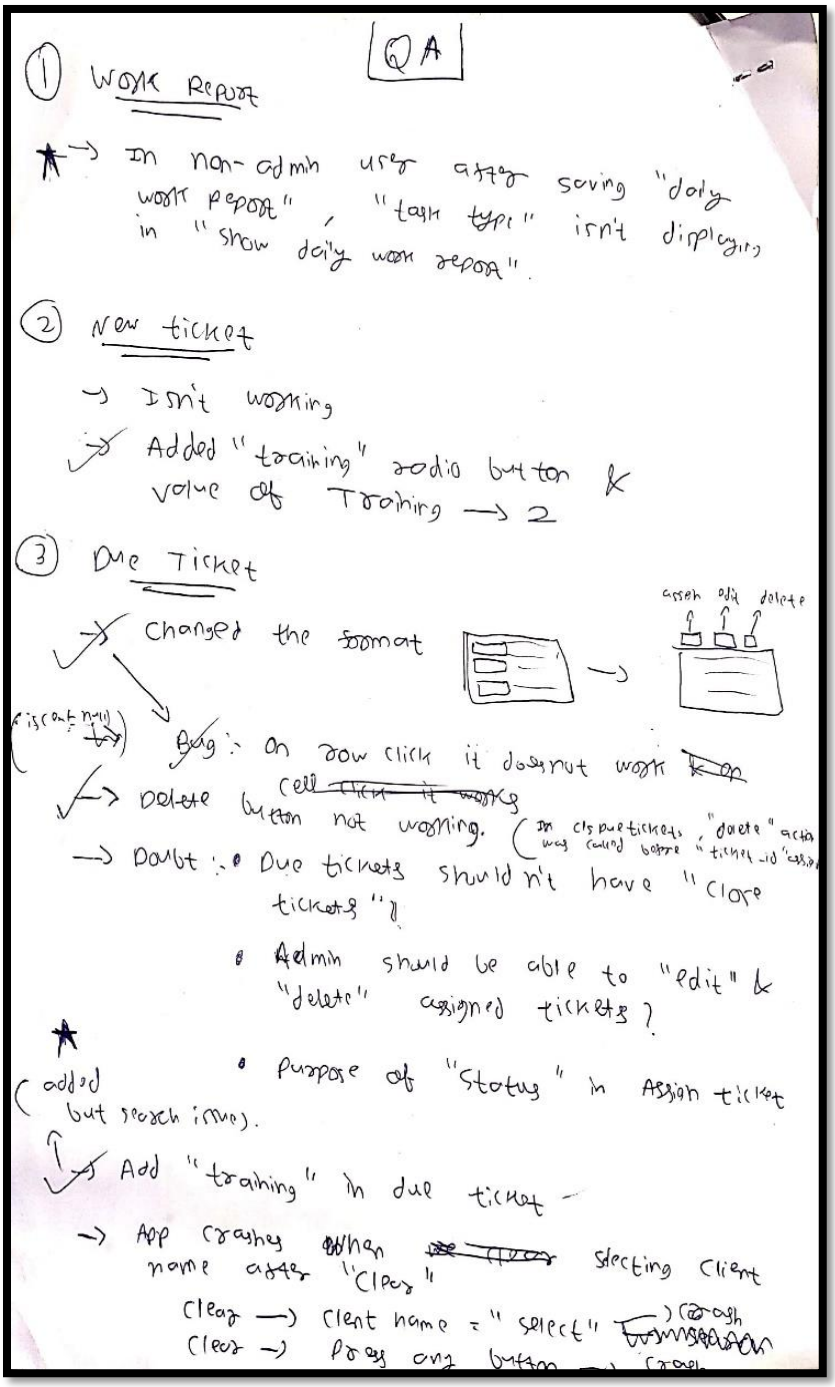


Fig. 7.1 Bug List -1

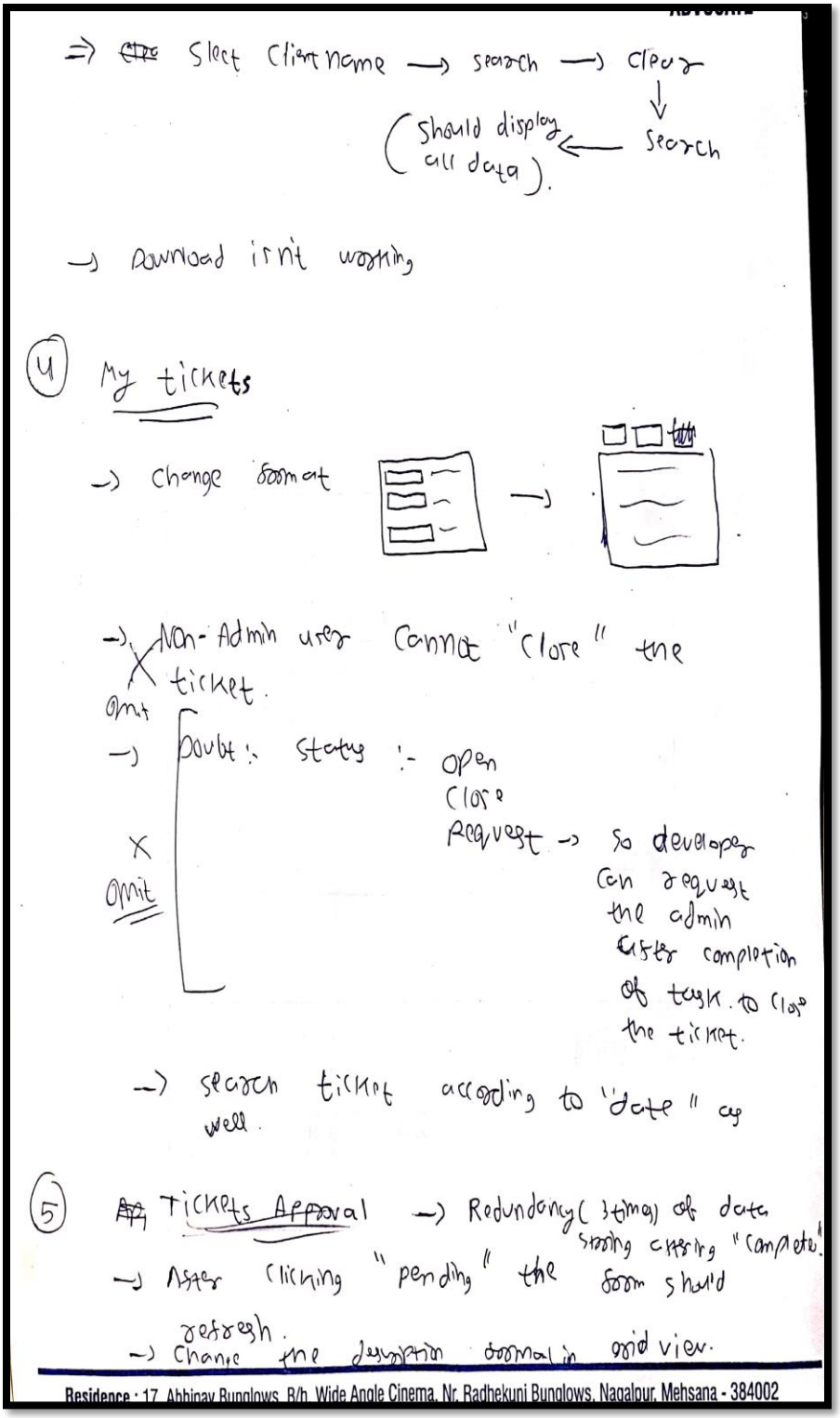


Fig. 7.2 Bug List -2

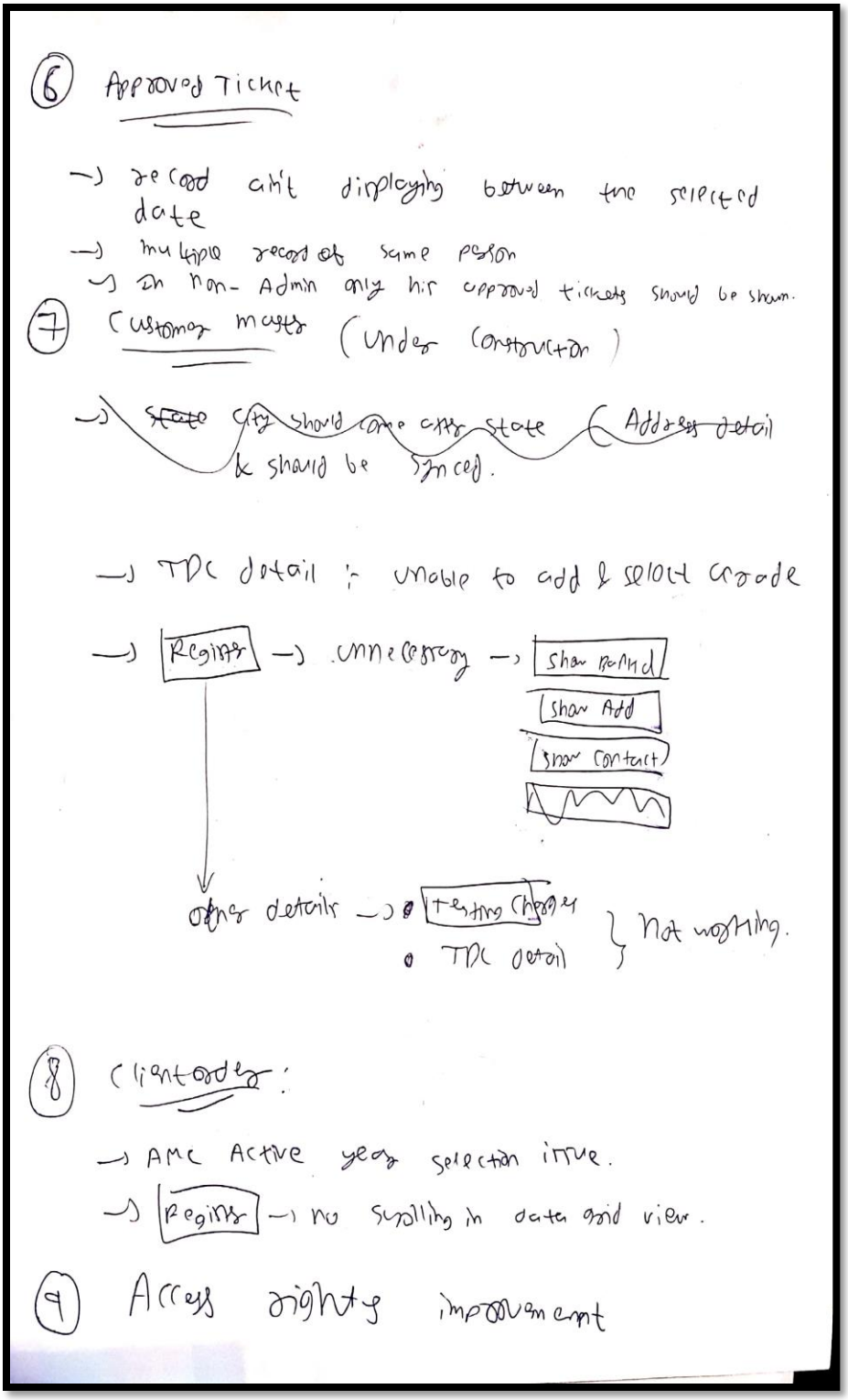


Fig. 7.3 Bug List -3

7.2 SOLVING BUGS IN THE PORTAL

- **Bugs in "Register"**
  - Register Button was not working and was causing application hang and crash
  - Debugging : On Debugging found that when the connection with the database was being opened, application hangs and then crashes
  - On Further debugging found that application does not go into the constructor of "clsRegister" class and hence the object of "SqlConnection" class was not being assigned with the connection and hence no connection was being established and no value is returned by "clsRegister" to the "UserRegister" class, while it still waits for the value and application hangs .
  - On further debugging found that the wrong connection class (clsConnection) was used to set the connection and on "Opening" connection the application used to try multiple times to set the connection and hence it used to hang and then finally crash.
  - Fix : Changed the connection class to "clsDAL".

- **Issues in Due Ticket** – on row click the buttons "Assign Ticket", "Edit Ticket", "Delete Ticket" wasn't working
  - Problem arrived due to "if (ex.RowIndex>=0 && ex.ColumnIndex>=0)".
  - Solution: Assign "ex=null" initially and then checking the condition " if (ex!=null)".
- **Delete button not working**
  - In clsDueTicket "delete" action was called before assigning which ticket to delete (ticket id).

- **Solved the issue of "Show Daily Work Report"**
  - Task type wasn't being showed in non- Admin users
  - Analyzing:
    - Admin was able to see the task type because for admin the "task_id" was matched with "task_type" from other table and value was fetched
    - But for non-admin users the above thing wasn't done and we got empty results.

- So, after a session of debugging found that problem was in stored procedure in data base.
- Problem : For non- admin users in stored procedure the “task_id” wasn’t matched with the “task_type” in the other table, and value wasn’t being fetched.
- Bug : Even after adding that the value wasn’t being fetched
- Other solution : On debugging found that the table column “TaskType” wasn’t being filed while submitting the report and on manually adding the value in table, “TaskType” was being fetched by the non-admin users.
- Solved : Modified the XML query and stored procedure to also include “TaskType” in data base table. And we get the complete results.

- **Solved the issue of “Training” search button in “Due Tickets”**
  - On Adding new radio button “Training”, the result after search was same as radio button “New requirement”.
  - Analyzing:
    - Debugging: debugged the whole code to find if the value for “Training” was left to pass.
    - Even after debugging, problem Continues
