ONLINE FOOD ORDERING SYSTEM

A PROJECT REPORT

Submitted in partial fulfilment of the

Requirements for the award of the Degree of

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

By

Name of the Student: MANISHA LALCHAND YADAV

Roll no:627

Under the esteemed guidance of

Ms. ANISHA ASIRVATHAM

(Examination In-charge)

MALAD KANDIVALI EDUCATION SOCIETY'S
NAGINDAS KHANDWALA COLLEGE OF COMMERCE,
ARTS & MANAGEMENT STUDIES & SHANTIBEN NAGINDAS
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(AUTONOMOUS)

(Reaccredited 'A' Grade by NAAC)
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PNR **No.:** .....

Roll no: **627**

1. Name of the Student: Manisha Yadav
2. Title of the Project: Online Food Ordering System
3. Name of the Guide: Ms. Anisha Asirvatham
4. Teaching/Industry experience of the Guide:
5. Is this your first submission? Yes

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Signature of the Guide:

Date: 12 APR 2021

Date: .....

Signature of the Coordinator:

Date: .....

NAGINDAS KHANDWALA COLLEGE

(*Autonomous Institute*)

(Affiliated to University of Mumbai)

MUMBAI, MAHARASHTRA-400064

DEPARTMENT OF INFORMATION TECHNOLOGY

CERTIFICATE

This is to certify that the project titled, **"Online Food Ordering System "**, is bonafied work of **"Manisha Yadav"** bearing Seat No: **627** respectively submitted in partial fulfillment of the requirements for the award of degree of BACHELOR OF SCIENCE in INFORMATION TECHNOLOGY from University of Mumbai.

Internal Guide

Coordinator

External Examiner

EXAMINED

College Seal

Date: 12 APR 2021

Abstract

This book is meant to serve as a guide for my project – Online Food Ordering System
This book not only describes my project report but it also states its importance.

It describes the technical requirements of our project and also input and output views which would interact with the application.

The material presented in this book has been designed well so that it will be in good use to the user.

In this project I have created a Online Food Ordering System using Android Studio. I've tried to include as many features which are present in today's Online Food Ordering System. The material presented in this book has been designed and will be good use to the user. I feel very happy and relieved in presenting this project report to you.

ACKNOWLEDGEMENT

Apart from my efforts, the success of my project depends on the encouragement and guidelines of my professors. I take this opportunity to express my gratitude to the people who have been instrumental in the successful completion of this project. It would not have been possible without the kind support and help of many individuals and organizations. I would like to extend my sincere thanks to all of them.

I am highly indebted to **Ms. Anisha Asirvatham** for her guidance and constant supervision as well as for providing necessary information regarding the project & also for her support in completing the project. I would also like to thank all the faculties who helped me in choosing the project and assist me with what technology I need to use and how the project should proceed further. The project has meant a lot to me, the bonding and the exercises I had with my professors was truly amazing. All the professors have been really appreciative and cheerful. This has been a joyful, uplifting, and an excellent educational experience. As this is my last year of college, I always wanted to have such bonding with all the department members and my peers as well. As the memories are the only thing we'll be able to cherish in the future.

I would also like to Thanks **Mrs. Sindhu P.M.** Head of Department of our section in college for supporting us.

I am very thankful to **Mrs. Ancy Jose**, the principal of Nagindas Khandwala College for her kind co-operation in the completion of our project.

It is truly an honour being a student of Nagindas Khandwala College. The faculties of our college are steadfast and studying under them is truly an enriching process. I would also like to thank my friends, family and other benefactors who have been a constant support throughout the development of the project.

DECLARATION

I hereby declare that the project entitled, **"Online Food Ordering System"** done at **Mumbai,** has not been in any case duplicated to submit to any other university for the award of any degree.

To the best of my knowledge other than me, no one has submitted to any other university.

The project is done in partial fulfillment of the requirements for the award of degree of **BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)** to be submitted as final semester project as part of our curriculum

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Chapter 1

INTRODUCTION

1.1 Background

food ordering system these days has one of the fastest growing markets. In this project, we have developed something like the same to learn from and serve the nation in a much better way possible. Nowadays, people are more regular to dine-in at the restaurant for their meals. The online food ordering system provides convenience for the customers that are nothing special but the general busy people of the society. It overcomes the demerits of the manual hotel or mess system and the old-fashioned queuing system. This system enhances the readymade of foods than people. Therefore this system enhances the speed of getting food in person's plate and quality and manner of taking the order from the customer. It provides a better communication platform. The user's details are stored using the electronic media. The online food ordering system provides the menu online and the customers can easily place the order by just clicking the mouse or by touching a button on their smart phones. Also, with the

food ordering system online, people can easily track their orders, and admin can maintain customer's database and advance the food delivery system. This food ordering system allows the user to select the desired food items from a list of available menu items provided by the local hotel or restaurant. The user can place orders for the food items of their like from the list. The payment can be made online or pay-on-delivery system. The user's details are maintained confidentially because it maintains a separate account for each user. An id and password are provided for each user. And several encryption techniques have also been used on the server side to protect the card details. Therefore it provides a more secure and safe ordering system.

