

Chapter No: - 1

Introduction

1.1 Introduction to project:

JANVI RESTAURANT Karvand Naka, Shirpur

A Janvi Restaurant is situated in Shirpur since 10 years ago. It was established by shri. Jitendra Nairker. It is one of the best and successful Restaurant in Shirpur. Which is used for provide food and soft drink. This Restaurant Management System provide the suitable management structure which takes care of the information about Employees, Foods (Soft Drink).

1.2 Objective of project:

Our project is for Restaurant Management System, which kept food report and maintains the records of selling items and Transaction of items.

Our project also kept record of Customer Master, Food Master and Transaction Master also updates all records automatically.

Maintaining order of the day to day transaction. This software shows all the types of Foods.

1.3 Scope of project:

Now this organization is working through manual system so it is very difficult and to manage the data. So this organization needs a computerized system to keep records Because of this the time is saved and require less human labor. It becomes simple, easy and effective and no time consuming to maintain records than manual system. In existing system Restaurant is not secure. So it is a secure one.

Chapter No: - 2

System Study and Analysis

2.1 Information gathering:

Investigation of system is first step while designing a system. This is the way to handle user's needs.

We consider following things:-

1. How the precise system works?
2. Time taken to process the data through system.
3. List of documents.
4. Files, reports associated with system.

From the available document we got basic idea about fundamental of system as well as input and output of this system. In next step we have about existing system and collected information about inputs, reports, transaction.

2.2 Existing system:

Before developing the computerized system the firm managed the work manually in different modes i.e. work was divided into various steps.

These steps were as follow:-

1. Making attendance manually and gives the wages to the labors.
2. Manual calculation of food orders.
3. Manage customer information from whom they purchase food that they sell woods.
4. After this, make bill to the customer who purchases the food.
5. All the trading maintain manually.

2.3 Drawbacks of existing system:

1. Accuracy is less because all work in done manually.
2. More time is required for data entry its does not avoid repetition of data entry.

3. More time is required to process required information in form of output ,hence reports required for management getting developed
4. Human mistakes may be possible.
5. Handling of all records and different files is tedious and lengthy jobs.
6. It requires experience and trained person to look after a particular job.
7. Less statistical accuracy.

Chapter No: - 3

Need of Computer

3.1 Need of system:

3.2 Need for computerization:

The main aim of the computerizing any system is to provide less time, less Work, to increase efficiency and according so that large task can be done in short period of time.

The computer is use to assist the man in business organization carry out large and wide variety Of activity .Accurate recording and processing of this activity are called as data processing .As the complexity and size of the organization is growing day by day, some degree this automation becomes necessary.

When organization grows the manual system begin to break down, thus harming task of planning and controlling .In most of the organization electrical cost low and increase efficiency was introduce for processing of various transaction that arrives in difficult organization operation.

Most organization carry out largest wide variety of business transaction, accurate recording and processing of this transaction is now as data processing .Today some degree of automation exists in all organization in degree and processing of daily transaction.

3.3 Advantages of computerization:

Business organization found that they could computerize the transaction processing tasks quickly by using standard software.

The major advantages of such software as follows:

1. Improved accuracy is more than manual system.
2. All calculation is done externally so calculation solved within a second.
3. Processing time of information is negligible.
4. Simple handling and retrieving of data is very easy.
5. Data entry time is negligible as compared to manual system while entering customer's entries previous data will be reduced.
6. Easy for any type of search record.

3.4 Introduction to proposed System:

Our computerized system is specially design for Restaurant management which is made exactly as per the need of the organization .it is designed to speed up activity in the existing system and to minimized the human error ,man power and optimized its cost with better accuracy.

The system is made very simple to understand and operate. This system supports the

Graphical User Interface because this is menu driven and every time short keys are used to works through the keyboard also.

The system takes the data of item, food, order, purchase; sales, stock, and suppliers input .the system generate reports as follows:

- Customer Report

In our proposed system we have the provision for adding the details of the Restaurant management. Another advantage of the system is that it is very easy to edit the details of the supplier and delete a supplier when it found unnecessary. Here is no facility of net connection, email facility is also not provided. Online payment is not possible.

By developing the system, we can attain the following facilities:

- Easy to handle and feasible.
- Easy to operate.
- Cost reduction.
- Fast and convenient.

3.5 Advantages of computerized system:

- Accuracy is more than manual system.
- Data entry time is negligible as compare to manual system because while entering entries previous data will appeared so that required to complete entry will be reduced.
- All calculation is done internally, so calculation time is neglected.
- Processing time of information is negligible.
- Handling and retrieving data is very easy.
- The printed outputs are very neat, precise and even print attractively by simple pressing and clicking print button or report.
- Getting report or output is in time, hence it increase the productivity and popularity of center.

Repetition of data is avoided, hence work reduce.

3.6 System security:

Our system is security conscious and can be used by that person who has an authority to access the part of system software.

