

# **System Design Project–ICT222**

## **Renting Management System**



**Faculty of Social Sciences and Languages**

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## **Declaration**

I hereby that this project has been completed by me and that is true record of my work. I have read all references entered and also I declare that this documentation has not previously been submitted for a Degree of this University or any other University/Institution.

Name of the Student:

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Signature of the Student

Date:

Supervised by

Name of Supervisor:

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Signature of the Supervisor

Date:

## **Acknowledgement**

I have taken effort in this project. It is important to mention that it would not have been successful without the support of individuals and the members of the Business. I would like to thank all of them for helping me do my project.

I would also like to thank our lecturer Mr. Gihan Priyanka for giving this system and report.

I would like to offer my thanks to my parents, brothers & sisters who helped me to develop this project. I would also like to thank the owner and members of the Business, who gave their co-operation to make this project.

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## **1.0 Introduction**

This is a system Renting Management System Which Design to Rent Travel Items in Renting Business. This system avoids the disadvantages of The Exciting manual system. And Also New System Provide Report generating Functions. Its helps To Keeps Records About There Day to Day Transactions. And This Avoids Lot of Problems That Occurs in During Using Previous File Based System.

### **1.1 Statement of Objective**

#### **1.1.1 General Problem**

Using The previous system, they have faced many problems. Main Problems Is It Is A File Based System. So, they maintain their day to day business process in a book.

- It is a File Based System.
- Missing Old Record
- Occurs more Errors.
- Consume More Time.
- Security Level Not Much High
- There Is No Information About Real Time Business Status

#### **1.1.2 Specific Problem**

This Business Use File Base System So According To that They have problems when handling customers, Renting Items & Equipment's.

#### **1.1.3 General Objective**

- Convert Manual System to Automated System
- To make user friendly system and efficient.
- Store details about Admins, Users, customers, Renting Items & Equipment's, correctly.
- Store details about Real Time Equipment's Status
- Increase the Security Level

#### 1.1.4 Specific Objective

This Business have Many data. It can easily manage using database management system.

This system can easily INSERT, UPDATE, DELETE & SEARCH the data.

#### 1.2 Significance of the Study

	Weighting	Existing System	Proposed System
Description		Manual System	Automated System
Cultural Feasibility	10	5	20
Legal Feasibility	25	10	10
Operational Feasibility	30	15	30
Technical Feasibility	35	10	35
Total	100	40	95

#### 1.3 Scope and Limitation

This Renting System is the final result of the Whole project. Scope of this project is based on final result of this project. This system every side. This system provides a result of what you do with time, money and scope. The main scope of the project is to create a user friendly.

The main scope the project based on several stages. They are planning the system, requirement analysis, design and development, implementation & maintenance.

## **2.0 Methodology of the Study**

As the methodology of the study I used fact finding techniques. The fact-finding techniques are interview, Questionnaire For the requirement analysis part, it took 21 days.

- Interview

Interview is a very important data gathering technique as in this the analyst directly contacts system and the potential user of the proposed system. One very essential aspect of conducting the interview is that the interviewer should first establish a good connection with the interviewee. It should also be taken into account that the interviewee may or may not be a technician and the analyst should prefer to use day to day language instead of jargon and technical terms. In this session I asked questions from Customers, Users & Admin of the institute to understand what my system want.

- Questionnaire

A questionnaire is an instrument consisting of a series of questions for the purpose of gathering information. Although questionnaires are often designed for statistical analysis of the responses. Questionnaires have advantages over some other types of surveys in that they are cheap, do not require as much effort from the questioner as verbal or telephone surveys, and often have standardized answers that make it simple to collect data. However, such standardized answers may frustrate users. Questionnaires are also sharply limited by that respondents must be able to read the questions and respond to them. Thus, for some conducting a survey by questionnaire may not be constant.

## **3.0 Data Gathering Procedure and output**

I gathered more Information for this project via supervisor, Fact finding Techniques (Interview, Questionnaire), internet, books, ICT-222 group members and other relevant academic material related to the title. These things and group of peoples allow plenty of time for gathering information which helps to examine the concepts, technology, and application of system designing.

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7. ඇතුළත් කර දත්ත යාවත්කාලීන කිරීමට ඇති හැකියාව.

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4. ඇතුළත් කර දත්ත යාවත්කාලීන කිරීමට ඇති හැකියාව.

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## **4.0 The Proposed System**

### **4.1 System Overview**

The project I proposed to clearly insert the details of the Admins, Customers, Users and Renting Items. The hotel can easily manage the works easily by supplying a good customer service. This food ordering system mainly used by the owners & waiters.