1.2 Objectives:

The main objective of the Online Food Ordering System is to manage the details of menu Category, Food, Delivery Address, Order, payment and also automate the existing manual system with the help of advance computerized software so, that valuable data can be stored for longer period with easy accessing and manipulation of the same.
The registered user can access the account with valid credentials. User can surf the food item according to categories, Cash and card payment options are available to user. User can track their orders with the food details. In Online Food Ordering System Admin can handle the functionalities like add new food items, edit/delete food items, Enable/Disable the food items according to season and availability. Admin have authority to view order details and update the delivery status of food. The payment transaction and user details are also viewable to admin.

1.3 Purpose, Scope and Applicability

1.3.1 Purpose:

The main purpose of an online ordering system is to provide customers for a way to place an order at a restaurant over the internet. So why is this important? The main reason is that it benefits both the customer and the business. It also enables customers to enjoy quality food at their favourite store or restaurant without needing to leave the comfort of their home. Because of its added convenience to customers, food delivery is something you can venture into in the world of business. The project aimed is to developing an order system that can be used in the small medium enterprise food & beverages (F&B) industries which can help the restaurants to simplified their entire daily operational task as well as improve the dining experience of customers. The system will be in 2 platforms which are mobile and computer based. For the mobile based platform will developed to let user to view the menu card information of the restaurant and able to let user place an order via the system. In computer-based platform, the system will be able to let staff to update and make changes to their food and beverage menu information. Next, it also allows staffs to generate report that they wish to generate such as monthly sales report. The most important function is to allow staffs to make billing statement for consumer to make their payment after dine-in. At the end of the project,

it will improve the restaurants productivity, efficiency, effectiveness and as well as accurateness. Because of this system, it will minimize all the manual work by replacing the traditional order system into a computer system. It will eliminate the manual work such as workers physically deliver food order ticket into the kitchen, manually replace the price tag of the food and manually calculate billing price. These are some main functional module that will exist in the system.

Food & Beverage Ordering Module

This module will be developed in mobile platform that let staff pass over the mobile devices such as tablet or smart phone to the user for viewing the restaurant food menu information. User can also place an order thru the mobile devices after they make their decision and also some extra remarks that customer wish to request.

Order Queue Module

This module can help queue the food order that had been placed and display to the kitchen staff accordingly.

Reporting Module

User can view the overall performance of the restaurant in chart report. The report can generate according to the time period and the time period can customize by user.

Menu Management Module

In this module, user can update the latest and updated food menu information to the system such as name, code, price, and food availability. After the information changes, the mobile devices will retrieve the latest food menu information and display to user.

Billing Module

This module will gather the order information and print the billing statement for user to make payment and keep for their reference. Good & Services Tax (GST) Calculation Module This module will be able to calculate the total GST that have collected from consumer pay the amount of money to government.

1.3.2 Scope:

Its main aim is to simplify and improve the efficiency of the ordering process for both customer and restaurant, minimize manual data entry and ensure data accuracy and security during order placement process. Customers will also be able to view product menus and there ingredients and be able to have a visual confirmation that the order was place correctly.

1.3.3 Applicability:

Online food ordering software designed specifically for food to go retailers, restaurants and takeaway. Online sustenance requesting is quickly expanding as clients take pleasure in the comfort of requesting online. Get our online food ordering app and add a new channel for sales.

Using online food ordering app customers place orders through PC, tablets and smartphones. They can access your menu items, select from them and place order online. Also payment will be done online. Order can be delivered or customers can come and pick their orders by themselves.

Benefits of using online food ordering or restaurant ordering app is reduced labour costs, reduces walk away & long queues. This online ordering system for restaurants is designed for multisite food to go chains and independents like Restaurants, cafes & coffee shops, Fast food, take away, other catering services.

Getting your business online opens up many more sales which will improve your reputation in market. With your online menu, existing clients will have an awesome new advantageous approach to order and new clients will soon discover you through famous web search engines. The system is branded to match in with your existing

1.4 Achievements

During this development phase of the projects I learned many things which I didn't get to learn in my cirricular year. The Web Framework which I used in my project is Django which is the new framework for developing applications. The programming language which I used in my project is Python is the booming language now a days. The scripting language which I used in my project is HTML, CSS, Bootstrap. The database which I used for my project is dbsqlite. These all platforms and languages were totally new for me but I tried my best to learn them and complete my project. I learned the concept of MVT, opensource and many more.

1.5 Organization of Report

The topic which we covered in the next chapters is to identify which technologies is use while implementing the project and gathering the requirements of the project, analyze the project and applying the test cases to check the validity of the project, find the software and hardware requirement, design the UML diagrams, design modules, design the system and lastly implementing and testing the project simultaneously.