    - Further analyzing: On Passing any value except 0 off the radio button, the data was similar all the time
    - Conclusion: Developer might have used the condition like “if(0) {} else{}” so, any value except zero is showing the same result.
    - Debugging: Found that issue is in stored procedure and not in development code.
    - But there wasn’t any condition like that in stored procedure.
    - Deep Analyzing: On analyzing the old stored procedure found that, the value was in “BIT” so any value except 0 & 1 won’t be consider and it will display the result of 1 if value is > 1.
    - Solution: Changed the datatype to SmallInt and the bug is resolved.

- **“New Ticket” isn’t working**
  - Bug : Application crashes on opening “New Ticket”

- Debug : “New Ticket” -> “Initialize Component()” -> “ image upload” -> “Initialize Component()” -> “Acro pdf” -> CRASH (With unhandled exception).
- Handled the exception with try-catch – SOLVED.

- Close all open form when new form is being opened in MDI Parent
- Solving the redundancy issue while displaying “Approved Tickets”.

- **Due to changes in stored procedure(SP) “New Ticket” stopped working**
  - Problem – new variable in SP “Assigned Status” was not given any default value, due to which, when SP was called it expected some value for that variable but it didn’t get and application crashes.
  - Solution – Given default value to that variable

CHAPTER – 8 – RDLC & SVN

8.1 INTRODUCTION TO RDLC

- RDLC Stands for Report Definition Language Client Side. It is used to create reports using Microsoft Reporting Technology.
- It is not a third party report and is a built-in reporting service in Microsoft Visual Studio.
- The .rdlc is the format of a report file used by the Microsoft reporting system. Mainly Microsoft Visual Studio creates this *rdlc file extension* that contain report definitions.

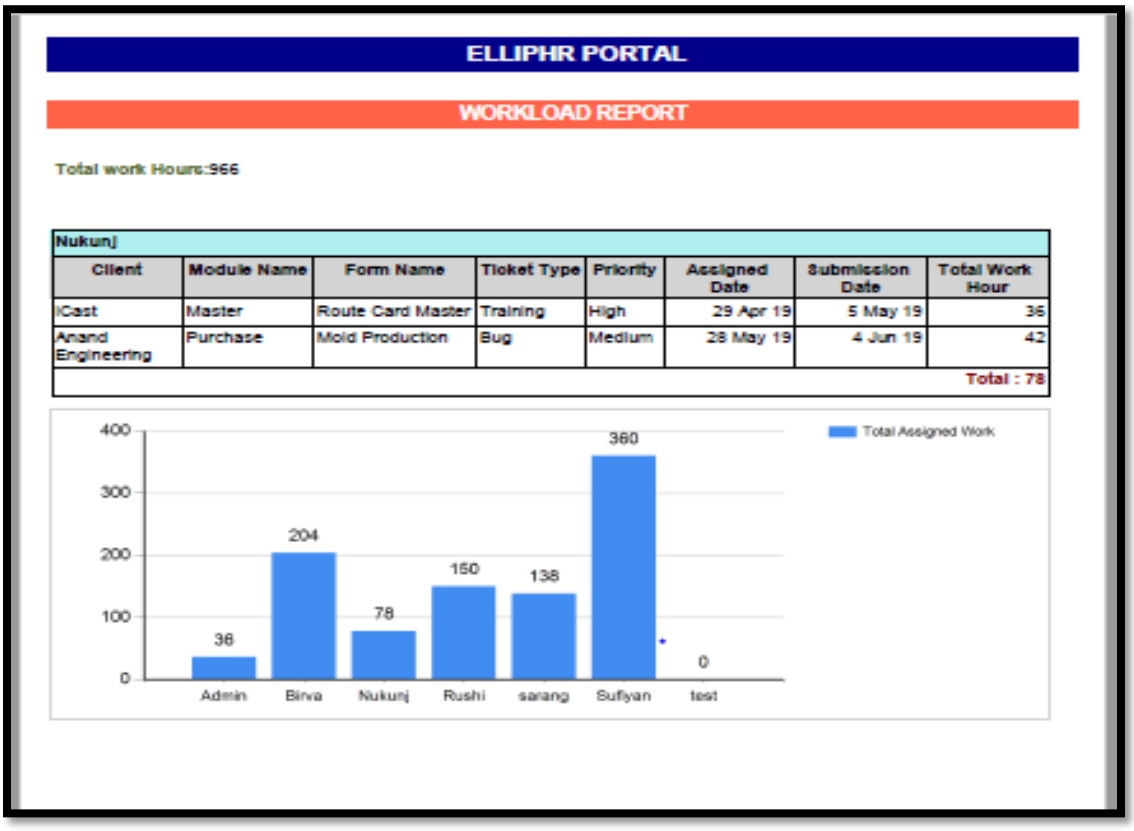
8.2 HOW TO ADD A RDLC REPORT IN A PROJECT

- In the Project or Web Site menu or write click on Solution Explorer, select Add New Item. Add New Item dialog box will be open
- From the Installed Templates pane select Visual Basic or Visual C#
- From the Templates pane select Report or Report Wizard
- If you select Report a blank .rdlc file will be added to the project
- If you select Report Wizard the Report Wizard will be started to guide you through the steps in creating a report

8.3 HOW TO DISPLAY THE RDLC REPORT IN A REPORTVIEWER CONTROL IN APPLICATION?

- In Microsoft Visual Studio open the application project.
- Select the form or page that will display the report.
- From the Toolbox add a ReportViewer control to the form.
- Set the Size and position of the control on the page or form.
- In the ReportViewer Tasks Smart tags panel select an existing .rdlc file in the Choose Report. drop-down list Or click Design a new report to create a new report using the Report Wizard.
- To preview the report build or deploy the application and browse that form.