We have created one type of login authority. Operators can entry and free to access part of system but he is responsible person so his responsibility increase in using system. In this way ensuring that not anybody can come and have access to our work. So system becomes more secure which is also an advantage of over manual system.

Chapter No: - 4

Feasibility Study

Feasibility study:

At the end of information gathering phase, we have data available currently and the deficiencies of the existing system. We also come to know the requirements. It is necessary to quantify goals and sub goals.

Once this goals and sub goals are quantified, the next step is to find out whether these goals are met? And if yes, then how will they met? And at what cost? Feasibility analysis is mainly concern with these questions step followed in feasibility.

All the projects are feasible given unlimited resources and infinite time. In the development of present system, no such restrictions for limitation are imposed that are not feasible. As all the resources are easily available and the given was enough.

Feasibility study can be divided into 3 broad areas:

1. Economic feasibility
2. Technical feasibility
3. Operational feasibility

4.1 Economical feasibility study:

Any system before implementation must be checked whether it is feasible or not. I.e. the new system is more feasible than existing system.

If proposed system is implemented then there are following benefits:

1. The man power required for maintenance of system is reduced.
2. Faster and accurate processing of transactions.
3. Easier and understanding of working system by the operator.
4. Easier and instant report generation.

The organization has implemented the local area networking operating system with the dedicated file servers. Therefore the implementation of multi-user system is easy as the operating system level.

4.2 Technical feasibility study:

During technical feasibility analysis, the analyst evaluates the technical merits of the system concept, while at the same time collects additional information about performance, reliability and predictability.

Technical feasibility analysis begins with an assessment of the technical viability of proposed system. It is analyzed that what kind of development environment is required, what new method and processor are required to accomplish systems function and performance. A model is created based on the systems goal. A solution is technically feasible, if technology is available to implement it as we provided with sufficient support, we do not have a technical feasibility problem.

4.3 Operational feasibility study:

1. as top management have full support for project due to higher usefulness and advantages of system.
2. Also user support is available is because the way which existing system work causes many drawbacks.
3. Also current methods are not acceptable to user due to its time consuming nature.
4. User is already in the phase of planning to bring change in the current system. So the project is operationally most feasible and no resistance from users.
5. Proposed system causes no any harm to anyone. But on other hand it has much vital application, which causes benefits as ever.
6. Also proposed system performance is much quicker and faster than existing one and it has no effect on functionality of similar areas.
7. More important point is that system gives all types inventory status report.

Chapter No: - 5**Hardware and Software****Hardware:**

Hardware of computer means all physical parts contained in the computer system. Following are the hardware that human use for performing various tasks:

1. Input devices.
2. Output devices.
3. Central processing unit.

Configuration of hardware:

PROCESSOR:	Intel(R) Core TM i3 -4170T CPU @ 3.20GHz
RAM:	4.00 GB
HARD DISK:	500 GB

Software:

OPERATING SYSTEM:	Windows-8.1
FRONT END:	Visual Studio 2012
BACK END:	Microsoft Access 2010

Chapter No: - 6

Reason for Selecting C#.Net

What is .NET?

.NET is essential framework of software development. It is similar in nature to any other software development framework (J2EE etc. in that it provides set of runtime containers/capabilities, and a rich set of pre-built functionality in the form of class libraries and API's.

.NET framework:

The best way to understand what .NET offers is to observe some of the limitations of its predecessors. In this section, we take a brief and simplified look at the history of Microsoft component interaction and then a short look at the architecture.

.NET architecture:

The .NET architecture consists of three parts: The Common Language Runtime, the framework classes and ASP.NET, which are covered in the following sections. The components of .NET tend to cause confusion.

Advantages of C#.NET:

- C# borrows concepts from Java and C++, adopting only the good bits from those languages and eliminating overly confusing and error prone features, which are the major sources of bugs in a code.
- C# is a terse language. It's very tiny even with the commands. Visual Basic on the other hand has a command for almost any kind of situation that the developer may face during the development of the code making its reference a real hefty one.
- C# supports effective and reusable components.
- C# is portable at the same time it is cross language compatible for all Microsoft Windows based languages and programs specifically targeted to that particular platform can be coded to interoperate with the code of other languages.

- C# implements the modern programming concept of Object Oriented Programming which enables the developer to produce secure data centric applications and take the user to the next level of experience.
- C# programs can be written in as simple as a text pad and a command line which are common to any operating system provided the developer has installed the CLR and the framework priory. Microsoft's Rapid Application Development Suite products, named Microsoft Visual Studio ships with a separate Visual tool for C#, and gives developers visually rich tools for development and deployment.
- C# RAD tools gives the developer the power to produce "One click install" application, where the user needs no prior software experience and can install and use C# applications like any other windows program.
- C# provides the ability of code extension to the developer with which developers can produce extensions and wrappers to use the underlying library to behave the way the developer want it to.
- C# programs are managed code, to say, they are coded and executed in a controlled environment leaving little room for anomalies called "bugs" to creep in. Also it has eliminated some of the "unsafe" features of C++, which can provide intruders to breach secure C# programs.
- C# can be used to write wide range of applications due to their portability, from simple desktop widgets to high end web services, secure systems programming and even robotics.