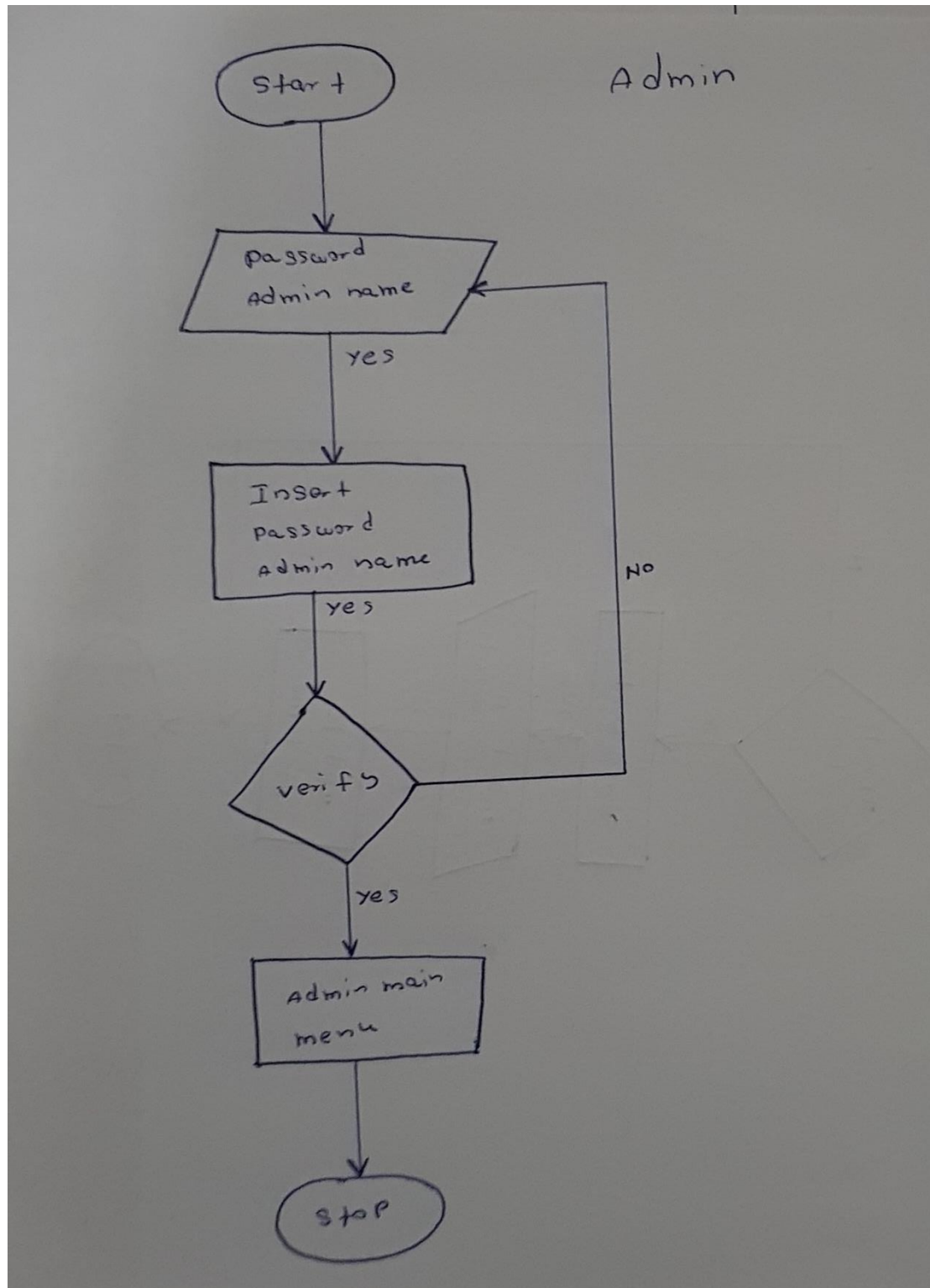
- At first there is a Logging Form. From that you can log in to the system as owner or User, but you have to log by giving the name & password. After logging enter to main menu form.
- Then you can see the Main Form & you can select, Administration, Equipment's, customer, Renting Home buttons and then you can go to those forms. But User only can go to the customer form and Few Renting Order Options forms which are included in renting home. If you want to go Admin, Equipment's, User & more Renting Order Option Forms, you must log as an Admin.
- After you can go to admin, user, equipment's, customer, Renting Order forms and you can INSERT, UPDATE, DELETE & SEARCH information in those forms.

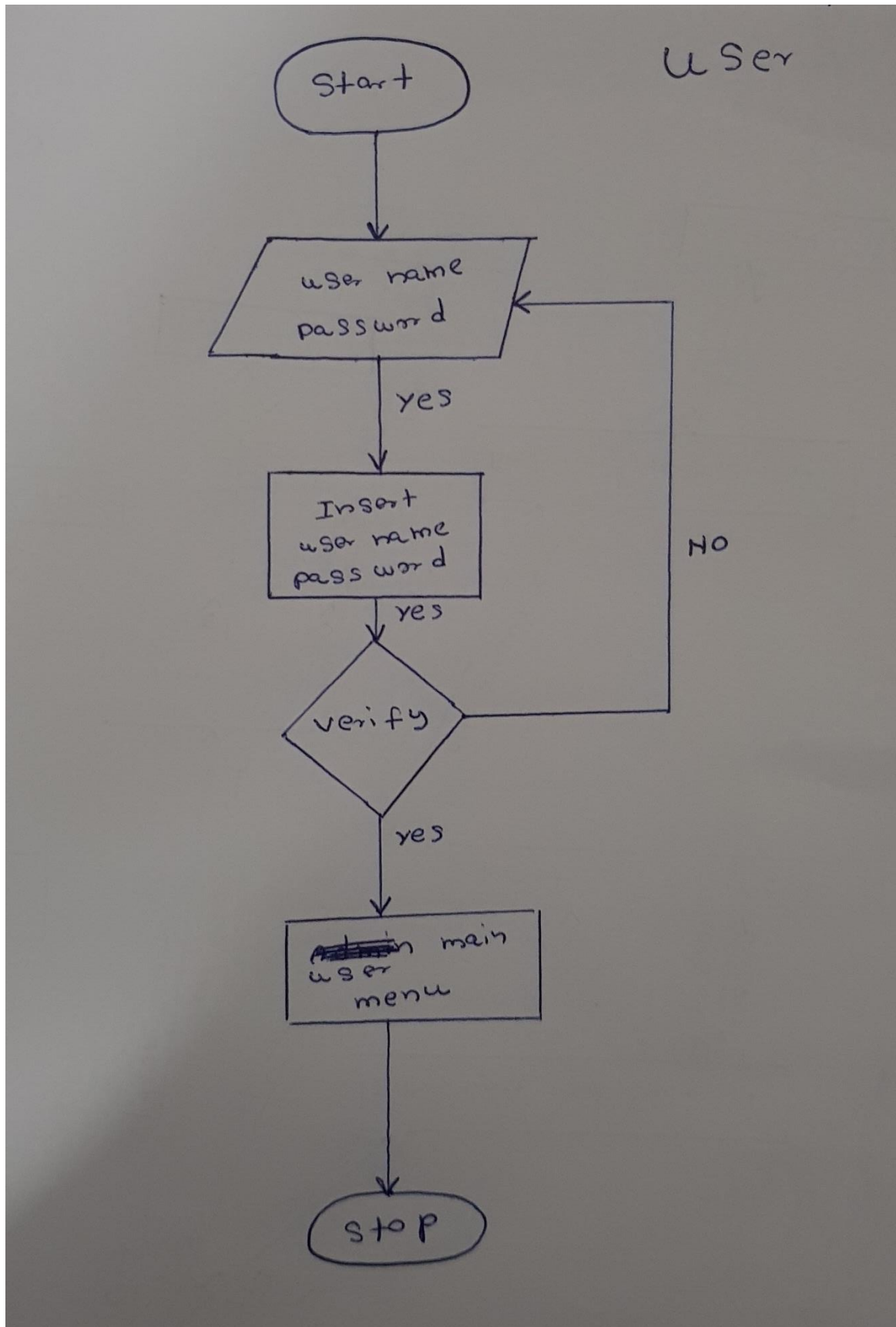
This management system allows followings:

- Insert New admin, user, equipment's, customers, Renting Order Details
- Update customers, Equipment's Details
- Search customers, Renting orders, Equipment's Details
- Delete Renting orders Details
- Shows all reorder logging, renting orders, equipment's, availability, Details separately
- Allow to generate Finance report & Renting Order Invoice through the system

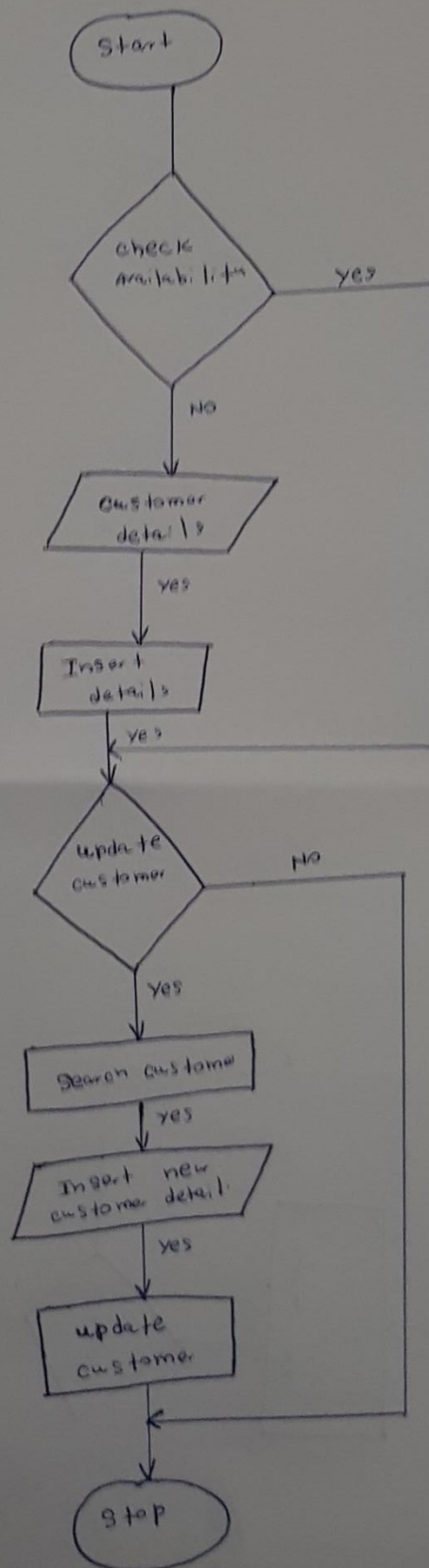
## 4.2 Process Specification

### 4.2.1 Flow charts

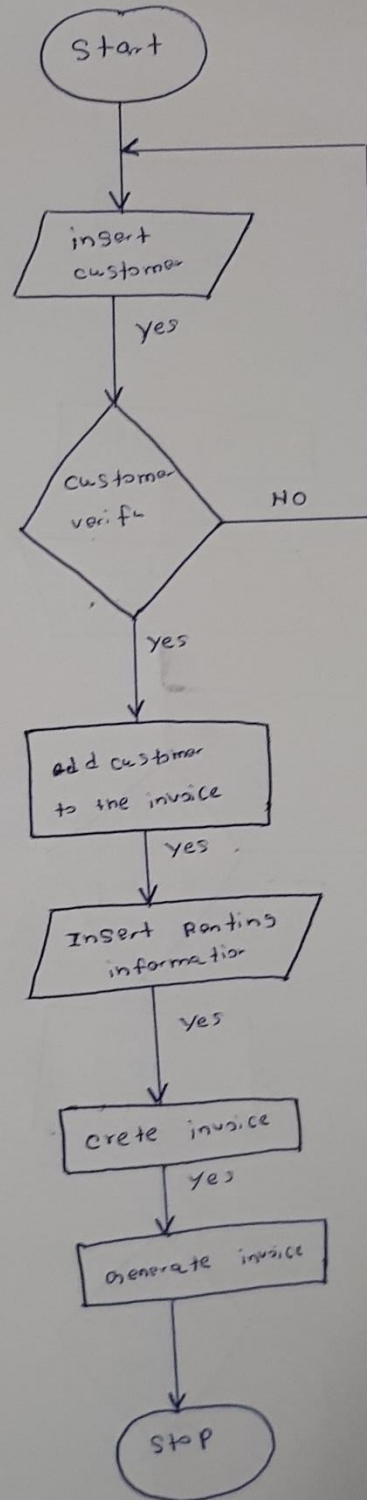




# Customer

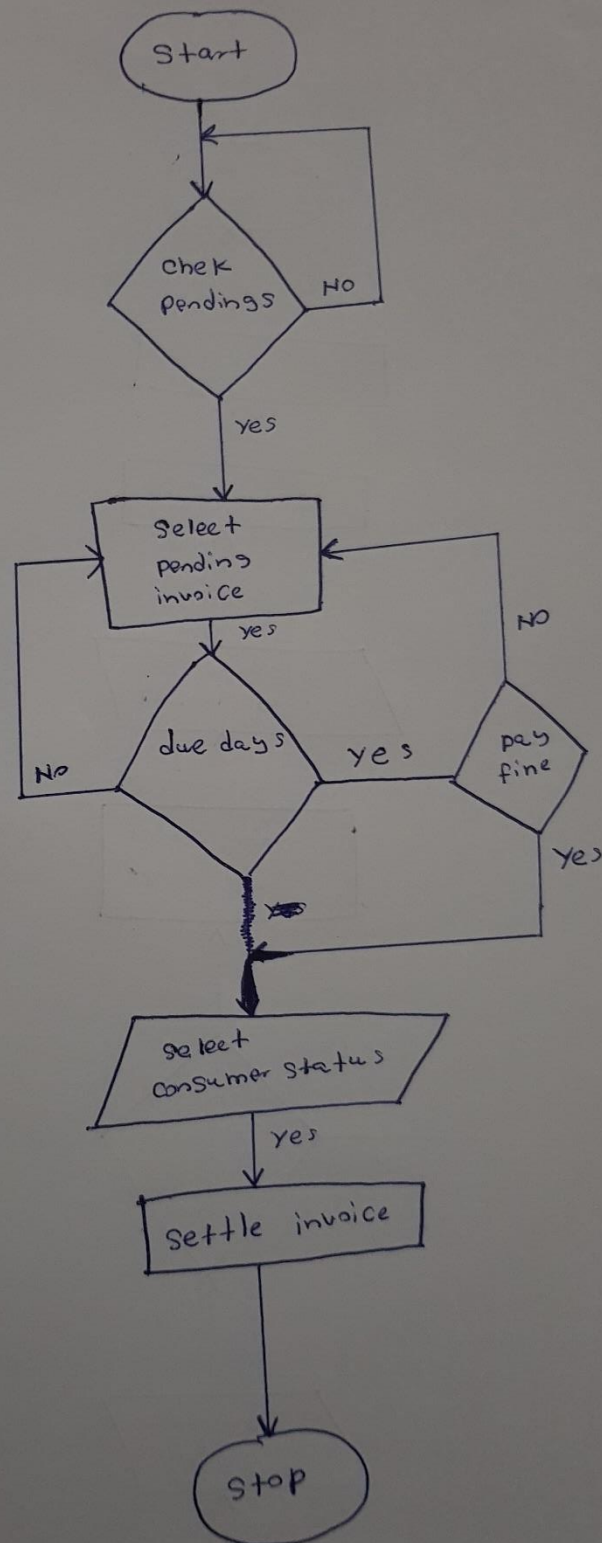


## Crete Invoice

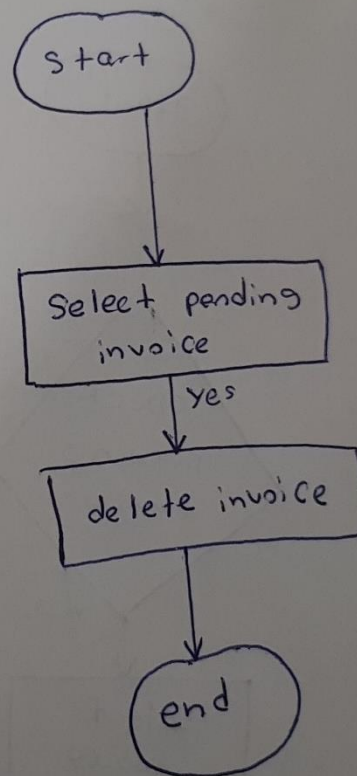




## Return Invoice

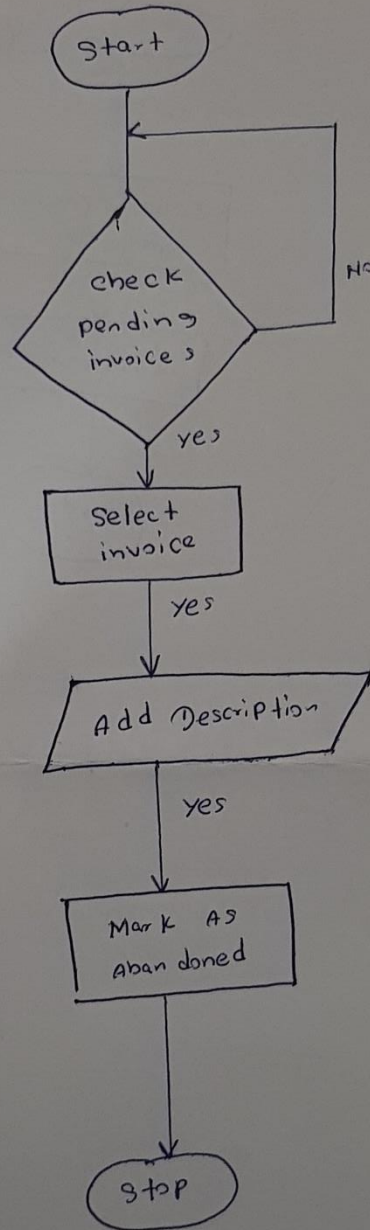


① delete pending  
invoice

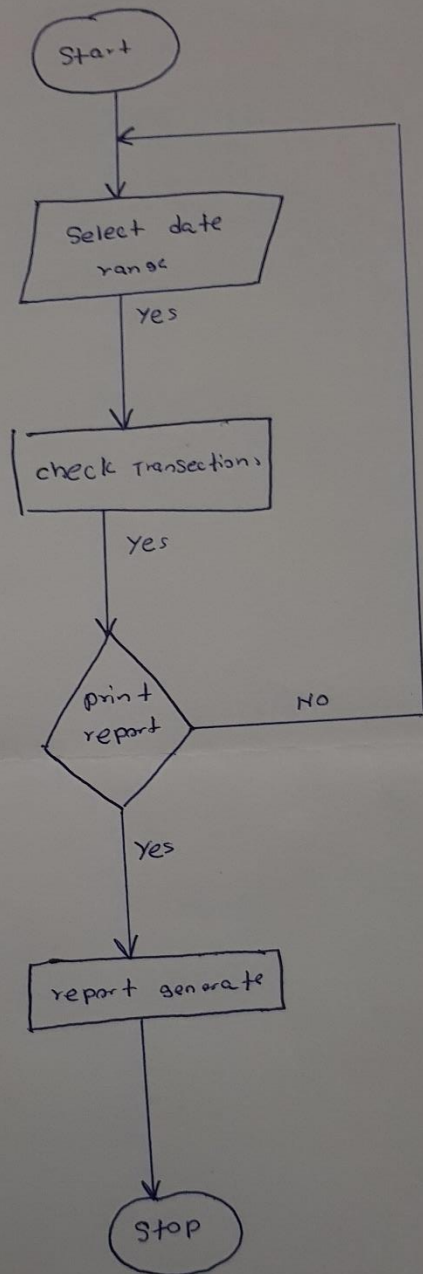




