VISVESVARAYA TECHNOLOGICAL UNIVERSITY
JNANA SANGAMA, BELAGAVI – 590 018

An Internship Project Report
on

FOOD ORDERING SYSTEM

Submitted in partial fulfillment of the requirements for the VIII Semester of

degree of **Bachelor of Engineering in Information Science and Engineering** of

Visvesvaraya Technological University, Belagavi

by

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RNS INSTITUTE OF TECHNOLOGY

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DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

CERTIFICATE

Certified that the Internship work entitled *Food Ordering System* has been successfully completed by **Vinayaka N Adiga (1RN18IS125)** a bonafide student of **RNS Institute of Technology, Bengaluru** in partial fulfillment of the requirements of 8th semester for the award of degree in **Bachelor of Engineering in Information Science and Engineering** of **Visvesvaraya Technological University, Belagavi** during academic year **2021-2022**. The internship report has been approved as it satisfies the academic requirements in respect of internship work for the said degree.

Mr. R Rajkumar	**Dr. Suresh L**	**Dr. M K Venkatesha**
Internship Guide	Professor and HoD	Principal
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External Viva

Name of the Examiners   **Signature with Date**

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DECLARATION

I, **VINAYAKA N ADIGA [USN: 1RN18IS125]** student of VII Semester BE, in Information Science and Engineering, RNS Institute of Technology hereby declare that the Internship work entitled **Food Ordering System** has been carried out by us and submitted in partial fulfillment of the requirements for the *VIII Semester degree of **Bachelor of Engineering in Information Science and Engineering** of Visvesvaraya Technological University, Belagavi* during academic year 2021-2022.

Place: Bengaluru

Date:

VINAYAKA N ADIGA

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ABSTRACT

The purpose of this project is to develop a computerized and mobilized food ordering system that can be used to revolutionize the traditional ordering system that currently implemented in majority of the food and beverage industry.

The traditional system that using by most of the food and beverage industry is the traditional manual ordering system which means all works and procedures is recorded through manpower manual work and it consist of a huge amount of paper work that is not effective and efficiency. This cause the business to encounter trouble which regarding human error due to the huge amount of manpower manual work that operating in each business routine.

Thus, this computerized and mobilized food ordering system is designed to assist the business routine in term of having better management as well as easier to handle daily business operation.

ACKNOWLEDGMENT

At the very onset I would like to place our gratefulness to all those people who helped me in making the Internship a successful one.

Coming up, this internship to be a success was not easy. Apart from the sheer effort, the enlightenment of the very experienced teachers also plays a paramount role because it is they who guided me in the right direction.

First of all, I would like to thank the **Management of RNS Institute of Technology** for providing such a healthy environment for the successful completion of internship work.

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We are extremely grateful to our own and beloved Professor and Head of Department of Information science and Engineering, **Dr. Suresh L**, for having accepted to patronize me in the right direction with all her wisdom.

We place our heartfelt thanks to **DR S SATISH KUMAR** Professor ,Department of Information Science and Engineering for having guided internship and all the staff members of the department of Information Science and Engineering for helping at all times.

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I also thank our internship coordinator **Dr. R Rajkumar,** Associate Professor, Department of Information Science and Engineering. I would thank my friends for having supported me with all their strength and might. Last but not the least, I thank my parents for supporting and encouraging me throughout. I have made an honest effort in this assignment.

VINAYAKA N ADIGA

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List of Abbreviations

ADO   Active X Data Object
SQL   Structed Query Language
MSSQL   Microsoft SQL Server
HTML   Hypertext Markup Language
CSS   Cascading Style Sheets
CLR   Common Language Runtime
IE   Internet Explorer
VB   Visual Basics
ISO   International Organization of Standardization
ANSI   American National Standard Institutes

1. INTRODUCTION:

Food Ordering System is an application which will help restaurant to optimized and control over their restaurants. For the waiters, it is making life easier because they don't have to go kitchen and give the orders to chef easily. For the management point of view, the manager will able able to control the restaurant by having all the reports to hand and able to see the records of each employees and orders. This application helps the restaurants to do all functionalities more accurately and faster way. Food Ordering System reduces manual works and improves efficiency of restaurant.

This application is helping Food Ordering s to maintain the stock and cash flows and there are many more functionalities, like

• To store records.

• Control orders and services.

• Billings.

• Control staff and their shifting.

• Control multiple branches.

• Helps Manager to control each part of the restaurant.

The main goal is to maintain the restaurant's functions in an effective and accurate manner and also it is reducing the use of manual entries. This software helps food orders to maintain day to day records in system. It is keeping a proper record of the database.

1.1 EXISTING SYSTEM

The existing system happens to be a non computerized operating system were all operations are done manually by the waiter carrying paper and to take down the order of the customer or making an order over the counter. This leads to mistakes because the waiter might not understand what the customer had ordered therefore serving him/her a different menu. This could be so embarrassing because the customer might not take it lightly with the waiter which may lead to misunderstanding.

DISADVANTAGES

Due to manual means being employed by the fast food restaurants, it is very difficult to satisfy the wants and needs of the customers. Most of the problems include:

1. Mistakes are made when taking the orders of the customers

2. The process of collecting customers' purchases order is very tedious. This makes it impossible to deliver goods on time.

3. It leads to lack of understanding between the customers and the employees.

4. The record keeping system is poor. Losses of vital records have been reported in the past consequently. Besides, protecting the file system from unauthorized access is a problem that has defiled solution.

5. Unnecessary time is wasted conveying information through the ladder of authority. Management at times seeks to get a copy of the customer's order form and this may take a lot of time to obtain it.

6. It causes reduction of production flow. These are the major problems facing the existing system and would be corrected with the help of the proposed system.

1.2 PROPOSED SYSTEM

The proposed system is developed to manage ordering activities in fast food restaurant. It helps to record customer submitted orders. The system should cover the following functions in order to support the restaurant's business process for achieving the objectives:

1. To allow the customer to make order, view order and make changes before submitting their order and allow them make payment through prepayment card or credit card or debit card.

2. To provide interface that allows promotion and menu.

3. To prevent interface that shows customers' orders detail to front-end and kitchen staffs for delivering customers' orders

4. Tools that generate reports that can be used for decision making

5. A tool that allows the management to modify the food information such as price, add a new menu and many others as well as tools for managing user, system menu and promotion records.

ADVANTAGES:

1. Accuracy in handling of data

2. The volume of paper work will be greatly reduced.

3. Flexibility (i.e. it can be accessed at any time)

4. Easy way to back up or duplicating data in case of data loss

5. Better storage and faster retrieval system

6. Errors in the reports will be greatly minimized.

LITERATURE REVIEW

2.1 INTRODUCTION

An ordering system is referred to as a set of detail methods that is being used in handling the ordering process. Food ordering can be computerized or done manually. Thos helps the customer to order their food themselves which is known as the customer self-ordering system. The customer self-ordering system can be defined as a computerized system that is being used by customers to place their own orders in the restaurant and allow the orders to be tracked, in order to prepare and deliver the food to the computers.