8.4 RDLC REPORTS IN ELLIPSIS PORTAL



ELLIPHR PORTAL

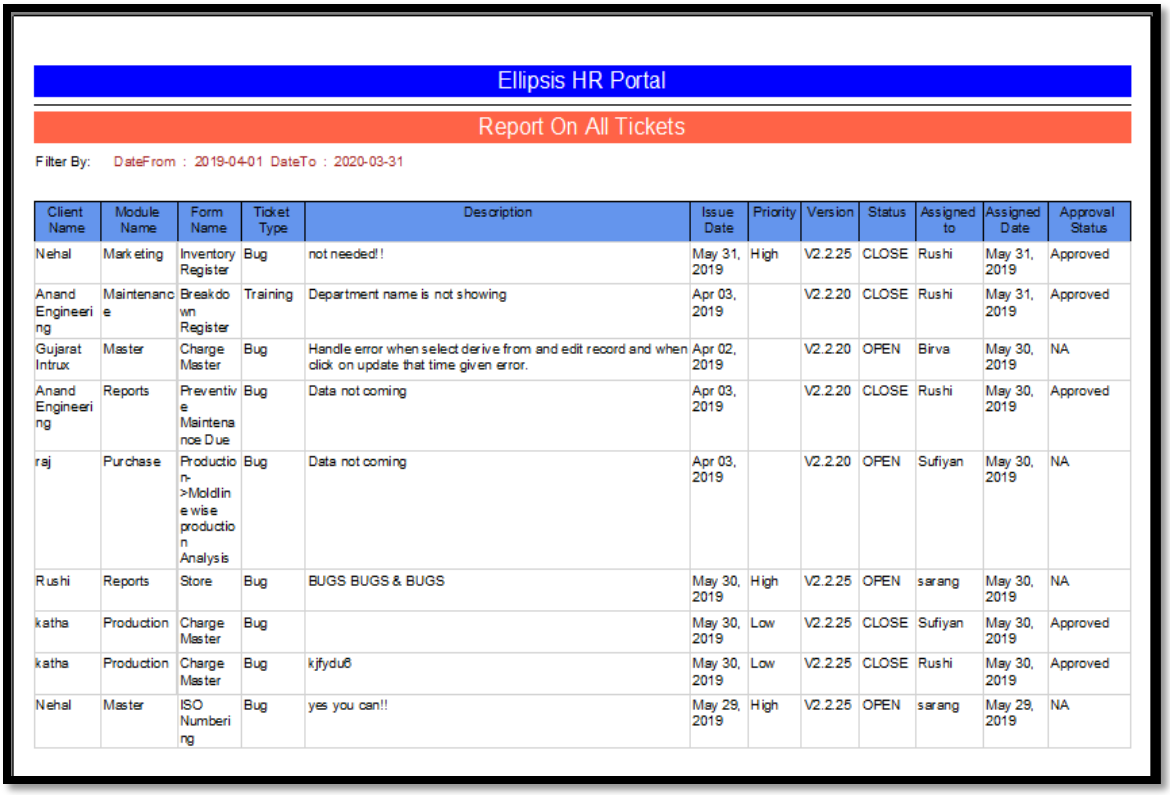
WORKLOAD REPORT

Total work Hours:966

Nukunj

Client	Module Name	Form Name	Ticket Type	Priority	Assigned Date	Submission Date	Total Work Hour
iCast	Master	Route Card Master	Training	High	29 Apr 19	5 May 19	36
Anand Engineering	Purchase	Mold Production	Bug	Medium	28 May 19	4 Jun 19	42
							Total : 78

Fig. 8.1 Work Load Report



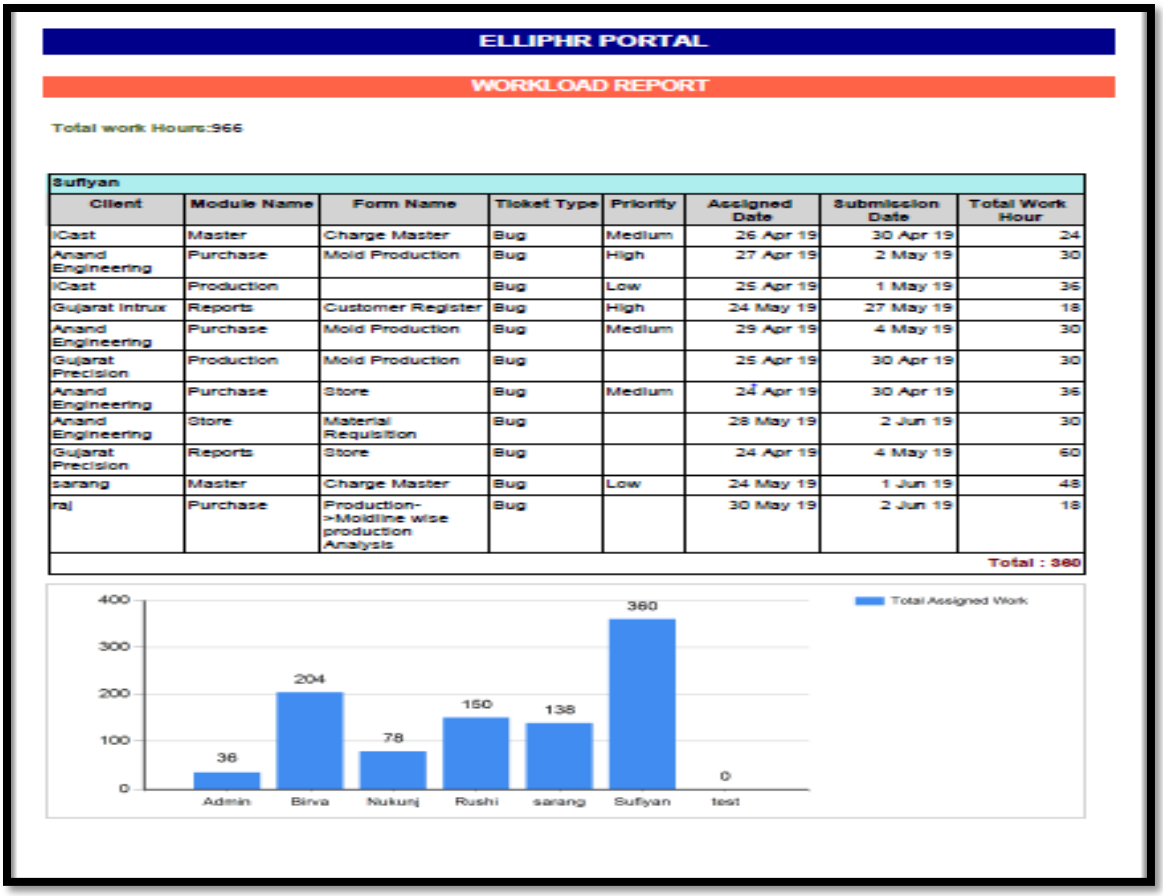
Ellipsis HR Portal

Report On All Tickets

Filter By: DateFrom : 2019-04-01 DateTo : 2020-03-31

Client Name	Module Name	Form Name	Ticket Type	Description	Issue Date	Priority	Version	Status	Assigned to	Assigned Date	Approval Status
Nehal	Marketing	Inventory Register	Bug	not needed!!	May 31, 2019	High	V2.2.25	CLOSE	Rushi	May 31, 2019	Approved
Anand Engineering	Maintenance	Breakdown Register	Training	Department name is not showing	Apr 03, 2019		V2.2.20	CLOSE	Rushi	May 31, 2019	Approved
Gujarat Intrux	Master	Charge Master	Bug	Handle error when select derive from and edit record and when click on update that time given error.	Apr 02, 2019		V2.2.20	OPEN	Birva	May 30, 2019	NA
Anand Engineering	Reports	Preventive Maintenance Due	Bug	Data not coming	Apr 03, 2019		V2.2.20	CLOSE	Rushi	May 30, 2019	Approved
raj	Purchase	Production->Moldline wise production Analysis	Bug	Data not coming	Apr 03, 2019		V2.2.20	OPEN	Sufiyan	May 30, 2019	NA
Rushi	Reports	Store	Bug	BUGS BUGS & BUGS	May 30, 2019	High	V2.2.25	OPEN	sarang	May 30, 2019	NA
katha	Production	Charge Master	Bug		May 30, 2019	Low	V2.2.25	CLOSE	Sufiyan	May 30, 2019	Approved
katha	Production	Charge Master	Bug	kjfyduб	May 30, 2019	Low	V2.2.25	CLOSE	Rushi	May 30, 2019	Approved
Nehal	Master	ISO Numbering	Bug	yes you can!!	May 29, 2019	High	V2.2.25	OPEN	sarang	May 29, 2019	NA

Fig. 8.2 Report on All Tickets



ELLIPHR PORTAL

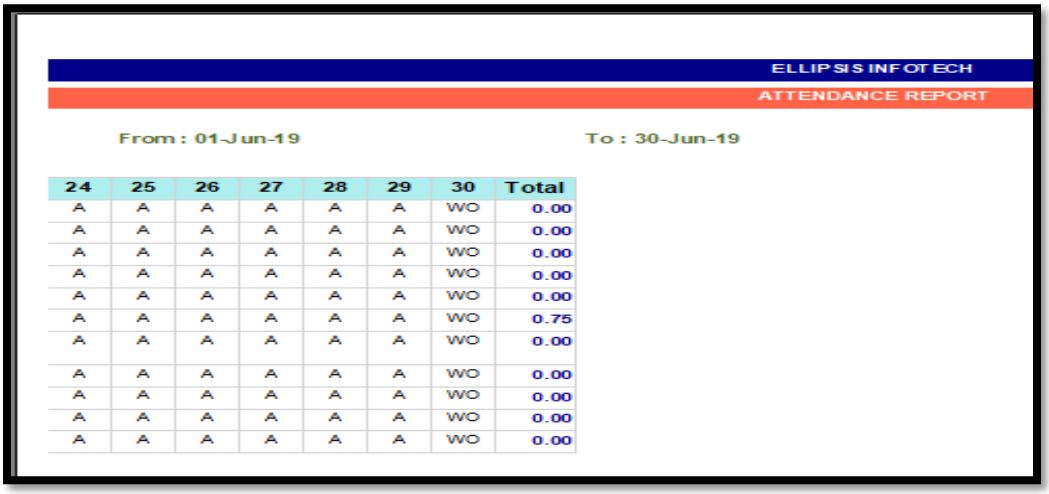
WORKLOAD REPORT

Total work Hours:966

Sufiyan

Client	Module Name	Form Name	Ticket Type	Priority	Assigned Date	Submission Date	Total Work Hour
ICast	Master	Charge Master	Bug	Medium	26 Apr 19	30 Apr 19	24
Anand Engineering	Purchase	Mold Production	Bug	High	27 Apr 19	2 May 19	30
ICast	Production		Bug	Low	25 Apr 19	1 May 19	36
Gujarat Intrux	Reports	Customer Register	Bug	High	24 May 19	27 May 19	18
Anand Engineering	Purchase	Mold Production	Bug	Medium	29 Apr 19	4 May 19	30
Gujarat Precision	Production	Mold Production	Bug		25 Apr 19	30 Apr 19	30
Anand Engineering	Purchase	Store	Bug	Medium	24 Apr 19	30 Apr 19	36
Anand Engineering	Store	Material Requisition	Bug		28 May 19	2 Jun 19	30
Gujarat Precision	Reports	Store	Bug		24 Apr 19	4 May 19	60
sarang	Master	Charge Master	Bug	Low	24 May 19	1 Jun 19	48
raj	Purchase	Production->Moldline wise production Analysis	Bug		30 May 19	2 Jun 19	18
							Total : 360