## Abandon Invoice

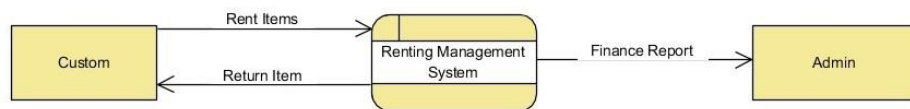


# Finance Report

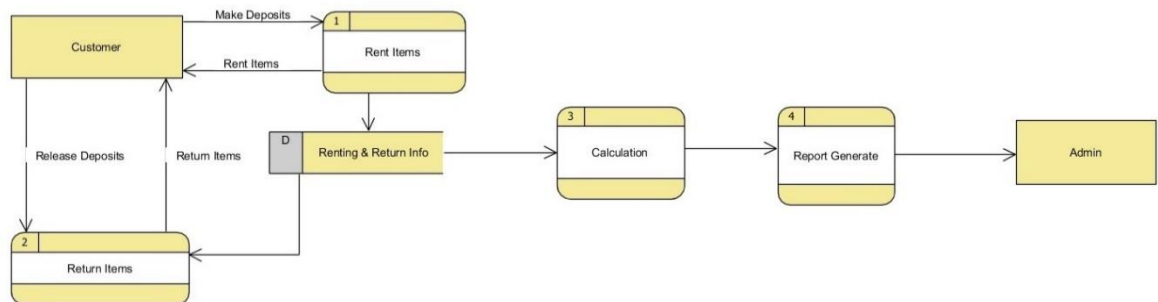


## 4.2.2 Data Flow

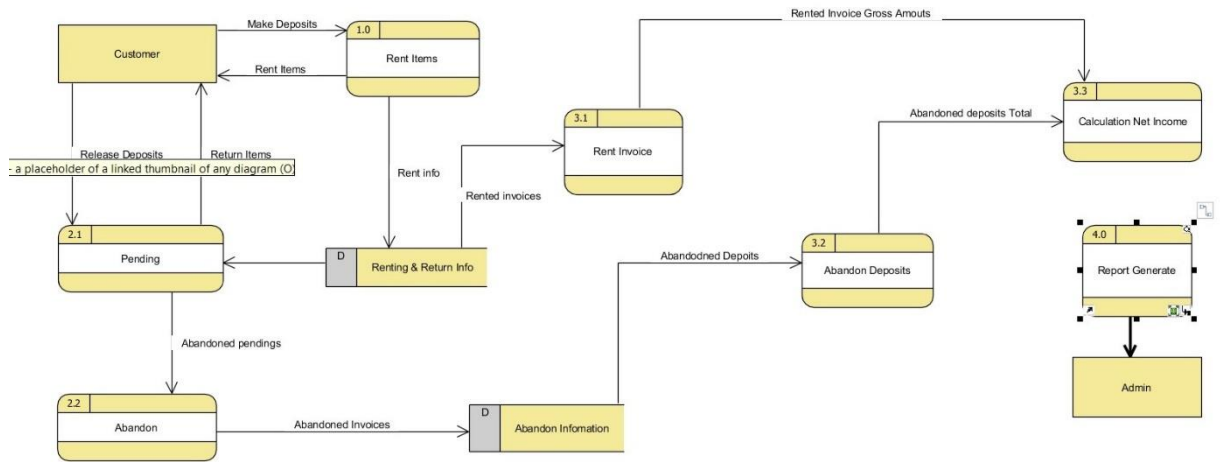
### Context



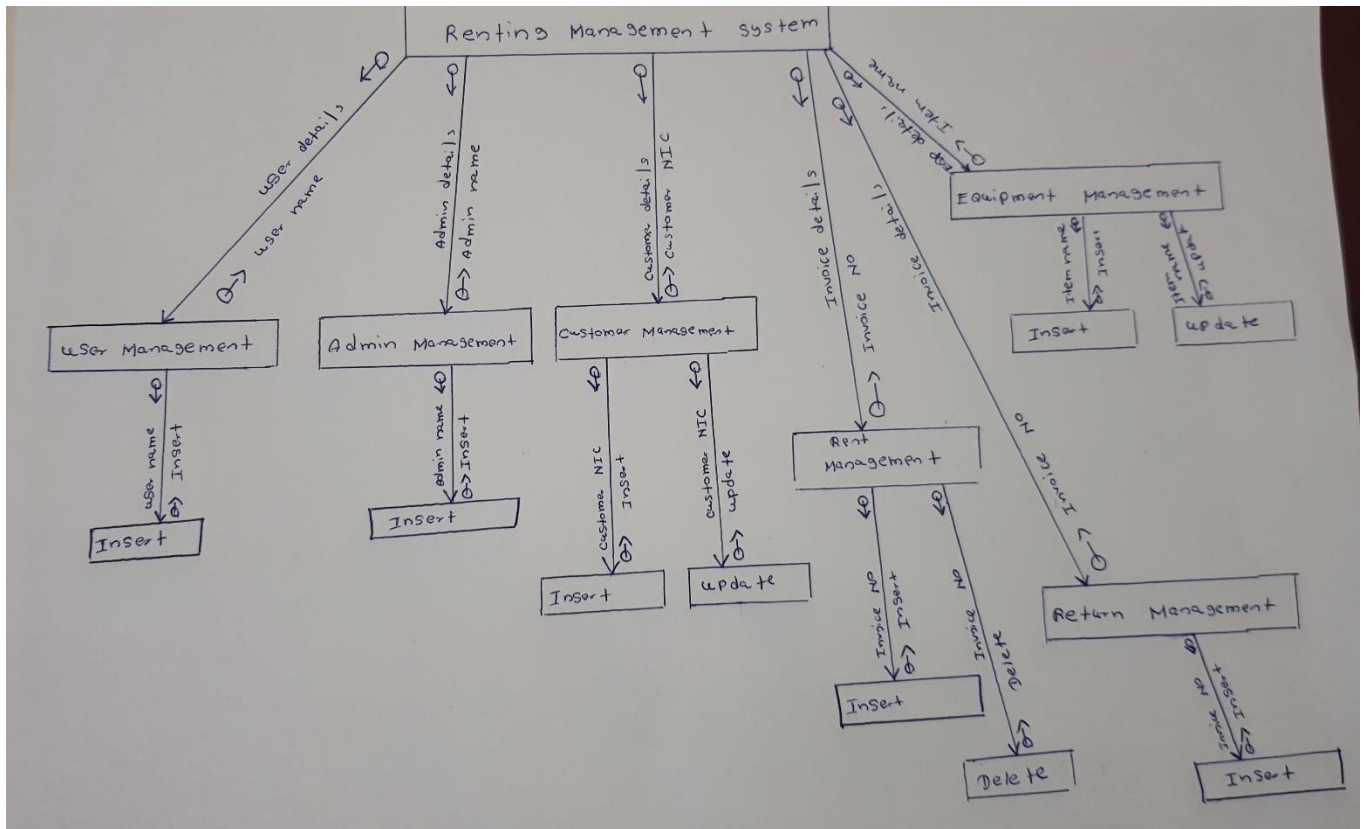
### Level - 01



## Level - 02

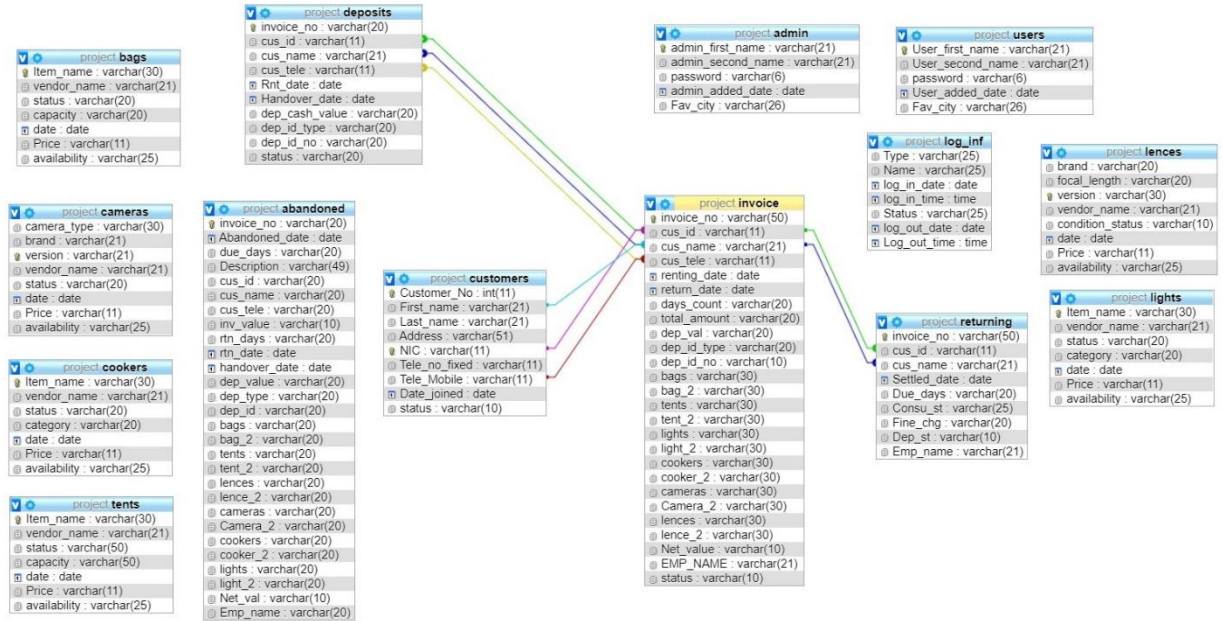


### 4.2.3 Structure Charts



## 4.3 Data Specification

### 4.3.1 Entity Relationship Diagram



## 4.4 Screen Layout/Specification

The screenshot shows the 'Create invoice' form in Microsoft Visual Studio. The form is titled 'EMP NAME' and 'Create invoice'. It includes a search bar for 'Search by NIC' and a 'Search' button. The form is divided into two main sections: 'Renting And Deposits Details' and 'Equipments'.