Features of .NET:

- 1 Building Window Based Application.
- 2 Building Web-Based Application.
- 3 Building Console Based Application.
- 4 Simplified deployment.
- 5 Direct Access to Platform.
- 6 Full object oriented constructs.
- 7 XML Web services.
- 8 Mobile Application.

Introduction to MS Access 2010:

Microsoft Access is a part of the Microsoft Office Suite. Microsoft Office Access, previously known as Microsoft Access, is a database management system from Microsoft that combines the relational Microsoft Jet Database Engine with a graphical user interface.

Chapter No: - 7

Preliminary designed of proposed system

- Data designing
- Input designing
- Output designing
- Screen designing
- Procedural designing
- Architectural designing

Name of Table: Login Table

Login	
Field Name	Data Type
Username	Short Text
Password	Short Text

Name of Table: Admin Data:

admin	
Field Name	Data Type
id	Short Text
name	Short Text
address	Short Text
Username	Short Text
Password	Short Text


Name of Table: Customer Form:

customer	
Field Name	Data Type
fname	Short Text
lname	Short Text
city	Short Text
peoples	Short Text
mobilen0	Short Text
Date	Short Text

Name of Table: Break Fast Order Table

breakfast	
Field Name	Data Type
Tableno	Short Text
boileggs	Short Text
breadbutter	Short Text
sandwich	Short Text
cornflex	Short Text
poha	Short Text
salad	Short Text
omlet	Short Text
tea	Short Text
coffee	Short Text
greentea	Short Text
milk	Short Text
mixfruit_juice	Short Text
orang_juice	Short Text

Name of Table: Break Fast Order Table

 dinner		
	Field Name	Data Type
	tableno	Short Text
	datetime	Short Text
	pavbhaji	Short Text
	masaladosa	Short Text
	chickendinner	Short Text
	paneertikka	Short Text
	channamasala	Short Text
	butterchicken	Short Text
	aloomatar	Short Text
	mashroom	Short Text
	rise	Short Text
	pestrispuff	Short Text
	venellacone	Short Text
	strawberryshake	Short Text
	cocklatemuffin	Short Text
	pancakesyrup	Short Text
	applejuice	Short Text
	softdrink	Short Text

Preliminary design of proposed system:

Preliminary design related with transformation of requirement into data.

Data design defines data structure. (TABLES)

7.1 Data design:

Preliminary activity during data design is to select logical representation of data identifying during the requirement delimitation and specifications phase well data lead to program structure modularity and reduced procedural complexity.

Designing is an interactive process of taking a logical model of system together with a strongly stated set of objective for that system and producing the specification of physical system that will meet these objectives.

7.2 Input Design:

Though output are main determinant of any system performance the quality of output is determined by the input made to system carefully accepted data will give accurate and power analysis. Input having five types as external input, internal input, operation input, computerized input and interactive input. Our system checks the customer data, save customer data, modify or delete the customer, employee, order, bill, payment information.

7.3 Output Design:

The main objective of our system is to produce data to support operation or decision making of the organization. The output of our system is the primary contact between the system and admin, our output are flexible.

Our system support query reports, summery reports, detail reports and customer reports.

7.4 Screen Design:

Designing of the screen for the system have been designed with a throughout keeping in mind that it is very user easy to operate and error free, for data entry our system used interactive screen. We design menu path without breaking the integrity of security constraint.

Our system gives data entry form as

Customer data entry form:

All the data related to every customer is entered here.

Order data entry form:

All the data related to every order is entered here.

Payment data entry form:

All the data related to all payment is entered here.

Bill data entry form:

All the data related to every bill is entered here.

7.5 Procedural design:

In procedural design occurred data and program structure in English. Procedural design requires defining algorithmic details of the procedures, which can be represent in natural language like English. Graphical tools such as flowchart or block diagram which provides excellent pictorial patterns back readily defines procedural design.

Flowchart is most particular graphical representation of procedural design. Architectural design is to develop modular program structure and represent the control relationships between modules.

Architectural design holds the program structure and data structure and defines interface enabling data to flow throughout the program.

DFD Diagram:

Data Flow Diagram:

A graphic tool used to describe and analyze the movement of data through a system manual or automated including the processes, store of data, and delays in the system. Data flow diagrams are the central tool and the basis from which other components are developed. The transformation of

Data from input to output, through processes, may be described logically and independently of the physical components associated with the system. They are termed logical data flow diagrams in contrast, physical data flow diagram show the actual implementation and the movement of data.

A Data flow diagram is also known as 'Bubble Chart' has the purpose of clarifying system requirements and identifying major transactions that will become programs in system design. DFD describes the flow of data other than how they are processed. The data flow diagram generally contains the following elements and their representation is given below.