2.2 SELF-SERVICE/SELF-ORDERING IN RESTAURANT

Self-service or self-ordering in restaurant industry refers to the restaurant taking orders from customers through applying various types of technologies such as internet and many others. Self-service or self-ordering is successful when it is applied at restaurants in many other countries. The usage of the self-service or selfordering technology is proven to benefit most of the investors. Odesser-Torpey(Odesser-Torpey, 2008) reports that most of the Americans hate waiting for an order. Therefore, they prefer self-service technology, which can be in form of text messaging, the internet and kiosk. Usually, the customer prefers self-service because of speed and convenience in making order and transaction while minimize the miscommunication. He also mentioned that self-activated terminals are more likely to serve as ordering innovation in the future. The 7 implementation of alternative ordering can increase check size, free up counter staff that need to serve customers and take money handling out of service equation. Bhatnagar(Bhatnagar, 2006) mentioned that the innovation of kiosk and computerized table top ordering screen will force restaurant industry re-jigger an often used acronym quick service restaurant to the self-service restaurant. Customers can get information or search for recipes from the kiosk and internet. The kiosk and internet also takes orders and receives credit cards or debit cards payment. As a result, wrong order and

long queue can be avoided, order staff can be arranged to somewhere else and focus to speed up on delivery orders. On the other hand, a table-top touch screen order system can take customer orders as well as handle other customer requests such as refill drinks, call a waiter and make payment by credit card and debit card. Bytes, a restaurant located at Canterbury has been successfully standing apart from the competitors because of applying online self-service ordering and the payment concepts. The system used in Bytes allows the customers make an order through the touch screen, and the order will be directed to bar or kitchen. The system also offers games after a customer placed the orders while internet access will be provided to customers in the future. Touch screen ordering reduces the need of the waiter. The system also provides database for customers' habits and preferences, generate the management reports, perform analysis as well as allows the menu to be updated instantly. (Brickers, 2006). Based on study, it is possible for applying the online food ordering system to the fast food restaurants in Nigeria. This is because the system can improve workplace efficiency, increase sales of the restaurant as well as reduce making incorrect order. As a result, it is worth for investing on the system, whereby it can shorten the return on investment. In addition, the system should be supported by the food origin taste and services to maintain the customers' loyalty and satisfaction. However, widely implementing the food ordering system may cause the influx of labor due to the elimination of waiters in restaurant industry. Even the system is important to be implemented, yet there is still some risk in other factors such as a direct interaction and restaurant design concept, which need to be considered for ensuring the success of the system. Gan (Gan, 2002) proposed to develop an online fast food restaurant ordering system that allows customers to place orders anytime at any place. The system helps to manage order from customer as well as advertise promotion. It allows kitchen staff to view ordering information, management to manage fast food raw materials and staff to search customer delivery and profile information. This system helps to reduce queue issues during

peak hours, speed up food preparation and increase customer volumes. As a result, market share of fast food restaurant can be boosted up and increases return of investment for the investor. De Leon (De Leon, 2008) mentioned that there are several aspects that should be included in a good online food ordering system. System should be simple to navigate, not clustered and easy to make an order, (Sharma, 2007,) designed with professionals looking with search engine optimize capability and available 24hours. The system should also have a secure payment gateway to protect their customers' credit cards information, fast and keep track on orders and sales history easily as well as generate a comprehensive sales report, (Sharma, 2007).

3. Analysis

3.1 Introduction

In this fast generation people are very bury their routine work. so some time they din't spend time for shopping and going to restaurant for food.

We developed the system to get food at home delivery by making a online order on our system. We develop a web based application in asp.net with c# language which provide vast categories foods and user can easily make order for testy food from our website within a minute at any where using internet.

User need to make online payment for confirm order some time all user are not able to do online payment, so we provide cash on delivery option for our regular customer.

3.2 System Specifications

3.2.1 Hardware Requirements: -

- Pentium-IV(Processor).
- 4 GB Ram
- 512 KB Cache Memory
- Hard disk 10 GB
- Microsoft Compatible 101 or more Key Board

3.2.2 Software Requirements: -

- **Operating System** : Windows (Any version above XP)
- **Programming language:** .NET4.0, VISUAL STUDIO2019
- **Web-Technology** : ASP.NET
- **Back-End** : SQL SERVER 2016
- **Web Server** : IIS.

3.3 SYSTEM REQUIREMENTS

3.3.1 NON-FUNCTIONAL REQUIREMENTS

EFFICIENCY REQUIREMENT

When a food ordering system will be implemented admin and user will easily access it for managing orders and ordering food respectively.

RELIABILITY REQUIREMENT

The system should accurately perform member registration, member login,payment of customers,admin login, admin management of customer and orders .

USABILITY REQUIREMENT

The system is designed for a user-friendly environment so that customer and admin of restaurant can perform the various tasks easily and in an effective way.

ORGANIZATIONAL REQUIREMENT

DELIVERY REQUIREMENTS The whole system is expected to be delivered in six months of time with a weekly evaluation by the project guide.

3.3.2 FUNCTIONAL REQUIREMENTS

1. NORMAL USER

   1.1   USER LOGIN

Description of feature: This feature used by the user to login into system. They are required to enter user id and password before they are allowed to enter the system .The user id and password will be verified and if invalid id is there user is allowed to not enter the system.The system must only allow user with valid id and password to enter the system .The system performs authorization process which decides what user level can access toThe user must be able to logout after they finished using system.

   1.2   REGISTER NEW USER

Description of feature: This feature can be performed by all users to register new user to create account. Functional requirements -System must be able to verify information -System must be able to delete information if information is wrong

2   ADMIN USER

2.1 ADMIN LOGIN

Description of feature: This feature used by the admin to login into system. They are required to enter user id and password before they are allowed to enter the system. The user id and password will be verified and if invalid id is there user is allowed to not enter the system. The system must only allow admin with valid id and password to enter the system.

4. System Design

4.1 Introduction

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

4.2 UML DIAGRAMS

Actor:

A coherent set of roles that users of use cases play when interacting with the use cases.

Use case:

A description of sequence of actions, including variants, that a system performs that yields an observable result of value of an actor.

UML stands for Unified Modeling Language.

There are various kinds of methods in software design:

They are as follows:

- ➢ Use case Diagram
- ➢ Sequence Diagram
- ➢ Activity Diagram
- ➢ ER DIAGRAM

4.2.1 SEQUENCE DIAGRAM:

Sequence diagram and collaboration diagram are called INTERACTION DIAGRAMS. An interaction diagram shows an interaction, consisting of set of objects and their relationship including the messages that may be dispatched among them.
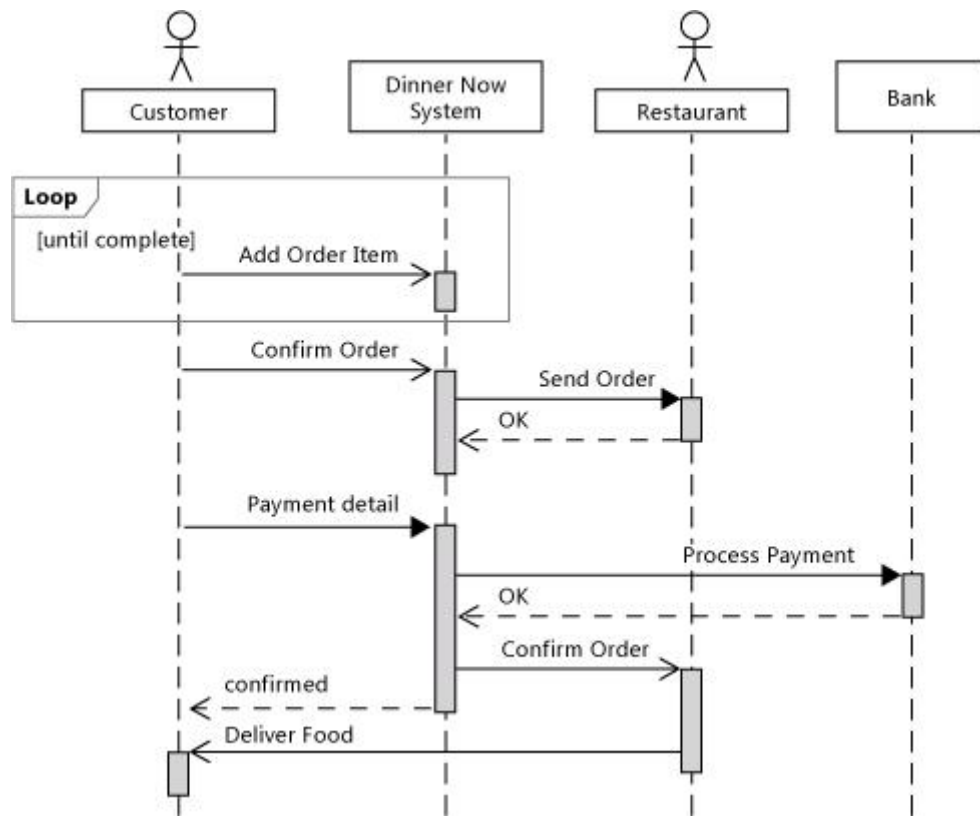
4.2.2 ACTIVITY DIAGRAM:

The activity diagram used to describe flow of activity through a series of actions. Activity diagram is a important diagram to describe the system. The activity described as an action or operation of the system.
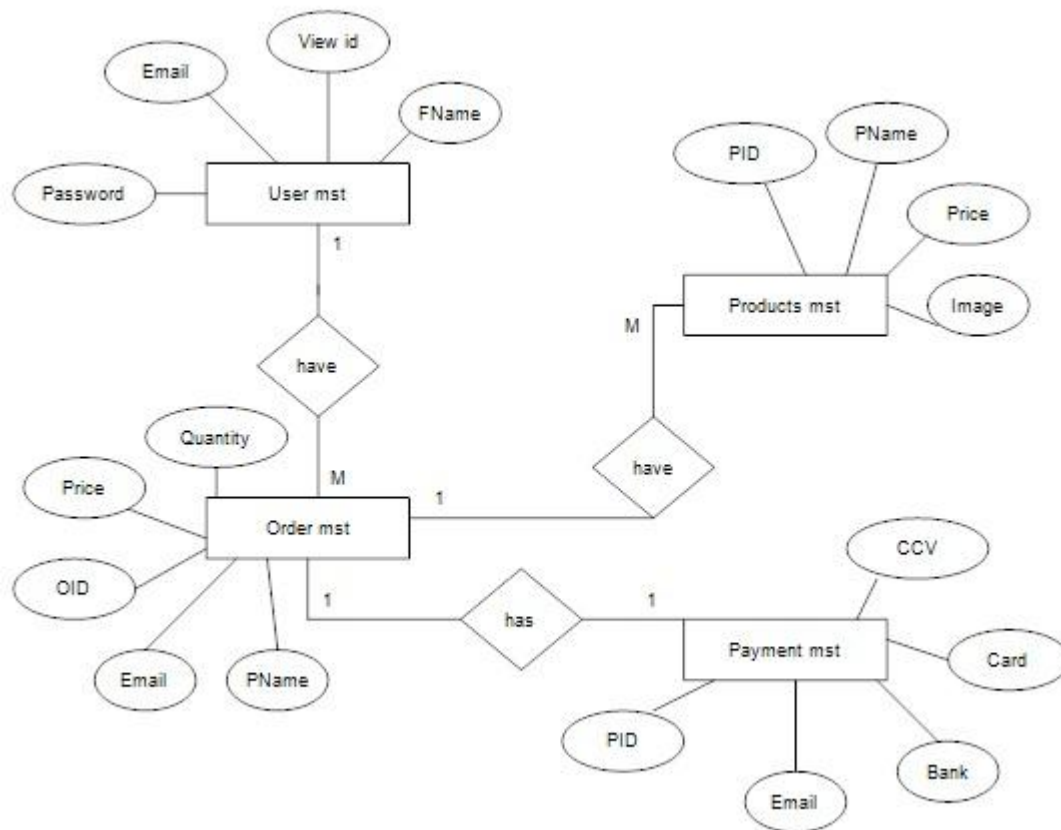
Activity Diagram for User Side
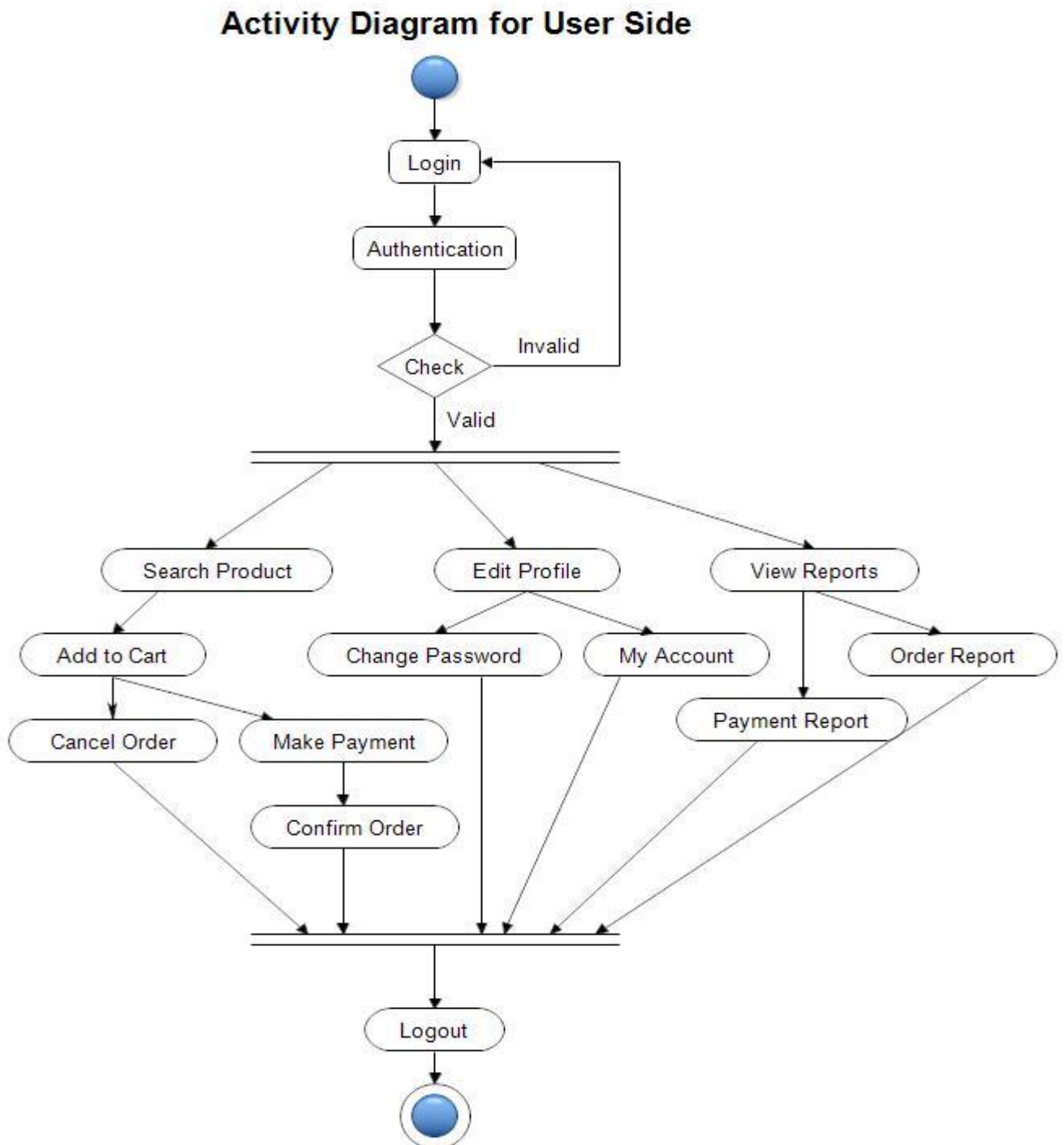
4.2.3 USECASE DIAGRAM:

Use case:

   A description of sequence of actions, including variants, that a system performs that yields an observable result of value of an actor.
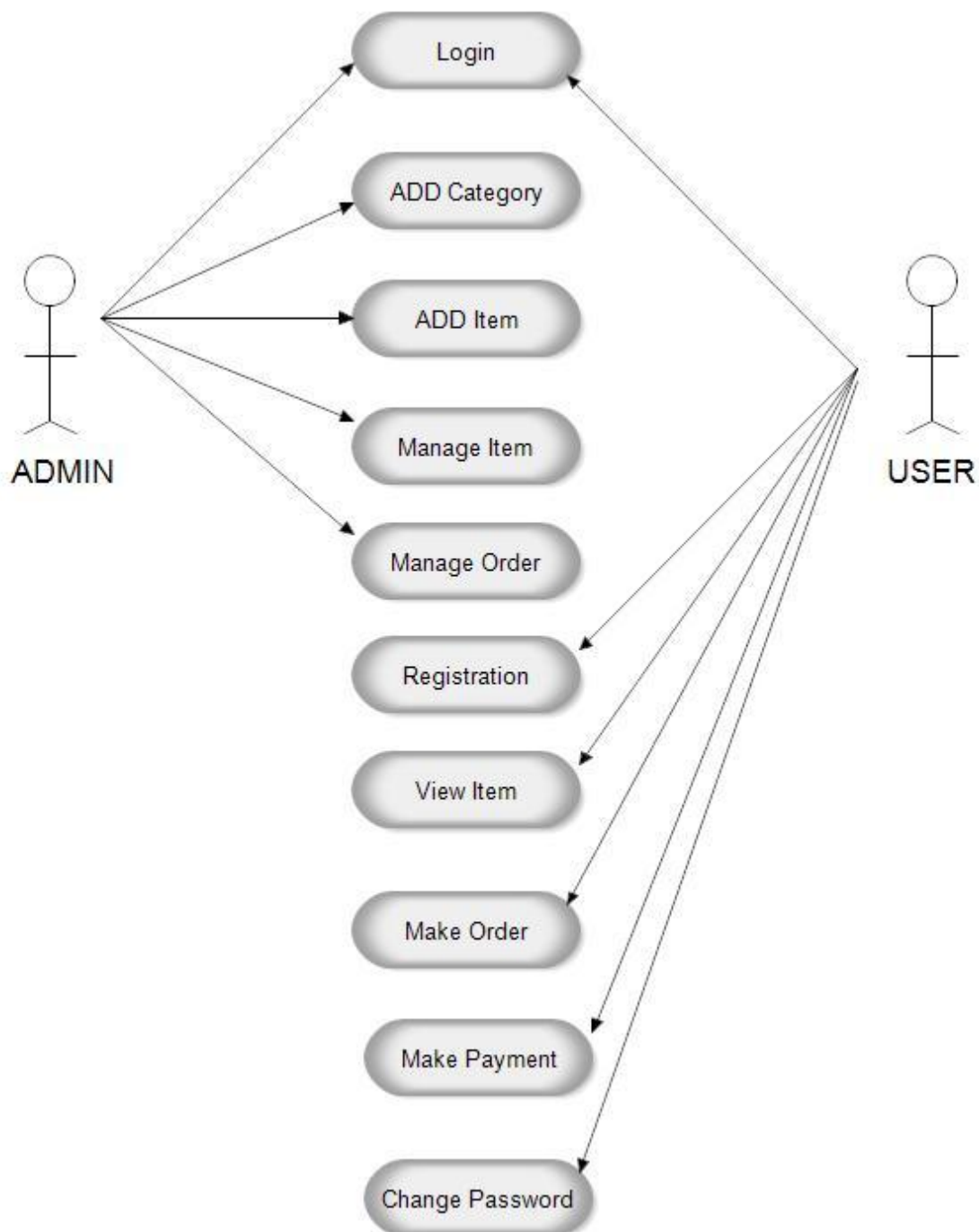
4.24 ER DIAGRAM

4.3 DATA FLOW DIAGRAMS

The DFD takes an input-process-output view of a system i.e. data objects flow into the software, are transformed by processing elements, and resultant data objects flow out of the software.

Data objects represented by labeled arrows and transformation are represented by circles also called as bubbles. DFD is presented in a hierarchical fashion i.e. the first data flow model represents the system as a whole. Subsequent DFD refine the context diagram (level 0 DFD), providing increasing details with each subsequent level.

The DFD enables the software engineer to develop models of the information domain & functional domain at the same time. As the DFD is refined into greater levels of details, the analyst performs an implicit functional decomposition of the system. At the same

time, the DFD refinement results in a corresponding refinement of the data as it moves through the process that embody the applications.

A context-level DFD for the system the primary external entities produce information for use by the system and consume information generated by the system. The labeled arrow represents data objects or object hierarchy.

RULES FOR DFD:

- Fix the scope of the system by means of context diagrams.
- Organize the DFD so that the main sequence of the actions .
- Identify all inputs and outputs.
- Identify and label each process internal to the system with Rounded circles.
- A process is required for all the data transformation and Transfers. Therefore, never connect a data store to a data Source or the destinations or another data store with just a Data flow arrow.
- Do not indicate hardware and ignore control information.
- Make sure the names of the processes accurately convey everything the process is done.
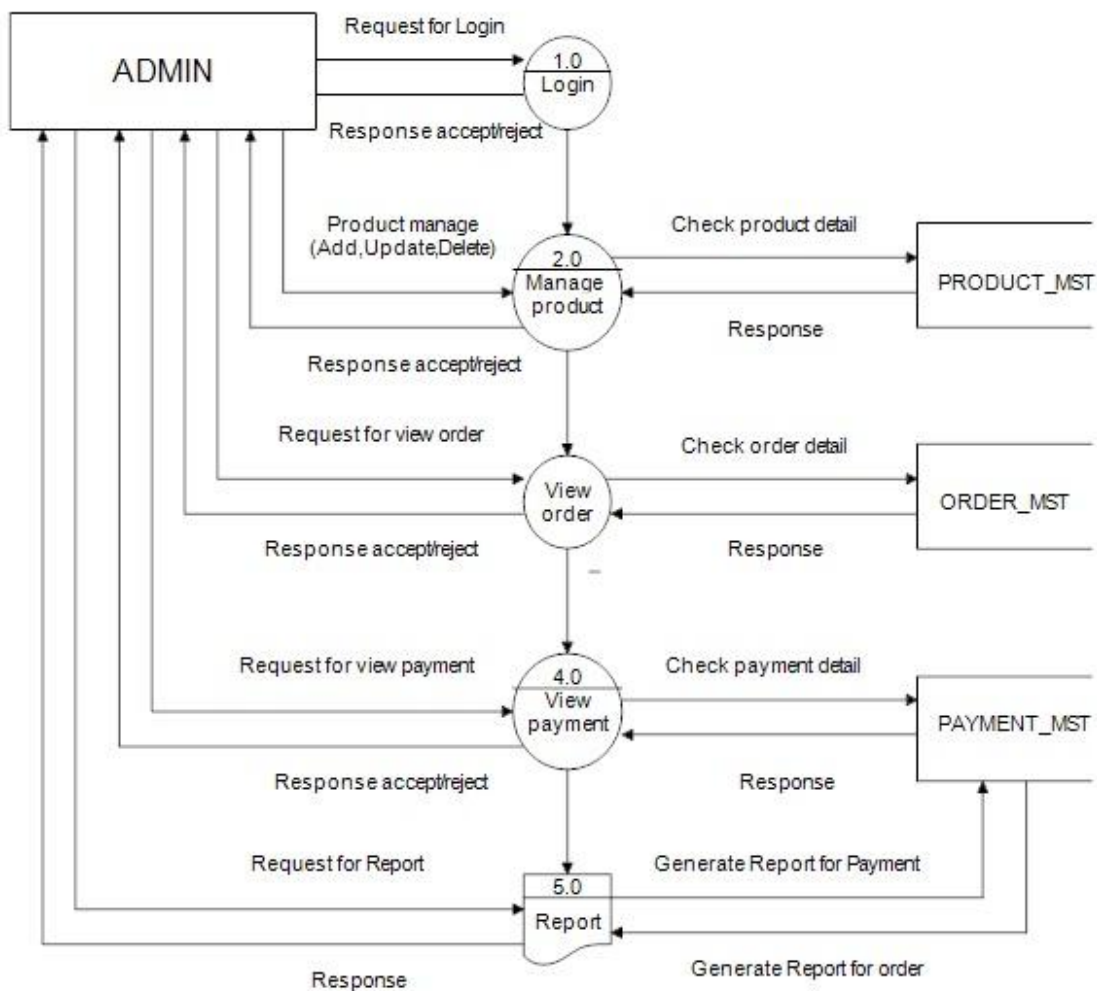- Number each occurrence of repeated external entities.
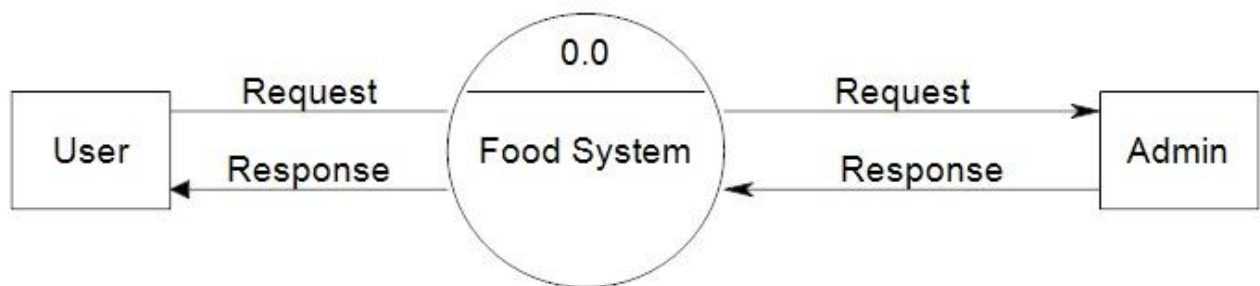
1 LEVEL DFD
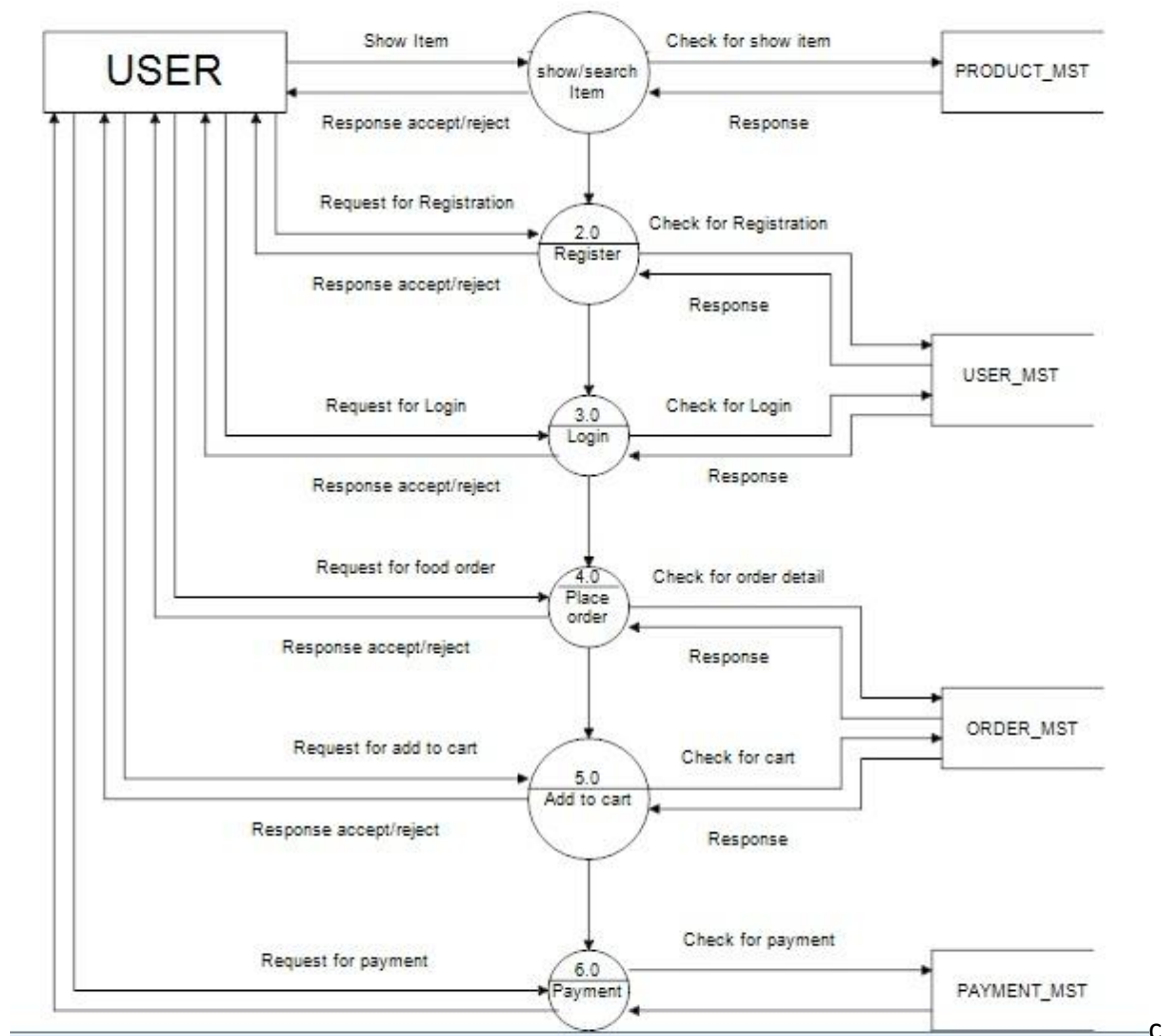
1st **level DFD for user**
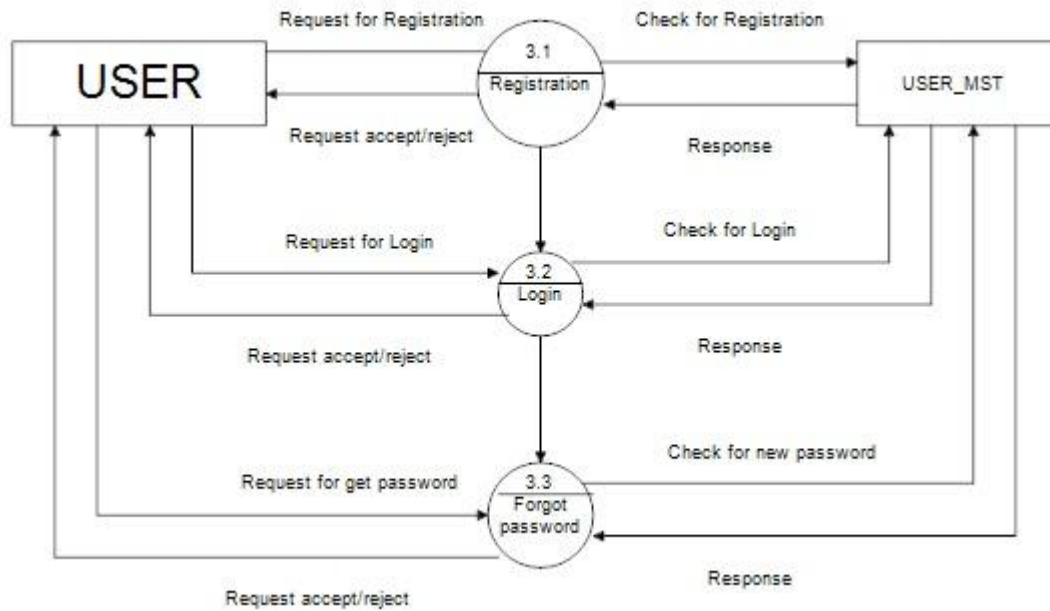
2nd level DFD for user