Fig. 8.3 Detailed Work Load Reports



ELLIPSIS INFOTECH

ATTENDANCE REPORT

From : 01-Jun-19 To : 30-Jun-19

24	25	26	27	28	29	30	Total
A	A	A	A	A	A	WO	0.00
A	A	A	A	A	A	WO	0.00
A	A	A	A	A	A	WO	0.00
A	A	A	A	A	A	WO	0.00
A	A	A	A	A	A	WO	0.00
A	A	A	A	A	A	WO	0.75
A	A	A	A	A	A	WO	0.00
A	A	A	A	A	A	WO	0.00
A	A	A	A	A	A	WO	0.00
A	A	A	A	A	A	WO	0.00

Fig. 8.4 Attendance Report

8.5 SVN

- **It stands for Subversion(SVN).** SVN used to be one of the most popular version control systems.
- **Version Control System** (VCS) is a software that helps software developers to work together and maintain a complete history of their work.
- Allow developers to work simultaneously.
- Do not overwrite each other's changes.
- Maintain history of every version of everything.
- **Repository:** A repository is the heart of any version control system. It is the central place where developers store all their work. Repository not only stores files but also the history. Repository is accessed over a network, acting as a server and version control tool acting as a client. Clients can connect to the repository, and then they can store/retrieve their changes to/from repository. By storing changes, a client makes these changes available to other people and by retrieving changes, a client takes other people's changes as a working copy.
- **Trunk:** The trunk is a directory where all the main development happens and is usually checked out by developers to work on the project.
- **Tags**: The tags directory is used to store named snapshots of the project. Tag operation allows to give descriptive and memorable names to specific version in the repository.

  For example, LAST_STABLE_CODE_BEFORE_EMAIL_SUPPORT is more memorable than

  Repository UUID: 7ceef8cb-3799-40dd-a067-c216ec2e5247 and

  Revision: 13
- **Branches:** Branch operation is used to create another line of development. It is useful when you want your development process to fork off into two different directions. For example, when you release version 5.0, you might want to create a branch so that development of 6.0 features can be kept separate from 5.0 bug-fixes.
- **Working copy:** Working copy is a snapshot of the repository. The repository is shared by all the teams, but people do not modify it directly. Instead each developer checks out the

working copy. The working copy is a private workplace where developers can do their work remaining isolated from the rest of the team.

- **Commit changes:** Commit is a process of storing changes from private workplace to central server. After commit, changes are made available to all the team. Other developers can retrieve these changes by updating their working copy. Commit is an atomic operation. Either the whole commit succeeds or is rolled back. Users never see half finished commit.

CHAPTER - 9- ADDING NEW MODULES AND FEATURES

9.1 DAILY WORK REPORT

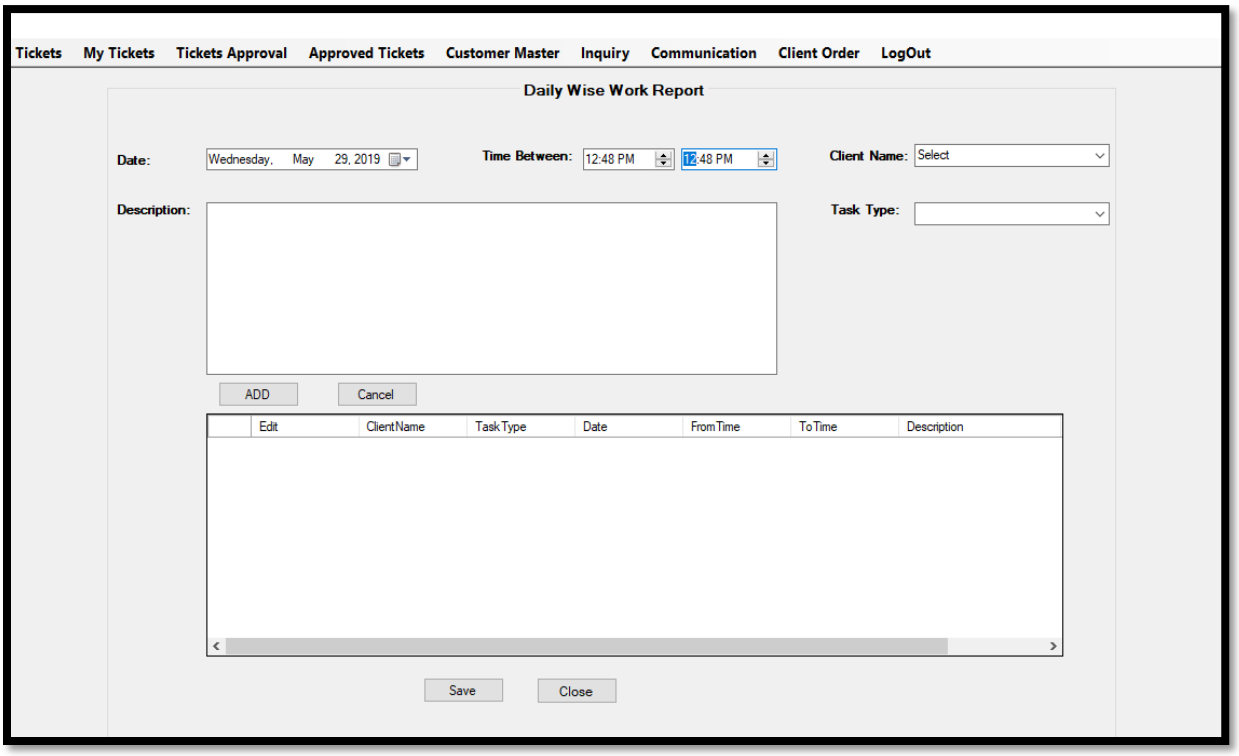


Fig. 9.1 Daily Work Report

- Adding "User Name" Combo box
- Changed the code of "Search" button - Displaying "Daily Work Report" on the basis of selected "User Name".
- Added "Ticket Id" select in combo box

9.2 ASSIGN TICKET

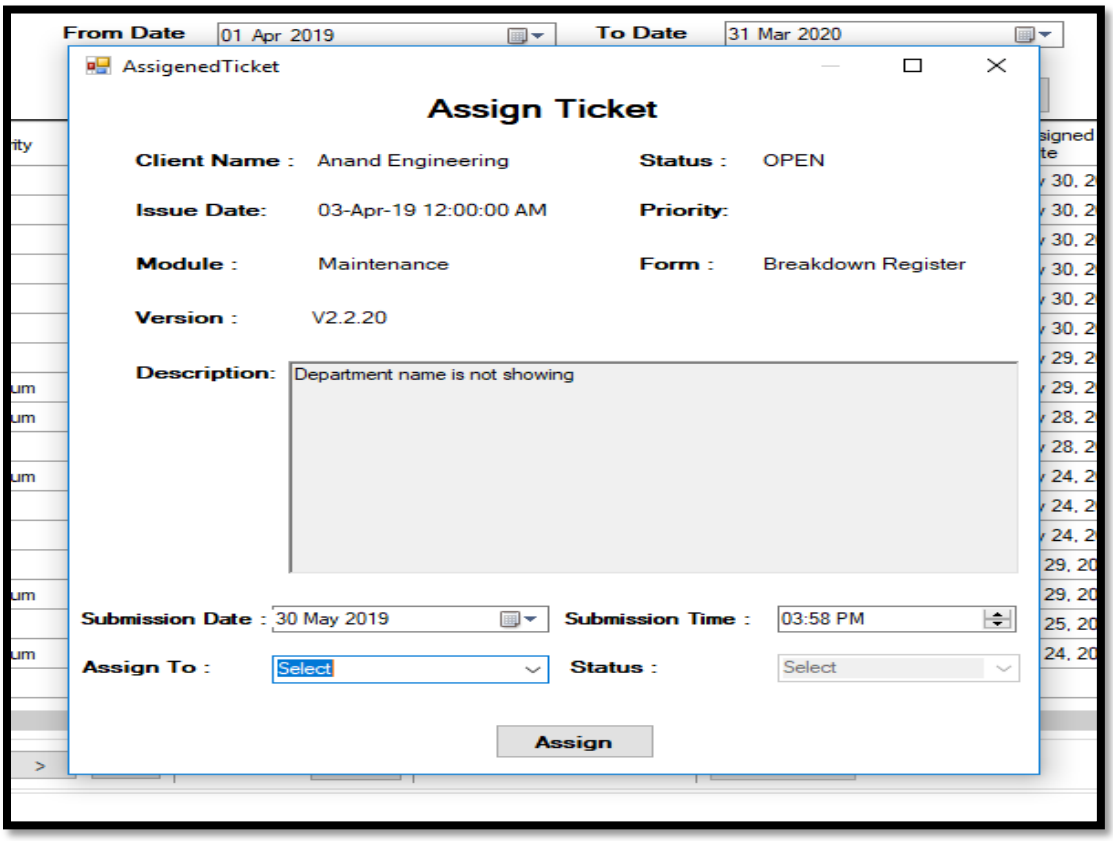


Fig. 9.2 Assign Ticket

- Adding QA levels – The number of QA test a ticket has to pass after it has been closed by a developer
- Changing the format and making it more attractive.
- "Complete" checkbox non-Admin Users.
- Auto time of completion date and time,
- Hours of work