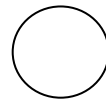
- External Entity
- Process
- Data Flow
-

A level 0 DFD, also called a fundamental system model or a context model, represents the entire software element as a single bubble with input and output data indicated by incoming and outgoing arrows, respectively. Additional processes (bubbles) and

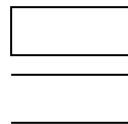
information flow paths are represented as the level 0 DFD is partitioned to reveal more detail. For example, a level 1 DFD might contain five or six bubbles with interconnecting arrows. Each of the processes represented at level 1 is a sub-function of the overall system depicted in the context model.

Each of the bubbles may be refined or layered to depict more detail. Some graphical symbols used:

i) Process



ii) External Entity

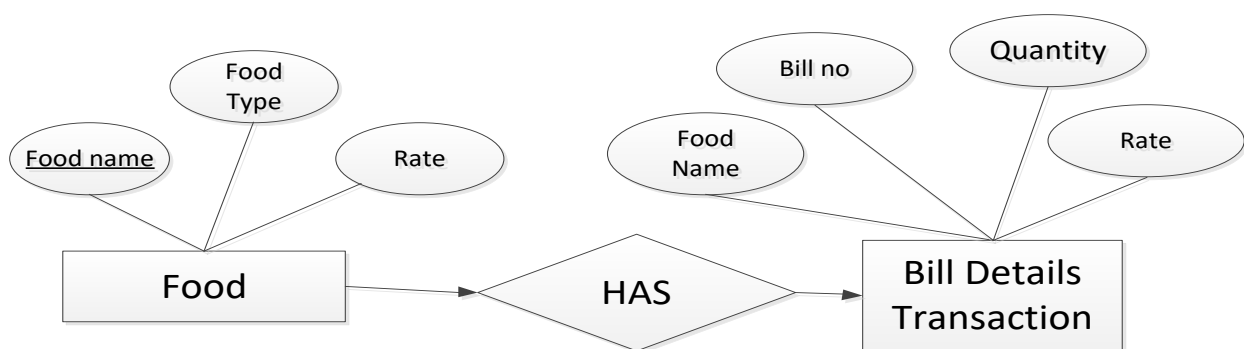


iii) Data Store

IV) Data Flow



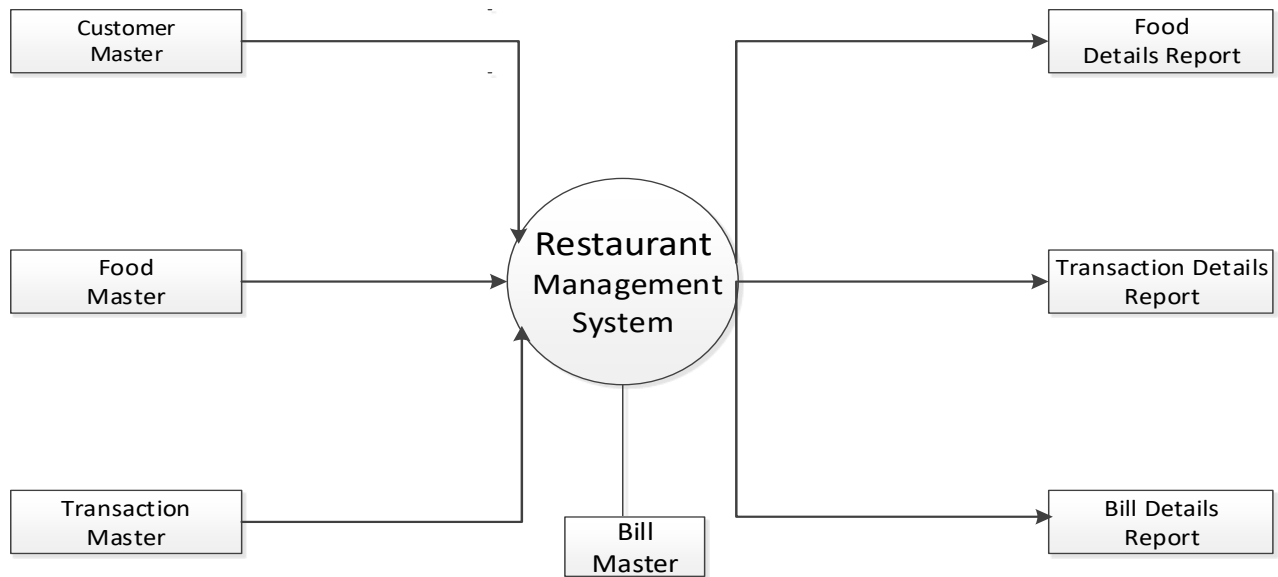
ERD:



ERD For Restaurants
Management System

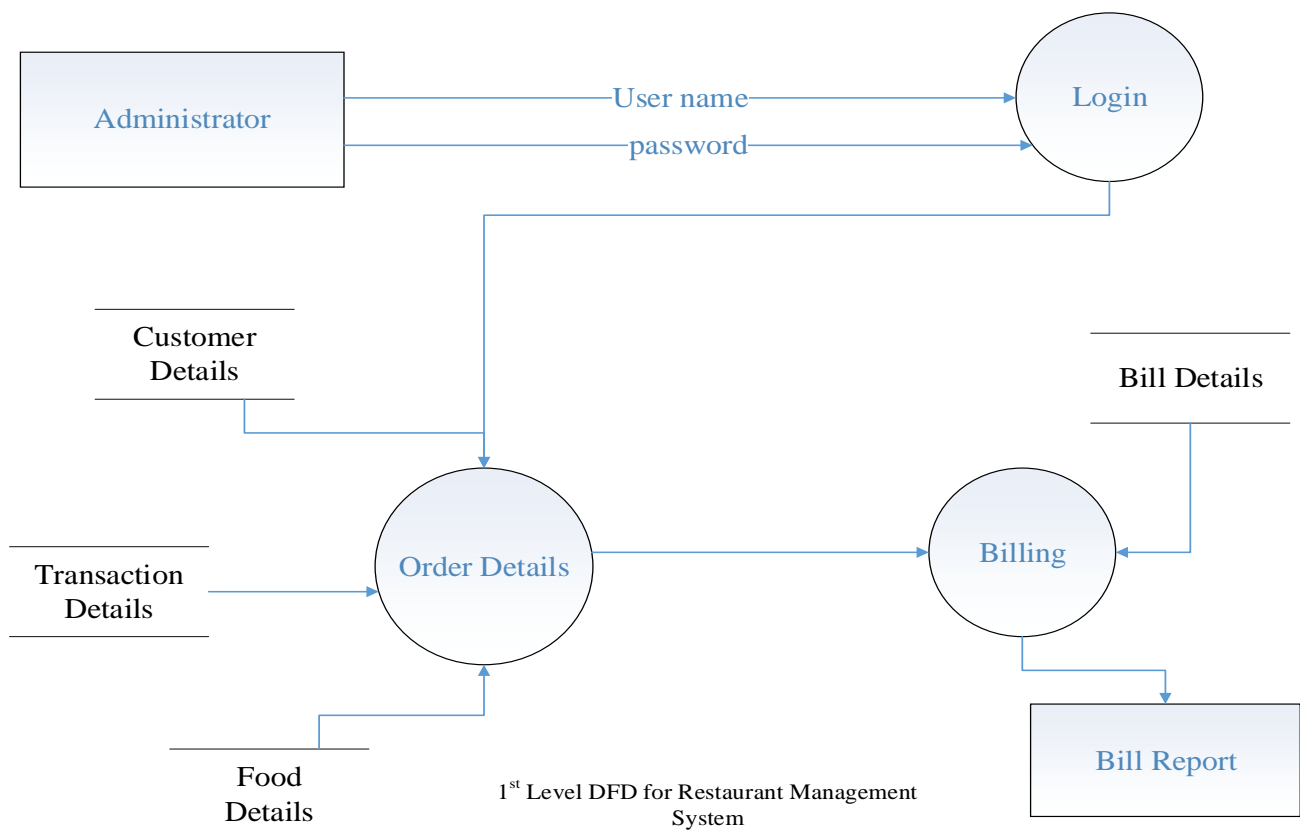
Data Flow Diagrams:

0-level DFD:



0th Level DFD For Restaurant Management System

1-level DFD:



1st Level DFD for Restaurant Management System

Chapter No: - 8

Detail designed of proposed system

Detail design:

Specifying the algorithm and data structure that make up the interior modules does detail design of system. Usually there are many choices but from the different available alternatives. The one of which offers greatest, simply, functionality, and availability is selected based of relative importance of this criteria.

Detail design is converted into codes. Code optimization will improve the performance of the system.

Data dictionary:

Entire in data dictionary includes the names of data item and attributes.

Data dictionary has been proposed a formal grammar for describing.

The content of the definitions of all data is mentioned in data flow diagram. In process specification, composite data is define in terms of the meaning each of values that it can be assumed.