Admin side DFD for online food system

5. Detailed Design

5.1 MODULES USED: -

The proposed system categories and follows these modules to implement

Login component

1. Admin
2. User

Administrator Component

1. Admin

5.2 MODULES DESCRIPTION: -

In online food system there are main two modules first is Admin and second is User or Customer.

Admin : is a responsible person who operate the whole system. Admin has rights to add, delete, modify category , item and all other information regarding to online food ordering system.

User: Using login id and password user can the use food ordering system where users can search for order food and make payment.

Registration: In the Registration module, user has to register himself by supplying his personal information which gets store in data base which are using as backend.

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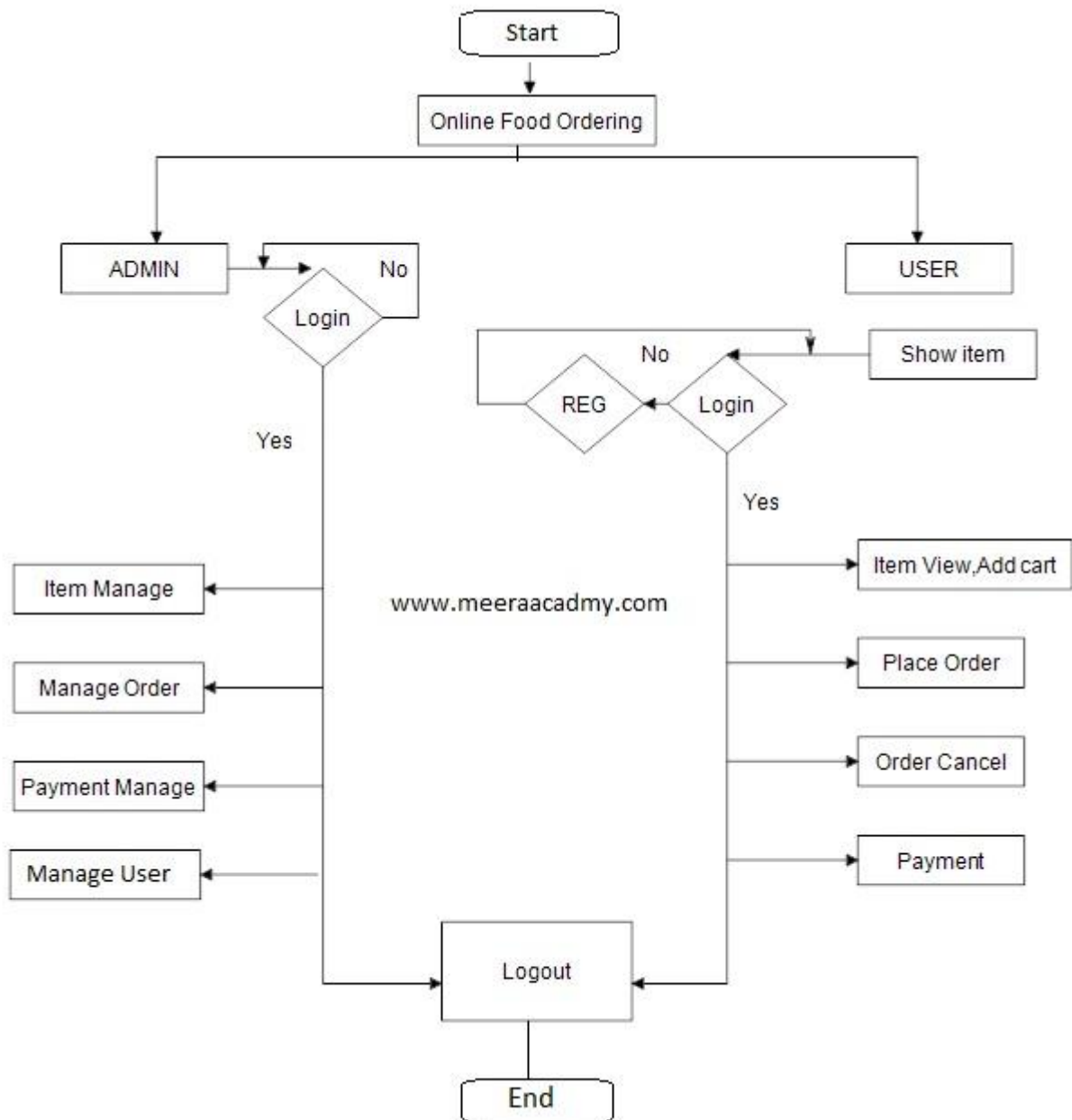Admin Functionalities:

Here is the list of activities of admin.

- Add Product
- View product
- View payment report
- Receive payment order

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User Functionalities:

- Add food
- View cart
- Payment

5.3 FLOWCHART

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6. Implementation Details

6.1 Introduction:

Implementation is the stage where the theoretical design is turned into a working system. The most crucial stage in achieving a new successful system and in giving confidence on the new system for the users that it will work efficiently and effectively.

The system can be implemented only after thorough testing is done and if it is found to work according to the specification.

It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the changeover and an evaluation of change over methods a part from planning. Two major tasks of preparing the implementation are education and training of the users and testing of the system.

The more complex the system being implemented, the more involved will be the systems analysis and design effort required just for implementation.

The implementation phase comprises of several activities. The required hardware and software acquisition is carried out. The system may require some software to be developed. For this, programs are written and tested. The user then changes over to his new fully tested system and the old system is discontinued.

6.2 OVERVIEW OF TECHNOLOGIES USED

6.2.1 Front End Technology

6.2.1.1 MICROSOFT .NET FRAMEWORK

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

- To provide a consistent object-oriented programming environment whether object code is stored and executed locally, executed locally but Internet-distributed, or executed remotely.

- To provide a code-execution environment that minimizes software deployment and versioning conflicts.