9.3 NEW TICKET

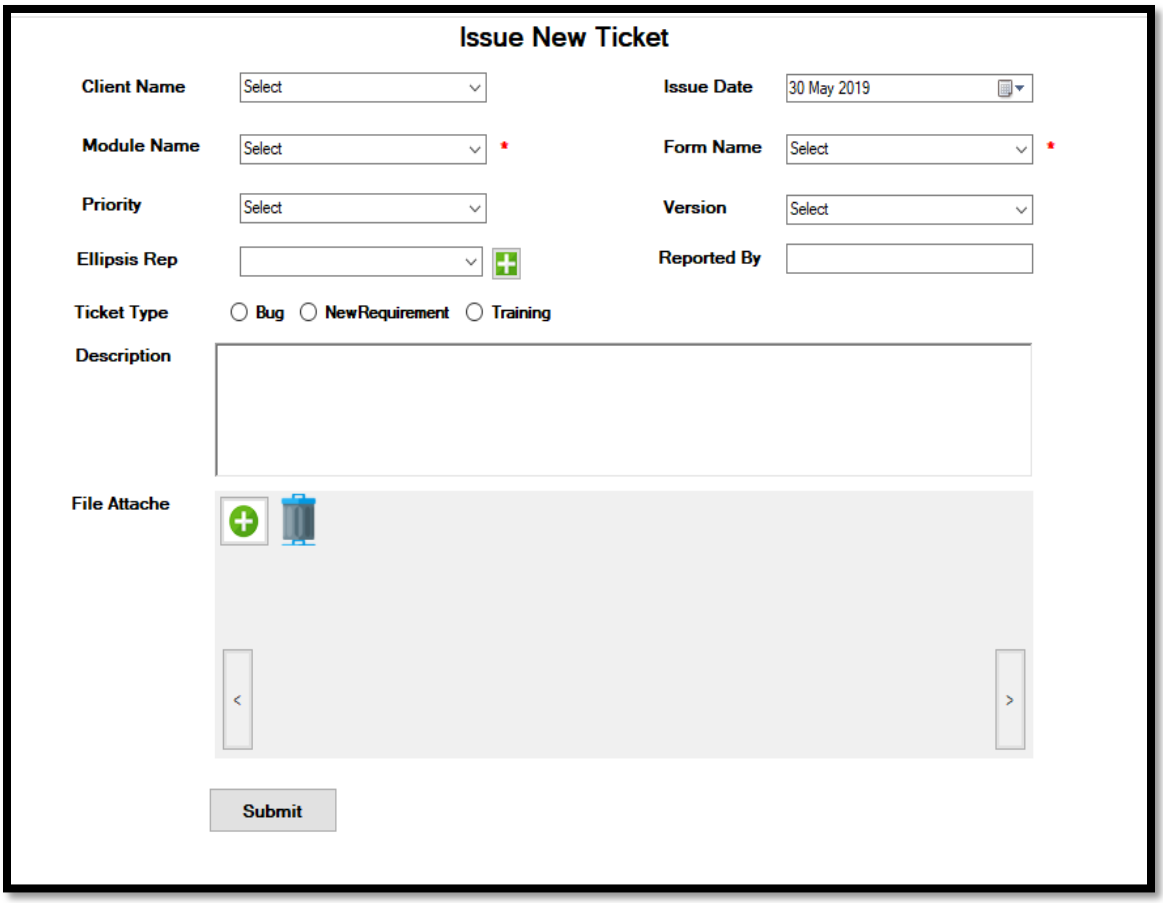


Fig. 9.3 New Ticket

- Added "Training" radio button and linked it with every function in the code
- Added "+" button in New Ticket to add new value in combo box through database for,
  - Module Name
  - Form Name
  - Version

9.4 DUE TICKETS

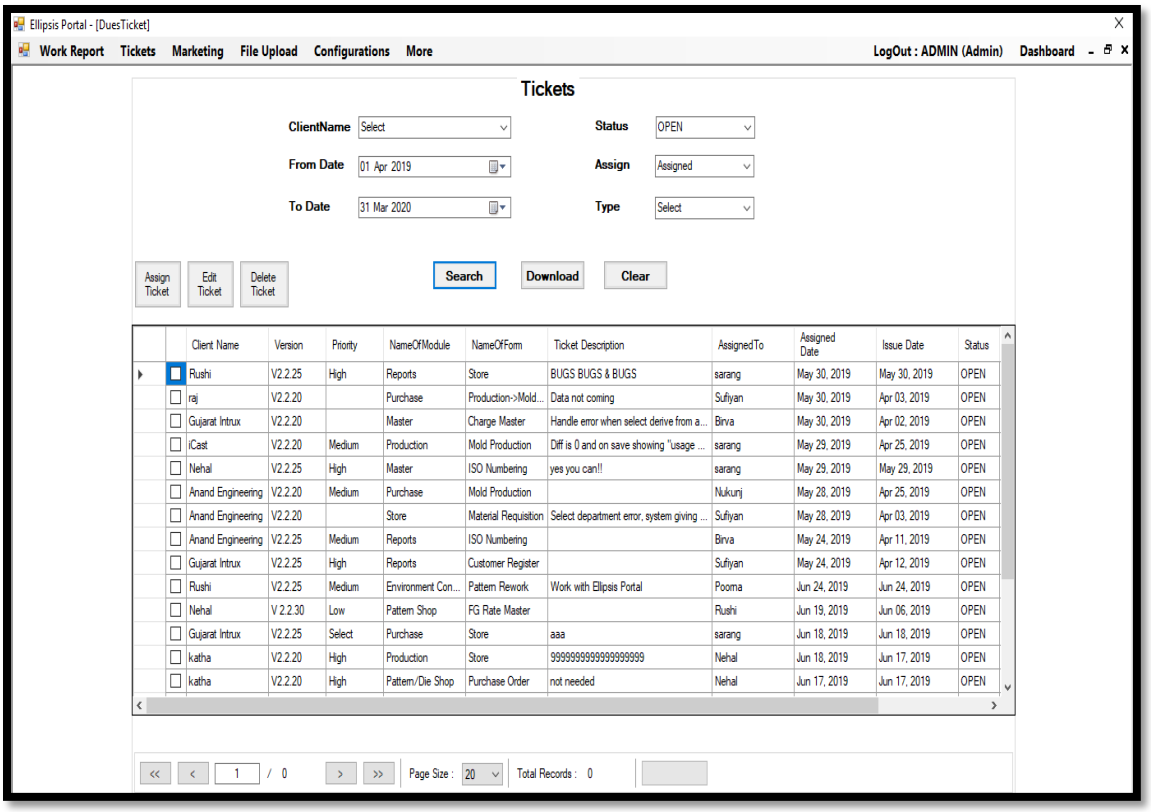


Fig. 9.4 Due Tickets

- Created single button for “Assign Ticket”, “Edit Ticket”, “Delete Ticket” instead of button on every field. Adding checkbox in Data Grid View to select a row
- Handling checkbox events.
- Allowing multiple assign, delete in due tickets
- Multiple Edit is prohibited.
- Added multiple filter in due tickets.
  - OPEN, CLOSE, ALL
  - Assigned, Not Assigned, ALL
  - Bug, New requirement, Training, ALL
- Deactivated the row click and kept only checkboxes working.
- Changed the UI of filters in due tickets – Como box instead of radio buttons.
- Back-Hand Working of the filters.