Chapter No: - 9

Appendix A

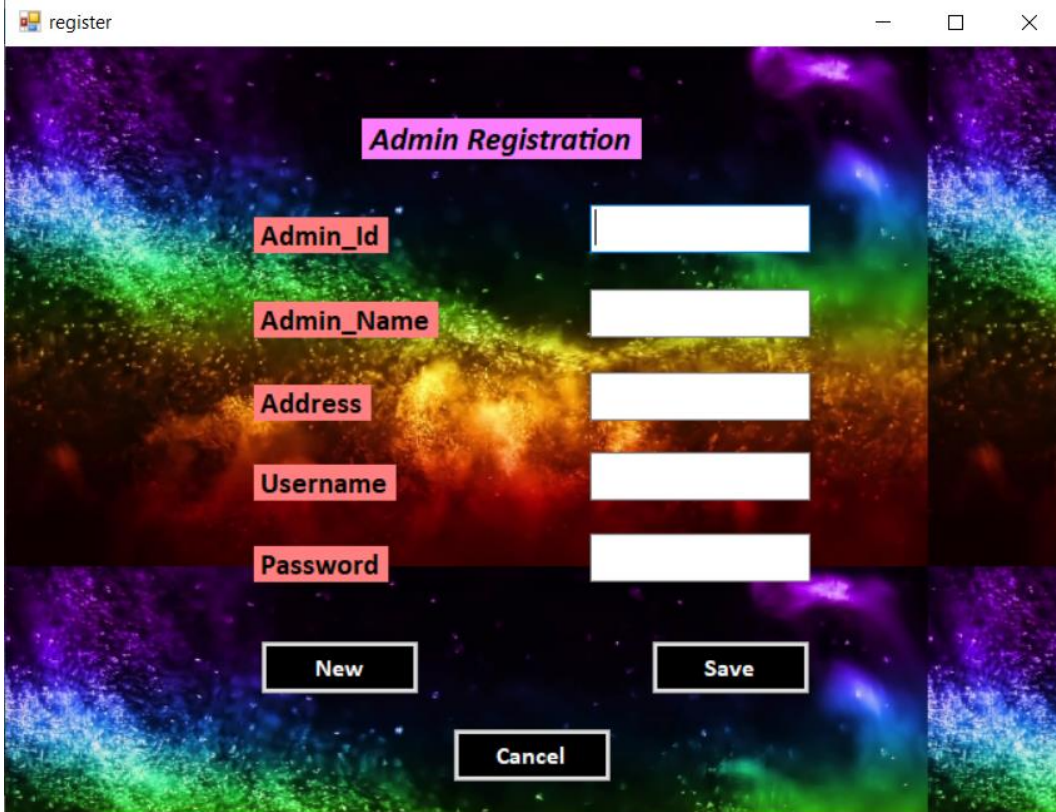
- Login Form
- Admin Registration Form
- Main Form
- Customer Form
- Breakfast Order Form
- Dinner Order Form
- Breakfast Bill Form
- Dinner Bill Form
- Change Password Form
- About Us

1. Login form:-

The screenshot shows a web application window titled "Form1" with a background image of a restaurant table. The login form contains the following elements:

- A "LOGIN" button at the top center.
- A "Username" label with a text input field containing the letter "a".
- A "Password" label with a text input field containing a dollar sign "\$".
- A "Show" checkbox next to the password field.
- A "Submit" button at the bottom left.
- A "cancel" button at the bottom right.
- A "Register here" link at the bottom center.
- A "Login Successful" dialog box with an "OK" button.