- To provide a code-execution environment that guarantees safe execution of code, including code created by an unknown or semi-trusted third party.

- To provide a code-execution environment that eliminates the performance problems of scripted or interpreted environments.

- To make the developer experience consistent across widely varying types of applications, such as Windows-based applications and Web-based applications.

- To build all communication on industry standards to ensure that code based on the .NET Framework can integrate with any other code.

The .NET Framework has two main components: the common language runtime and the .NET Framework class library. The common language runtime is the foundation of the .NET Framework.

For example, ASP.NET hosts the runtime to provide a scalable, server-side environment for managed code. ASP.NET works directly with the runtime to enable Web Forms applications and XML Web services.

Database

A database is similar to a data file in that it is a storage place for data. Like a data file, a database does not present information directly to a user; the user runs an application that accesses data from the database and presents it to the user in an understandable format.

A database typically has two components: the files holding the physical database and the database management system (DBMS) software that applications use to access

data. The DBMS is responsible for enforcing the database structure, including:

- Maintaining the relationships between data in the database.
- Ensuring that data is stored correctly and that the rules defining data relationships are not violated.
- Recovering all data to a point of known consistency in case of system failures.

Client/Server: -

- In a client/server system, the server is a relatively large computer in a central location that manages a resource used by many people. When individuals need to use the resource, they connect over the network from their computers, or clients, to the server.

- Examples of servers are: In a client/server database architecture, the database files and DBMS software reside on a server. A communications component is provided so applications can run on separate clients and communicate to the database server over a network. The SQL Server communication component also allows communication between an application running on the server and SQL Server.

- Server applications are usually capable of working with several clients at the same time. SQL Server can work with thousands of client applications simultaneously. The server has features to prevent the logical problems that occur if a user tries to read or modify data currently being used by others.

- While SQL Server is designed to work as a server in a client/server network, it is also capable of working as a stand-alone database directly on the client. The scalability and ease-of-use features of SQL Server allow it to work efficiently on a client without consuming too many resources.

.NET Framework Class Library: -

The .NET Framework class library is a collection of reusable types that tightly integrate with the common language runtime. The class library is object oriented, providing types from which your own managed code can derive functionality.

For example, you can use the .NET Framework to develop the following types of applications and services:

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

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

6.2.2 Active Server Pages.NET: -

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

- World-Class Tool Support:

- Power and Flexibility

- Enhanced Performance

- Simplicity

- Manageability

- Scalability and Availability

- Customizability and Extensibility

- Security

Language Support

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

What is ASP.NET Web Forms?

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

6.3 BACK-END TECHNOLOGY:

6.3.1About Microsoft SQL Server 2016

Microsoft SQL Server is a Structured Query Language (SQL) based, client/server relational database. Each of these terms describes a fundamental part of the architecture of SQL Server.

Database

A database is similar to a data file in that it is a storage place for data. Like a data file, a database does not present information directly to a user; the user runs an application that accesses data from the database and presents it to the user in an understandable format.

A database typically has two components: the files holding the physical database and the database management system (DBMS) software that applications use to access data. The DBMS is responsible for enforcing the database structure, including:

- Maintaining the relationships between data in the database.
- Ensuring that data is stored correctly and that the rules defining data relationships are not violated.
- Recovering all data to a point of known consistency in case of system failures.

SQL Server Features

Microsoft SQL Server supports a set of features that result in the following benefits:

Ease of installation, deployment, and use

SQL Server includes a set of administrative and development tools that improve your ability to install, deploy, manage, and use SQL Server across several sites.

Scalability

The same database engine can be used across platforms ranging from laptop computers running Microsoft Windows to large, multiprocessor servers running Microsoft Windows NT, Enterprise Edition.

Data warehousing

SQL Server includes tools for extracting and analyzing summary data for online analytical processing (OLAP). SQL Server also includes tools for visually designing databases and analyzing data using English-based questions.

System integration with other server software

SQL Server integrates with e-mail, the Internet, and Windows.

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

Connections

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

Data Adapters (OLEDB/SQL)

The Data Adapter object works as a bridge between the Dataset and the source data. Using the provider-specific SqlDataAdapter (along with its associated SqlCommand and SqlConnection) can increase overall performance when working with a Microsoft SQL Server database. For other OLE DB-supported databases, you would use the OleDbDataAdapter object and its associated OleDbCommand and OleDbConnection objects. The Data Adapter object uses commands to update the data source after changes have been made to the Dataset. Using the Fill method of the Data Adapter calls the SELECT command; using the Update method calls the INSERT, UPDATE or DELETE command for each changed row.

6.3.2 C# Language

C# (pronounced C Sharp) is a multi-paradigm programming language that encompasses functional, imperative, generic, object-oriented (class-based), and component-oriented programming disciplines. It was developed by Microsoft as part of the .NET initiative and later approved as a standard by ECMA (**ECMA-334**) and ISO (**ISO/IEC 23270**). C# is one of the 44 programming languages supported by the .NET Framework's Common Language Runtime.

C# is intended to be a simple, modern, general-purpose, object-oriented programming language. Anders Hejlsberg, the designer of Delphi, leads the team which is developing C#. It has an object-oriented syntax based on C++ and is heavily influenced by other programming languages such as Delphi and Java. It was initially named Cool, which stood for "C like Object Oriented Language". However, in July 2000, when Microsoft made the project public, the name of the programming language was given as C#. The most recent version of the language is C# 4.8 which was released in conjunction with the .NET Framework. The next proposed version, C# 4.0, is in development.

Some notable C# distinguishing features are:

- There are no global variables or functions. All methods and members must be declared within classes.
- Local variables cannot shadow variables of the enclosing block, unlike C and C++. Variable shadowing is often considered confusing by C++ texts.
- C# supports a strict Boolean data type, bool. Statements that take conditions, such as while and if, require an expression of a Boolean type.
- In C#, memory address pointers can only be used within blocks specifically marked as *unsafe*, and programs with unsafe code need appropriate permissions to run.
- Managed memory cannot be explicitly freed, but is automatically garbage collected. Garbage collection addresses memory leaks. C# also provides direct support for deterministic finalization with the using statement (supporting the Resource Acquisition Is Initialization idiom).
- Multiple inheritance is not supported, although a class can implement any number of interfaces.

- C# is more type safe than C++. The only implicit conversions by default are those which are considered safe, such as widening of integers and conversion from a derived type to a base type.
- Enumeration members are placed in their own scope.
- C# provides syntactic sugar for a common pattern of a pair of methods, accessor (getter) and mutator (setter) encapsulating operations on a single attribute of a class, in form of properties.
- Full type reflection and discovery is available

6.4 Pseudo Code

6.4.1 Connecting To SQL SERVER

```xml
<?xml version="1.0"?>
<!--
  For more information on how to configure your ASP.NET application, please visit
  http://go.microsoft.com/fwlink/?LinkId=169433
  -->
<configuration>
    <connectionStrings>
  <add name="USERMSTConnectionString" connectionString="Data Source=LAPTOP-UPH4FL5N;Initial Catalog=FOODSYSTEM;Integrated Security=True"
  providerName="System.Data.SqlClient" />
 </connectionStrings>
 <system.web>
        <compilation debug="true" targetFramework="4.0"/>
    </system.web>
</configuration>
```

7. Testing

Testing is a process of executing a program with the intent of finding an error. Testing is a crucial element of software quality assurance and presents ultimate review of specification, design and coding.