9.5 ACCESS RIGHTS

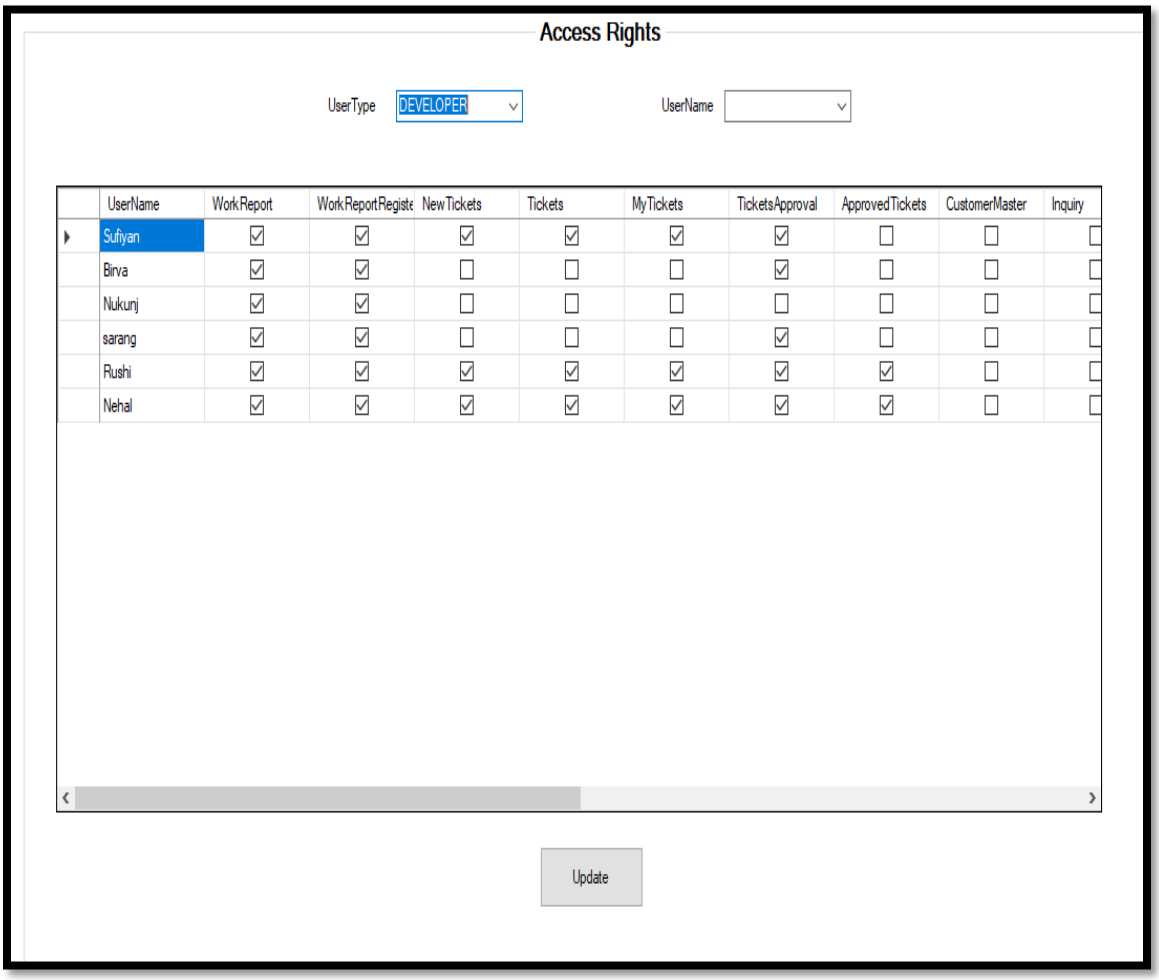


Fig. 9.5 Access Rights

- Adding a new module through which admin can decide which menu can be accesses by which user
- Step – 1 – Created a new table “Access Rights”, which store the value for every module and which user has access to which module (values 0 – not accessible, 1 – Accessible).
- Step – 2 –On “Register” a new User, the User must get default access rights according to its type (DEVELOPER, QA, CLIENT).
- Step-3 – Creating a new win form, having fields: User Type (Combo box) , User Name(Combo Box) and a Data Grid View.
- Step -4 – Getting Data from Access Rights to Data Grid View.

- Step – 5- Updating the changes made in DGV to the database table.
- Step – 6 – On user login, giving access to particular user according to the values in database
  - On login get the values of data base table to data table
  - Keeping Visibility FALSE for all modules initially.
  - Giving all rights to ADMIN
  - For other users checking the data table and where the value is 1, keeping the visibility TRUE for that module.
- Step -7 – Final Changes in Stored Procedure
  - Removing unwanted columns and creating a new SP for this module [UpdateAccessRights].

9.6 MDI

Fig. 9.6 MDI

- Combining all the Modules and adding it as Submodules.
- Making MDI form more attractive through company logo
- Adding name and designation of the User who is logged in, in menu strip.
- Adding header as “ELLIPSIS PORTAL”.

9.7 REGISTER

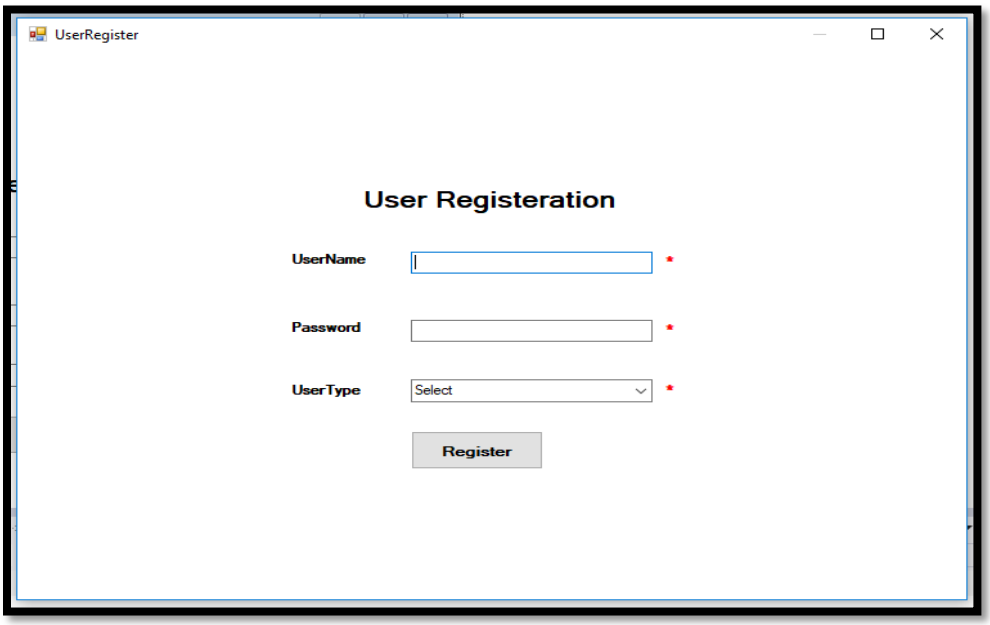


Fig. 9.7 Register

9.8 LOGIN

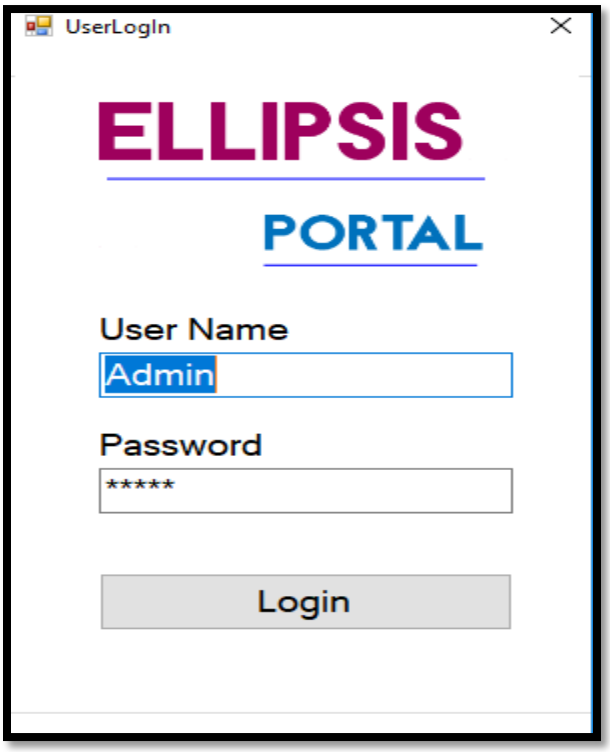


Fig. 9.8 Login

9.9 LEAVE APPLICATION

- Creating the UI of leave Application, find the image below :

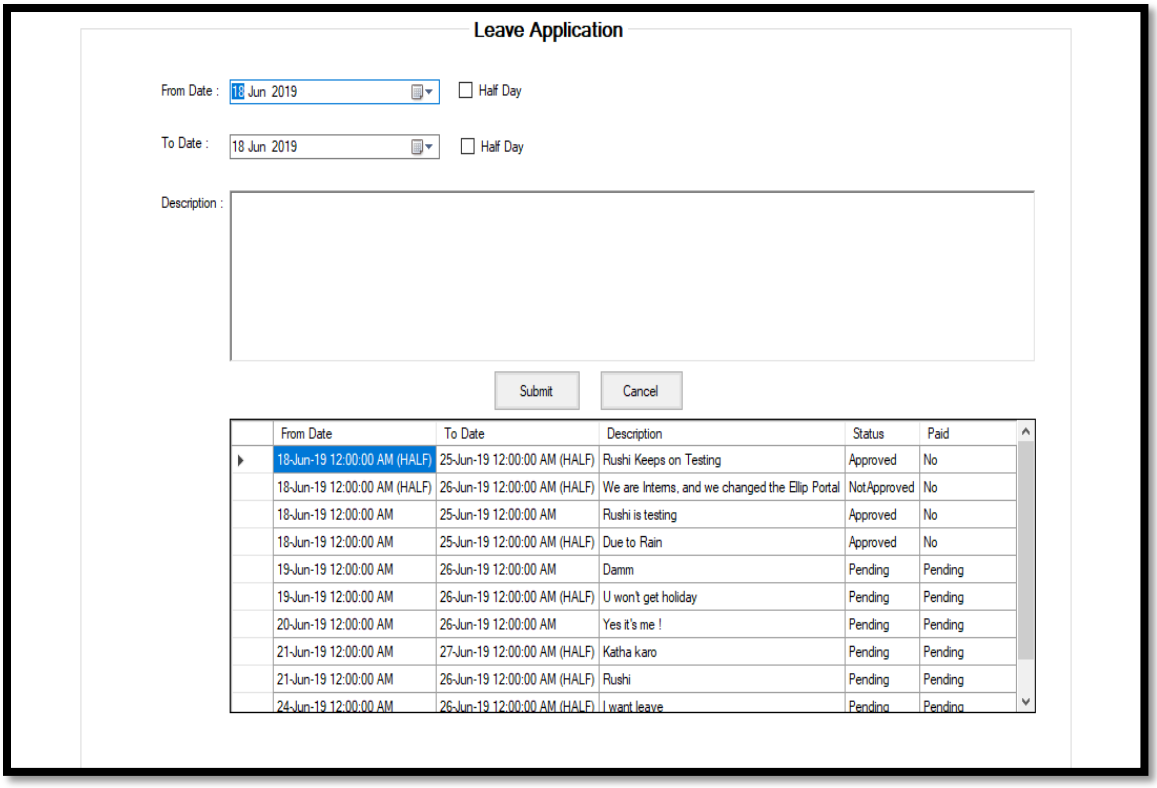


Fig. 9.9 Leave Application

- Writing the backend code for it –
  - Connecting form with database
  - Writing event on Submit button
  - Displaying all the previous application in data grid view
- Debugging - Checking the working of leave application