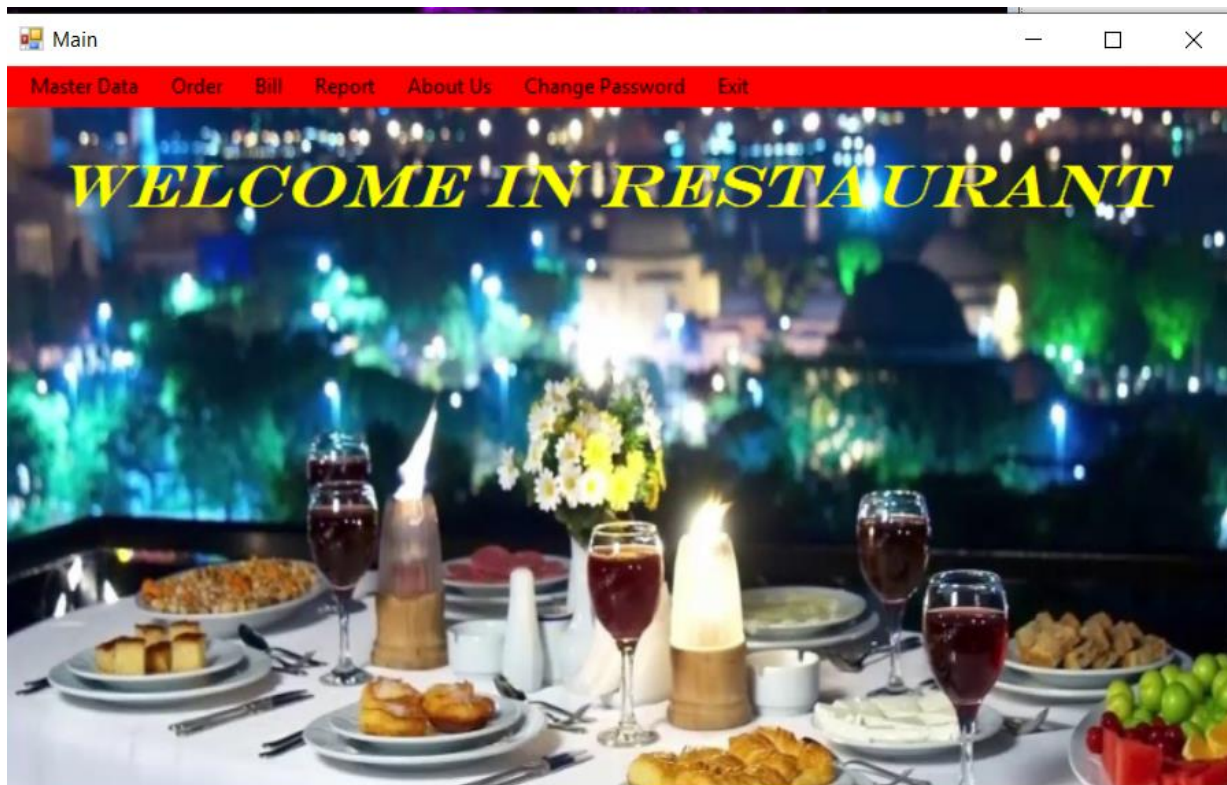
2. Admin Registration form:-



The image shows a window titled "register" with a colorful, abstract background. The window contains the following elements:

- Title:** Admin Registration
- Fields:** Five text input fields labeled Admin_Id, Admin_Name, Address, Username, and Password.
- Buttons:** Three buttons labeled New, Save, and Cancel.

3. Main form:-



4. Breakfast Order Form:-

breakfast [Window Title Bar]

Morning Breakfast

FOOD		Table No. <input type="text"/>		Drinks	
Boil -Egg	<input type="text"/>	New Order Cancel Bill	Tea	<input type="text"/>	
BreadButter	<input type="text"/>		Coffee	<input type="text"/>	
Sandwich	<input type="text"/>		Green Tea	<input type="text"/>	
Cornflex	<input type="text"/>		Milk	<input type="text"/>	
Poha	<input type="text"/>		Mix Fruit Juice	<input type="text"/>	
Salad	<input type="text"/>		Orange Juice	<input type="text"/>	
Omlet	<input type="text"/>				

5. Dinner Order form:-

dinner [Window Title Bar]

DINNER 19 March 2019

Veg and Non-Veg Meal	Dessert	Drinks
Pav-Bhaji <input type="text"/>	Pastries-Puff <input type="text"/>	Apple Juice <input type="text"/>
Masala-Dosa <input type="text"/>	Vanilla Cone <input type="text"/>	Soft Drink <input type="text"/>
Chicken Dinner <input type="text"/>	Strawberry Shake <input type="text"/>	Fruit Juice <input type="text"/>
Paneer-Tikka <input type="text"/>	Cocklate Muffin <input type="text"/>	Cola <input type="text"/>
Channa-Masala <input type="text"/>	Pancake Syrup <input type="text"/>	Orange Juice <input type="text"/>
Butter-Chicken <input type="text"/>		
Aloo-Mattar <input type="text"/>		
Masharoom <input type="text"/>		
Rise <input type="text"/>		

Table No.

Order **New** **Bill** **Cancel**

Soup	
Mix-Veg	<input type="text"/>
Tomato	<input type="text"/>
Non-Veg	<input type="text"/>
Mashroom	<input type="text"/>

6. Breakfast Bill form:-

breakfastbill

Table No

Search view all Remove

	Tableno	boileggs	breadbutter	sandwich	cornflex	poha
*						

Order Food Price

	TableNo	order	Quantity	Price	Amount
**					

Preview Close

Quantity Total Amount price

New Save Total

7. DinnerBill Details form:-

dinnerbill

Table No

Search Preview Close

	tableno	pavbhaji	masaladosa	chickendinner	paneertikka	channamasala	butterchicken	aloomatar	mashroom	rise	pe
▶	8		2								4
*											