System Testing is an important phase. Testing represents an interesting anomaly for the software. Thus, a series of testing are performed for the proposed system before the system is ready for user acceptance testing.

A good test case is one that has a high probability of finding an as undiscovered error. A successful test is one that uncovers an as undiscovered error.

The primary objective for test case design is to derive a set of tests that has the highest livelihood for uncovering defects in software. To accomplish this objective two different categories of test case design techniques are used. They are

- White box testing.
- Black box testing.

WHITE-BOX TESTING:

White box testing focus on the program control structure. Test cases are derived to ensure that all statements in the program have been executed at least once during testing and that all logical conditions have been executed.

BLACK-BOX TESTING:

Black box testing is designed to validate functional requirements without regard to the internal workings of a program. Black box testing mainly focuses on the information domain of the software, deriving test cases by partitioning input and output in a manner that provides through test coverage. Incorrect and missing functions, interface errors, errors in data structures, error in functional logic are the errors falling in this category.

7.1 Unit testing:

Unit testing is essential for the verification of the code produced during the coding phase and hence the goal is to test the internal logic of the modules. Using the detailed design description as a guide, important paths are tested to uncover errors with in the boundary of the modules. These tests were carried out during the programming stage itself. All units of Vienna SQL were successfully tested.

7.2 Integration testing:

Integration testing focuses on unit tested modules and build the program structure that is dictated by the design phase.

7.3 System testing:

System testing tests the integration of each module in the system. It also tests to find discrepancies between the system and it's original objective, current specification and system documentation. The primary concern is the compatibility of individual modules. Entire system is working properly or not will be tested here, and specified path ODBC connection will correct or not, and giving output or not are tested here these verifications and validations are done by giving input values to the system and by comparing with expected output. Top-down testing implementing here.

7.4 Acceptance Testing:

This testing is done to verify the readiness of the system for the implementation. Acceptance testing begins when the system is complete. Its purpose is to provide the end user with the confidence that the system is ready for use. It involves planning and execution of functional tests, performance tests and stress tests in order to demonstrate that the implemented system satisfies its requirements.

Tools to special importance during acceptance testing include:

Test coverage Analyzer – records the control paths followed for each test case.

Timing Analyzer – also called a profiler, reports the time spent in various regions of the code are areas to concentrate on to improve system performance.

Coding standards – static analyzers and standard checkers are used to inspect code for deviations from standards and guidelines.

7.5 Test Cases:

The test case specification for system testing has to be submitted for review before system testing commences.

No	Event	Attribute and Value	Expected Result	Result
1	Verify that ID and password that enter by user and match the data in the database when user click "OK" button on the login prompt.	Login ID: validID Password: validPassword	Login successfully.	Pass
2	Verify the invalid ID and password that enter by user and match with the data that store in database when user click "OK" button on the login prompt.	Login ID: validID Password: invalidPassword OR Login ID: invalidID Password: validPassword	Login failed and prompt out the error message to user.	Pass
3	Verify the situation that user does not enter any value	Login ID: null Password: null	Login failed and prompt out the error	Pass

LOGIN FORM

8. Results

HOME PAGE

ADMIN LOGIN PAGE

ADD NEW REPORT

Welcome to Just Eat..

ADD PRODUCT	VIEW PRODUCT	NEW ORDER	REPORTS	USER ACCOUNT	PAYMENT	LOG OUT

ADD NEW PRODUCT

Category : SELECT FOOD

Name :

Price :

Image : Choose File No file chosen

Detail :

ADD PRODUCT

VIEW PRODUCT

VIEW PRODUCT - 13

	Image	ProductName	Price	Detail	Category
Delete Edit		Doosee	45	Two doose with cutney	SOUTH INDIAN
Delete Edit		Mango Juices	20	Mango juice with cold	SOFT DRINK
Delete Edit		Apple Juice	35	Kashmir apple juice with cold	SOFT DRINK
Delete Edit		Pastha	50	White pastha	CHINEES
Delete Edit		Vanilla	65	cold ice cream with vanilla	ICE CREAM
Delete Edit		Chocolate	75	Chocolate ice cream	ICE CREAM
Delete Edit		Manchurian	95	Gobi manchurian	CHINEES
Delete Edit		combo specil	85	Combo Special	BRAK FAST
Delete Edit		Khandvi	80	Gujarth special	GUJARATI
Delete Edit		Noddles	90	Hot Noddles	ITALIAN

12

NEW ORDER RECIEVED

NEW ORDER - 2						
Email	**Image**	**ProductName**	**Price**	**Qnt**	**totalprice**	**Dispatch**
vinaya@gmail.com		Doosee	45	1	45	Dispatch
vinaya@gmail.com		Mango Juices	20	1	20	Dispatch

PAYMENT REPORT

PAYMENT REPORT					
Select User : vinaya@gmail.com		Select			
Total Record = 2					
Email	**Type**	**Bank Name**	**Card No**	**CCV**	**Amount**
vinaya@gmail.com	Online	BOB Bank	4156024601453	321	35
vinaya@gmail.com	Online	SBI Bank	4156024601453	321	65

MEMBER LOGIN FORM

MEMBER LOGIN FORM

UserName :

Password :

Login   New User?

Forgot Password ?

•

MEMBER REGISTRATION FORM

MEMBER REGISTRATION FORM

First Name :
Last Name :
Mobile :
Gender : ○ Male ● Female
Address :
City :
Pincode :

Email :
Password :
Confirm - Pass :

Rgister Now
Already Register, please login HERE

PRODUCT DETAIL

PRODUCT DETAIL

Product Name : Mango Juices

Product Price : 20

Category : SOFT DRINK

Detail : Mango juice with cold

ADD TO CART

MY CART

MY CART - **1**

Image	ProductName	Price	Qnt	TotalPrice	Update	Remove
	Mango Juices	20	1	20	Update	Remove

Continew Shopping   CheckOut

PAYMENT CHECKOUT

Payment Checkout

Total Amount :20

Payment Type : ● Online ● Offline

ONLINE PAYMENT

Payment Checkout

Total Amount :20

Payment Type : ○ Online ● Offline

Bank Name : ICICI Bank

Card No : 4156024601453

CVV : 123

Pay Now

LOGOUT PAGE

Thank you for Shopping...

Continew Shopping

9. Conclusion and future work

9.1 CONCLUSION

The package was designed in such a way that future modifications can be done easily. The following conclusions can be deduced from the development of the project.

➢ Food Ordering System improves the efficiency.

➢ It provides a friendly graphical user interface which proves to be better when compared to the existing system.

➢ It gives appropriate access to the authorized users depending on their permissions.

➢ It effectively overcomes the delay in communications.

➢ Updating of information becomes so easier.

➢ RMS makes works easy and faster than current applications.

➢ All the data will be saved in the database. So the administer can view all the data on time.

➢ This system reduces manual works.

➢ The System has adequate scope for modification in future if it is necessary.

9.2 FUTURE WORK:
The following section describes the work that will be implemented with future releases of the software.

• Customize orders: Allow customers to customize food orders

• Enhance User Interface by adding more user interactive features. Provide Deals and promotional Offer details to home page. Provide Recipes of the Week/Day to Home Page

• Payment Options: Add different payment options such as PayPal, Cash, Gift Cards etc. Allow to save payment details for future use.

• Allow to process an order as a Guest

• Delivery Options: Add delivery option

• Order Process Estimate: Provide customer a visual graphical order status bar

• Order Status: Show only Active orders to Restaurant Employees. • Order Ready notification: Send an Order Ready notification to the customer • Restaurant Locator: Allow to find and choose a nearby restaurant

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