**Renting And Deposits Details:**

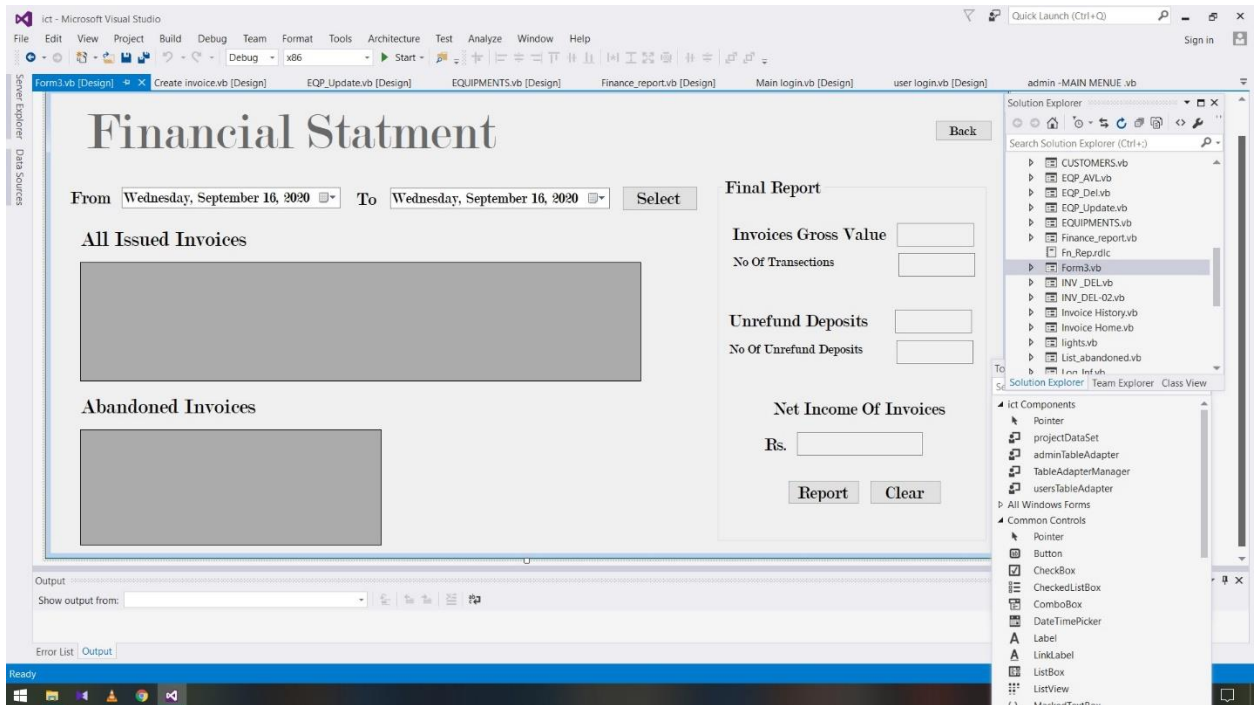
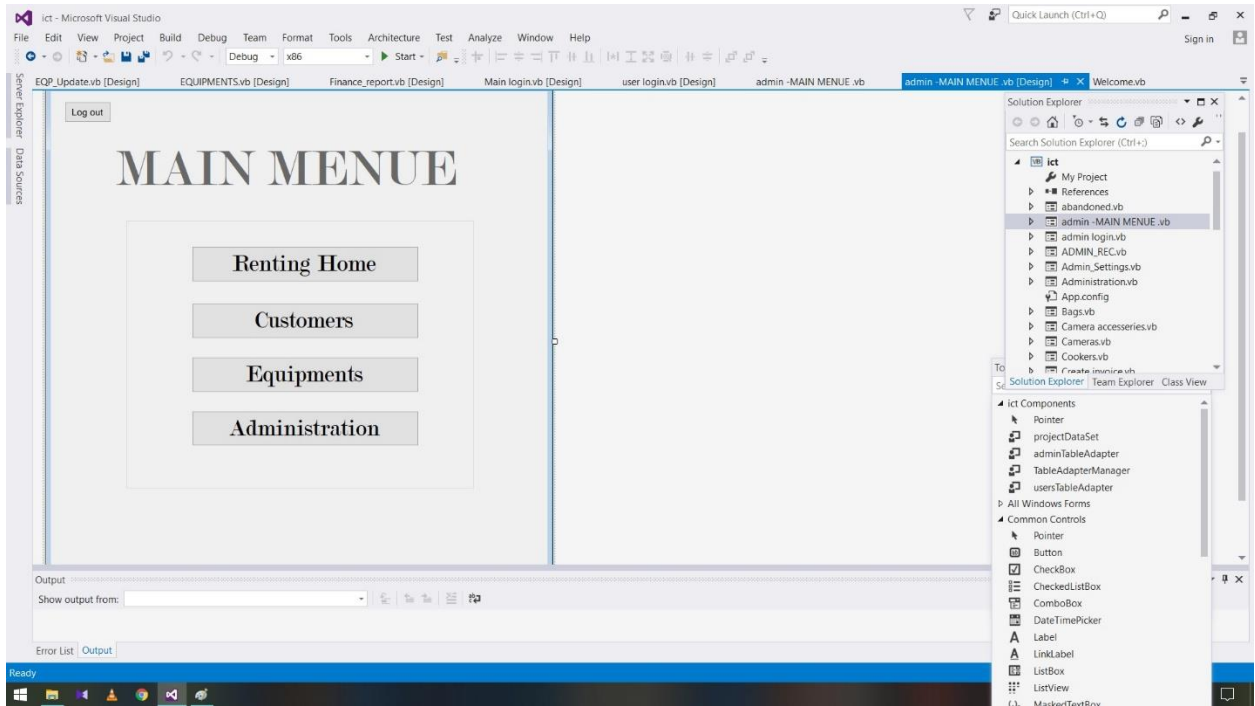
- Customer NIC:
- Customer name:
- Customer Tele:
- Handover date:
- How many days:
- Totall Amount:

**Equipments:**

- Bags:
- Lences:
- Cookers:
- Tents:

The form also includes an 'ErrorProvider' and an 'Output' window at the bottom.