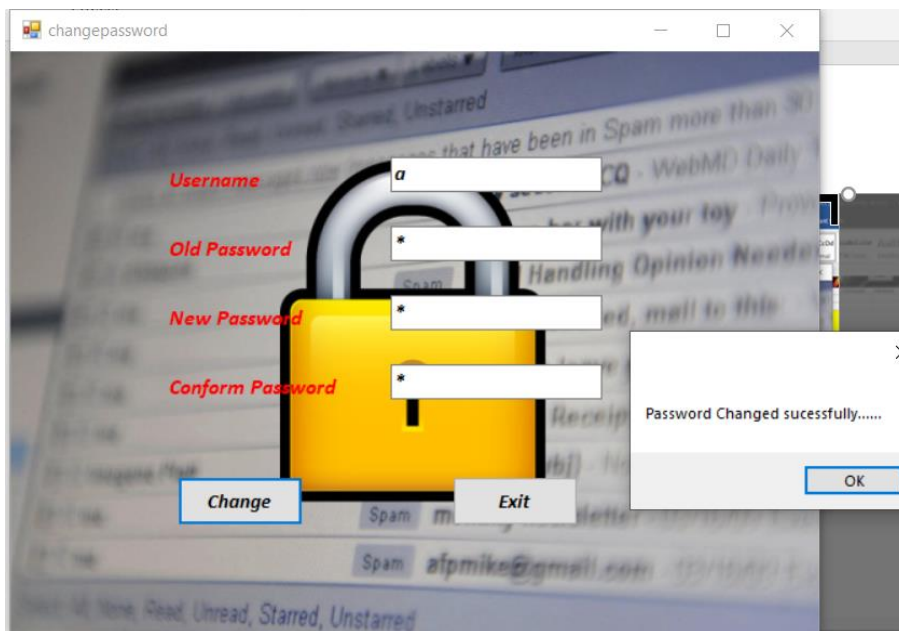
Order Food Price

	TableNo	order	Quantity	Price	Amount
**					

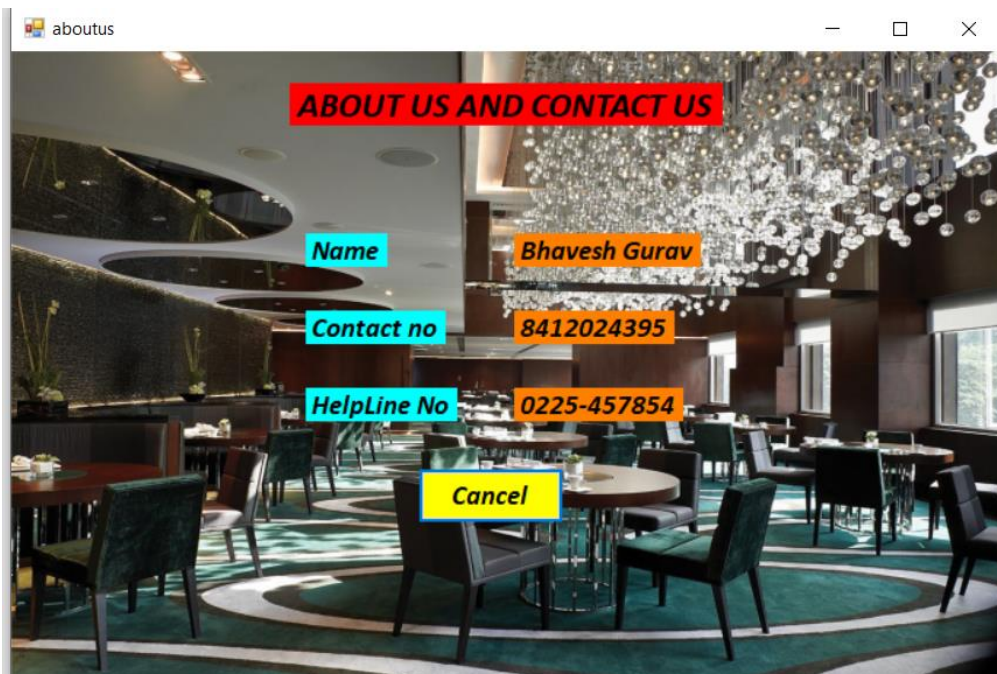
Quantity Total Amount price

New Save Total

8. Change Password form:-



9. About Us:-



Chapter No: - 10

Appendix B1. Customer report

<u>fname</u>	<u>lname</u>	<u>city</u>	<u>peoples</u>	<u>mobilen</u>	<u>Date</u>
bhaves	gurav	shirpur	7	78548455	7
mitesh	gurav	shirpur	5	44488454657	Sunday, 3 Mar
mitesh	gurav	shirpur	15	757454235	Thursday, 7 Mar
					Friday, 8 Mar
sdf	sdf	sdf	ds	sd	Friday, 8 Mar
dfds	df	f	df	d	Friday, 8 Mar
					Friday, 8 Mar
					Friday, 8 Mar

Chapter No: - 11

Conclusion

Software qualities are reliability which includes all the new and advance facilities given by the C#.Net. Software includes maintainability, modularity and good documentation making a system hundred percent reliable is nearly an impossible task, because through the testing who's resulted in great accuracy, the online nature may create on recover which may make system failure still "Record maintaining" has been developed to gain reliability it its maximum extends by considering all possible kinds of problem that may occur and create error in existing system.

By using this system, we maintain records of Customer, order, and payment, sales also maintain by this system. We can generate reports of all the forms and display the information. We can find the record of customer or order within minimum time. As per software quality is concerned, I tried to make the system user friendly and easy to understand.

Chapter no :-12

Undertaking

I declare that the work presented in this project entitled “Restaurant Management System” for “Janvi Restaurant, Shirpur “, submitted to the Department of Computer Application, Kavayitri Bahinabai Chaudhari , North Maharashtra University, Jalgaon.

I have not plagiarized or submitted the same work for the award of any other degree. In case this undertaking is found incorrect, I accept that my degree may be unconditionally withdrawn.

March, 2019

Shirpur

(Bhavesh D. Gurav)

Chapter No: - 13

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Pune VidhyarthiGruhaPrakashan.

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