9.10 LEAVE APPLICATION REGISTER

- Deciding UI of Leave Application Register, where all the leave application will be displayed

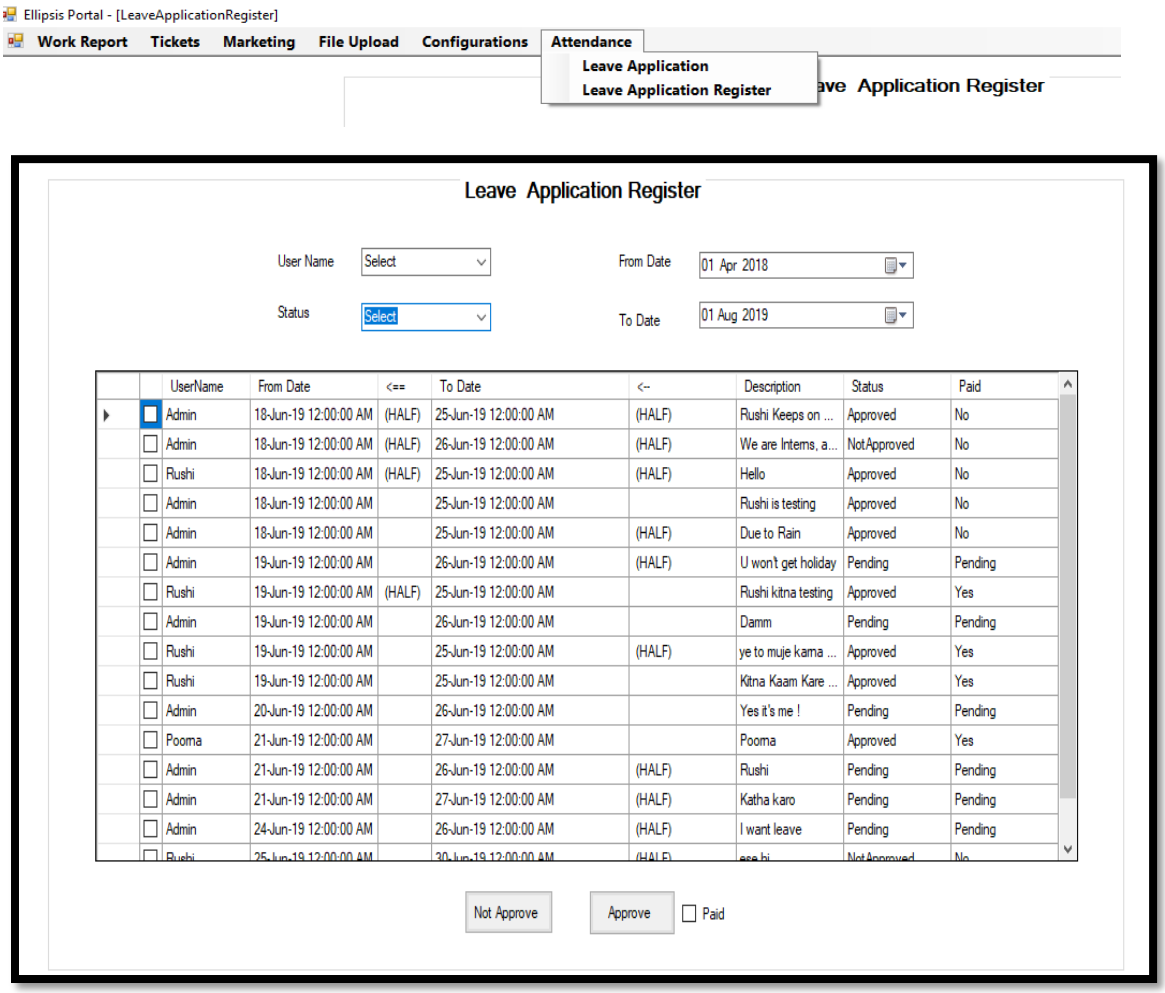


Fig. 9.10 Leave Application Register

- Basic connection of form with the database table and stored procedure.
- Brining all the leave applications in the Data Grid View
- Setting the checkbox for half day and displaying it in data grid view
- Working of buttons: Approved, Not Approved and paid.

9.11 PERFORMANCE CRITERIA

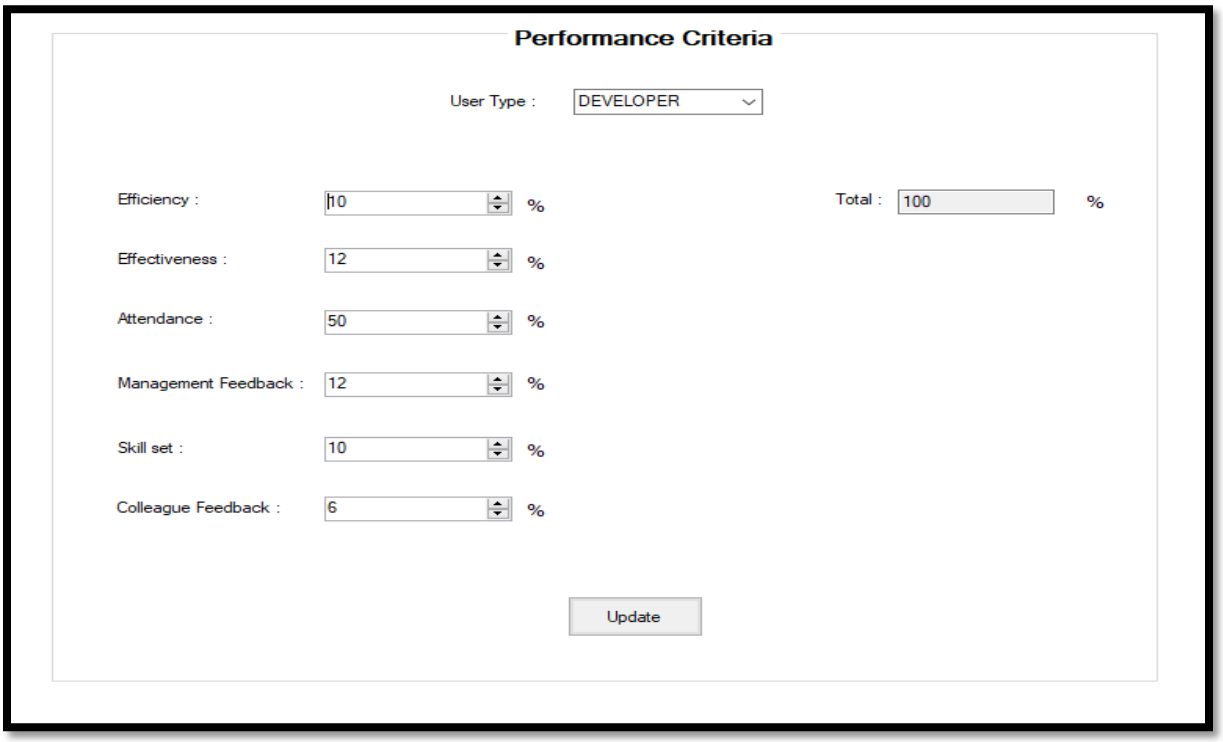


Fig. 9.11 Performance Criteria

- A module through which Admin can change the weightage of the criteria through which an employee's performance is calculated.

9.12 PERFORMANCE MODULE

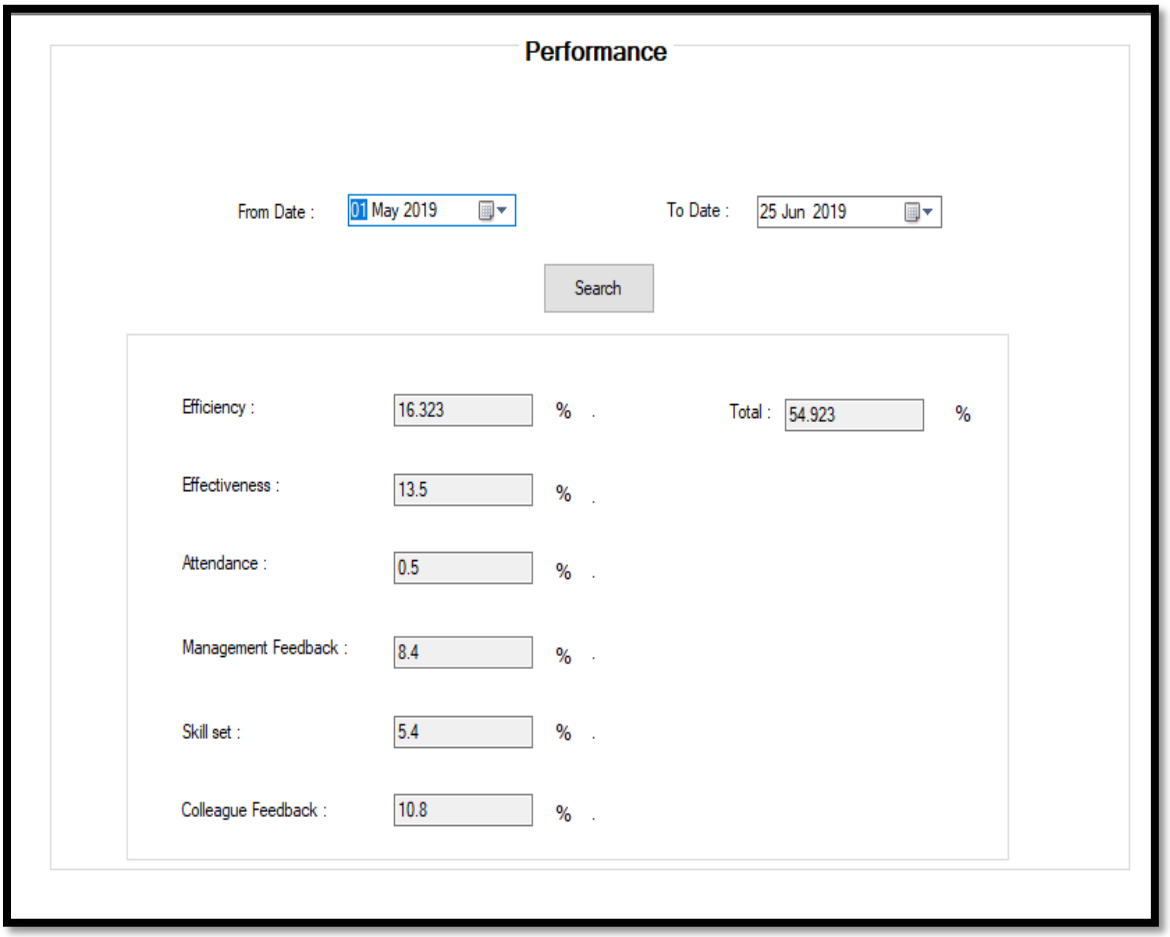


Fig. 9.12 Performance

- Module in which every User can see their own performance in every aspect
  - Efficiency
  - Effectiveness
  - Attendance
  - Management Feedback
  - Skill Set
  - Colleague Feedback
- And Admin can see everyone's performance.