Form8

EMP NAME SUPUN

Back

# Create invoice

INV-16-0001

Search by NIC  Search

## Renting And Deposits Details

Customer NIC

Customer name

Customer Tele

Handover date Wednesday, September 16, 2020

How many days

Totall Amount

## Deposit Details

Deposit Cash Value

Deposit ID Type

Deposit ID NO

Net Value  Calculate

## Equipments

Bags BAG - 1 BAG - 2

Lences LENCE - 1 LENCE - 2

Cookers COOKER - 1 COOKER - 2

Tents TENT - 1 TENT - 2

Lights LIGHT - 1 LIGHT - 2

Cameras CAMERA - 1 CAMERA - 2

Clear

Create

## 4.5 Program / Module Specifications

Renting Management System totally divide in to four parts

- Insert Details

In this part we can insert details about admins, users, customers, equipment's, renting Orders

- Update Details

In this part we can update details of Customers, Equipment's Details

- Delete Details

In this part we can delete details Renting Orders & Equipment's

- Search Details

In this part we can search details of customers, equipment's renting Orders, Logins



## 5.0 System Coding (Prototype)

### 5.1 Programming Language

The new proposed system for Renting management has been designed in Visual basic language. This language has been suggested for this project due to its powers for databases as compared with other languages and packages.

A programmer can create an application using the components provided by the Visual Basic 2015 version program itself. Over time the community of programmers developed third-party components. Visual Basic 1.0 was introduced in 1991. Visual Basic 1.0 (May 1991) was released for Windows at the Comdex/Windows World trade show in Atlanta, Georgia. The drag and drop design for creating the user interface is derived from a prototype form generator developed by Alan Cooper and his company called Tripod. Microsoft contracted with Cooper and his associates to develop Tripod into a programmable form system for Windows 3.0, under the code name Ruby.

#### 5.1.1 Sample Cording

0 references

```
Private Sub Form5_Load(sender As Object, e As EventArgs) Handles MyBase.Load

    Dim search_command As New MySqlCommand("SELECT * FROM `log` WHERE `Type` = @Type AND `Status` = @Status ", connection)

    search_command.Parameters.Add("@Type", MySqlDbType.VarChar).Value = "ADMIN"
    search_command.Parameters.Add("@Status", MySqlDbType.VarChar).Value = "LOGGED_IN"

    connection.Open()

    Dim adapter As New MySqlDataAdapter(search_command)

    Dim table As New DataTable()

    adapter.Fill(table)

    If table.Rows.Count > 0 Then

        Label4.Text = table(0)(1)

    Else

        Label4.Text = ""

    End If

    connection.Close()
End Sub
```

0 references

```
Private Sub DateTimePicker2_ValueChanged(sender As Object, e As EventArgs) Handles DateTimePicker2.ValueChanged

    TextBox2.Text = DateDiff(DateInterval.Day, Now.Date, DateTimePicker2.Value.Date)

    If TextBox2.Text < 0 Then

        TextBox2.Text = ""
        ErrorProvider2.SetError(TextBox2, "Selec A Valid Date")

    Else
        ErrorProvider2.SetError(TextBox2, "")
    End If

End Sub
```

## 5.2 Special Purpose Language Tools

Wamp Server is a Windows web development environment. It allows you to create web applications with Apache2, PHP and a MySQL database. It also comes with PhpMyAdmin and SQLite Manager to easily manage your databases.

MySQL is developed, supported and marketed by MySQL AB. The database is available for free under the terms of the GNU General Public License (GPL) or for a fee to those who do not wish to be bound by the terms of the GPL.

## **6.0 System Implementation Plan**

### **6.1 Resource Requirements**

#### **6.1.1 Hardware Requirements**

Processor - Intel(R) Core(TM) i3-5005U CPU @ 2.00GHz

Hard Disk – 500 GB

RAM – 4.00 GB

#### **6.1.2 Software Requirements**

Visual Paradigm 13.1

MySQL for visual studio 1.2.6

64-bit operating system, x64- Based processor

MySQL connector.Net 6.9.9

Wamp Server64

RF Flow

VB.net Books

## **7.0 Further Developments**

A computerized Renting System is used to make automate process of Renting Items. It makes easy to work to the people who use the system. For further development I suggest to use Barcode technology to this system. Barcode scanner help to do it efficiency. So, the users don't need to insert information Equipment's. For further development it can be include salary calculation method for both admin & users, expenses calculation for whole business to find out profits. For further development this allows to Update admin, user & Details And also delete admin & user & Equipment's For further development can be use the Finger print identification method Admin & User

## 8.0 Development Environment

According to this project the development environment that used is visual basic programing language from Microsoft visual studio 2015 ultimate.

- The size of records to be stored on the system
- The number of different kinds of data (or data fields) to be stored
- How data is going to be input
- How many users will access the system and how often
- What hardware the system will be used on
- Whether the system will be run on stand-alone computers or over a network
- How data will be sorted and manipulated

## 9.0 Results and Discussion

The system makes easier the process Renting

- View all details in system as Desire
- Saving time
- Reduce errors
- Generate Financial Report Through The System
- Attract More Customers
- Increase the Efficient of The Business

## 10.0 References

<https://www.wikipedia.com/>

<https://www.youtube.com/>

<http://stackoverflow.com/>

MySQL Tutorials

VB.NET Tutorials

<https://www.wampserver.com/>

<https://www.visual-paradigm.com/>

<https://downloads.mysql.com/archives/c-net/>

<https://downloads.mysql.com/archives/visualstudio/>