9.13 MANAGEMENT FEEDBACK

- A module through which Management committee can give feedback to any employee.

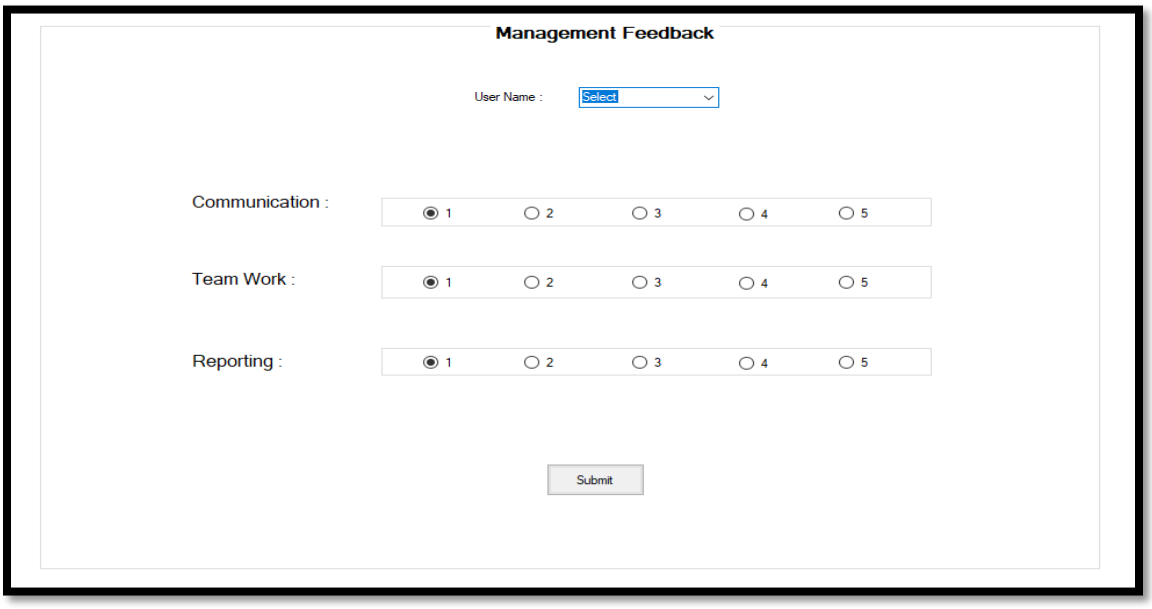


Fig. 9.13 Management Feedback

9.14 SKILL SET

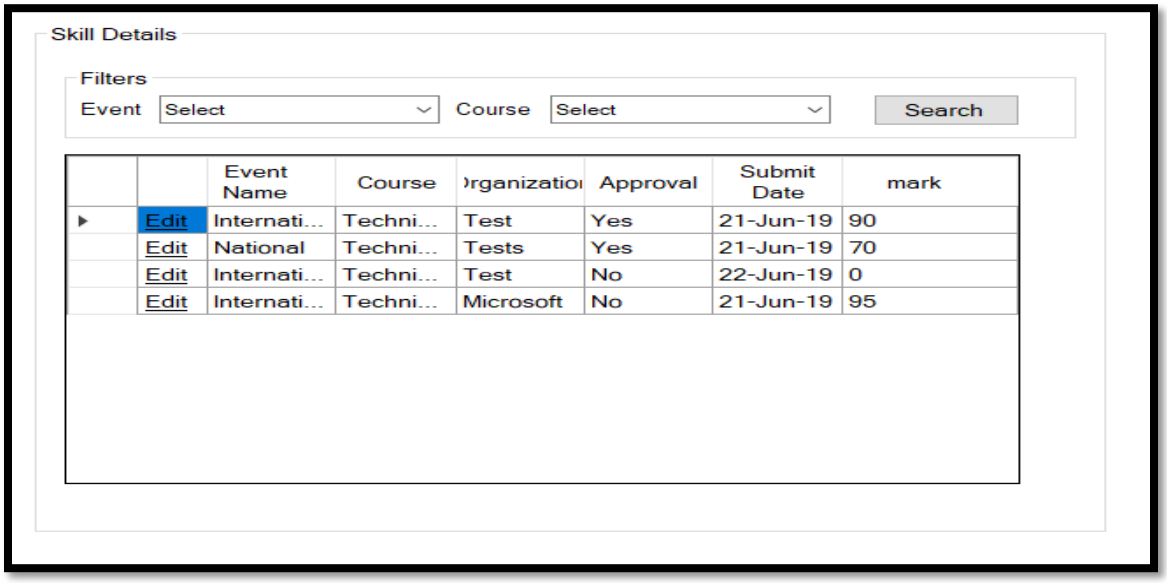


Fig. 9.14 Skill Set

9.15 EMPLOYEE MASTER

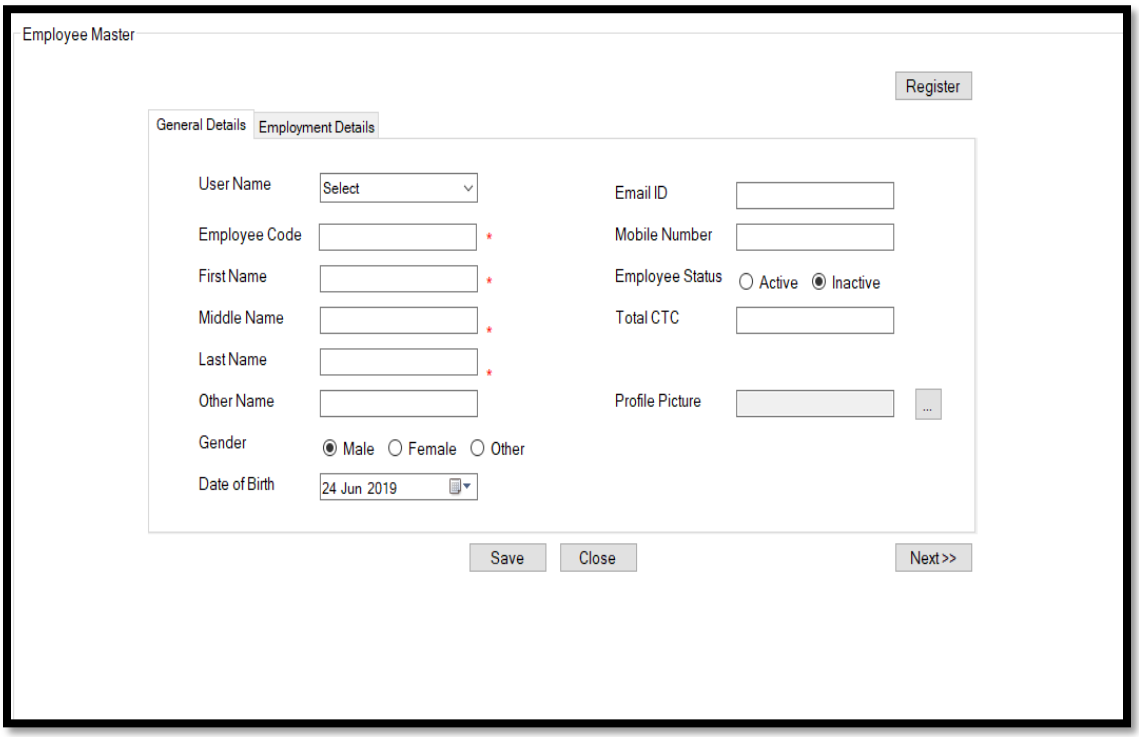


Fig. 9.15 Employee Master

- A module to enter detailed record of all the employee

CONCLUSION

It was my pleasure to work as an intern in Ellipsis Infotech. It was a great learning experience, which gave me an overview of the organization, its decision making, its policies, and steps taken to popularize its product. Moreover, I got a clearer picture about the role played by the organization in the market and the problems faced. I came to know more about the I.T industry working requirements. This internship not only gave me factual knowledge but also confidence and the way to interact with people in the organisation. I got opportunity to work for knowing how actual database development is done to support software.

The Ellipsis Portal I built helped me put a lot of theoretical concepts I learnt to use. I learnt that building software needs us to think about all aspects from the user point of view. This whole experience helped me enhance and develop not only my technical but also my thinking skills.

It gave me a more independent way of thinking about the problems faced in the software development and solutions towards to it. As a whole, it was a great learning experience and it was my pleasure to work in this organization. I thank my Dean (Principal) of DEPSTAR (Devang Patel Institute of Advance Technology and Research), my faculties and external guide at Ellipsis Infotech who gave the opportunity for internship.

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