Chapter 2

REQUIREMNT AND ANALYSIS

2.1 Problem Definition:

The mobile aggregator is an application that combines various thematic platforms in order to increase their level of sales and ensure the convenience of the choice of dishes and drinks by users. A distinctive feature of the application is a single design, user-friendly interface. In this app where customer can make an order should be as simple as few clicks on mobile device. And it should be easy to understand and informative about the options and choices the users have.

As industries are fast expanding, people are seeking for more ways to purchase products with much ease and still maintain cost effectiveness. The vendors need to purchase the products in order to sell to end users. The manual method of going to their local food sales outlets to purchase food is becoming obsolete and more tasking. Food can be ordered through the internet and payment made without going to the restaurant or the food vendor. So there is need for a wide range of publicity and enabling direct order, processing and delivering of food through online system .For this system, there will be a system administrator who will have the rights to enter the menu with current prevailing prices

2.2Requirement Specification:

A software requirements specification is a complete description of the behaviour of a system to be developed. It includes a set of use cases that describe all the interactions the users will have with the software. We studied the requirement and specification provided by client and list out all the functional requirement of website that would be implemented from our side. We also suggest client some good functionality like contact import.

2.3 Planning and Scheduling

- Gantt Chart: It is type of bar chart that Illustrates a project schedule. Also illustrate start and finish date of the project as mentioned above. This type of chart is a graphical representation about the progress of the project. Decides the standard of the system. This chart shows planned and actual progress for a number of tasks performed during the development of the project against the horizontal time scale. It is effective and easy to read and understandable method of indicating the status of the task compared to the planned progress of the product project.

ID	Task Name	Start	Finish	Duration
1	Preliminary Investigation	05-07-2020	08-07-2020	4.0d
2	Problem analysis	11-07-2020	09-08-2020	30.0d
3	Design	09-08-2020	17-09-2020	40.0d
4	Construction	18-09-2020	06-11-2020	50.0d
5	Implementation	07-11-2020	21-12-2021	45.0d
6	Analysis	22-12-2020	05-01-2021	15.0d
7	Implementation	06-01-2021	29-03-2021	78.0d
8	Operation And Support	05-02-2021	31-03-2021	58.0d

2.4 Software Requirements & Hardware Requirements.

2.4.1 Software Requirements:

- Visual Studio
- Xampp control panel

2.4.2 Hardware Requirements:

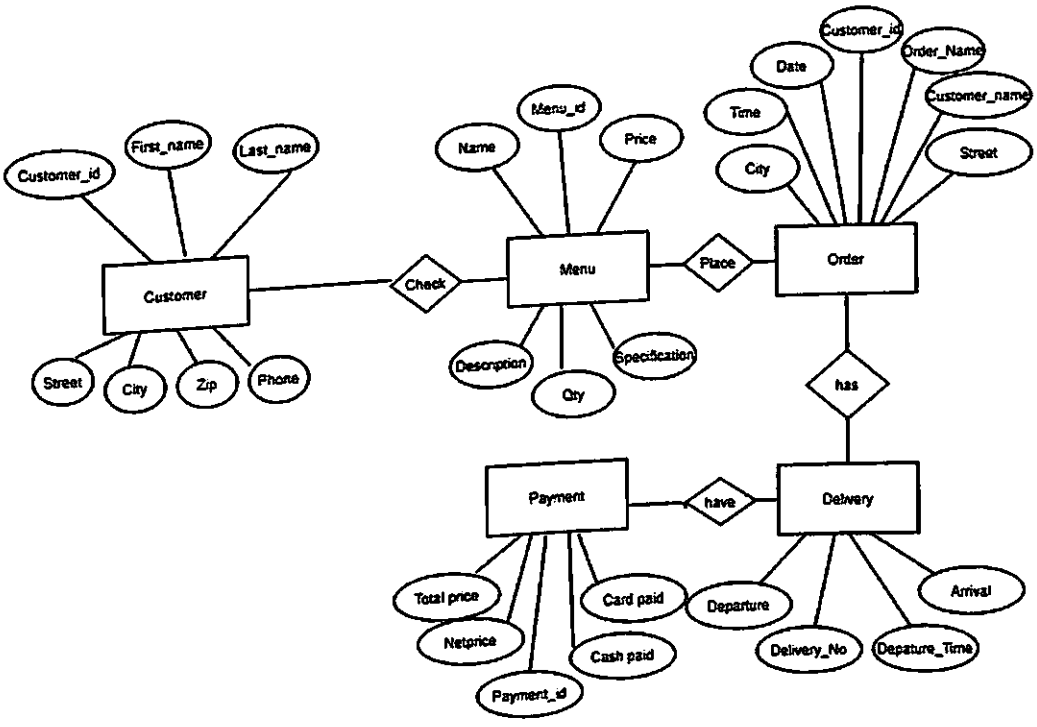
- Hard Disk – 2 GB.
- RAM – 1 GB.
- Laptop

2.5 Preliminary description of the Product

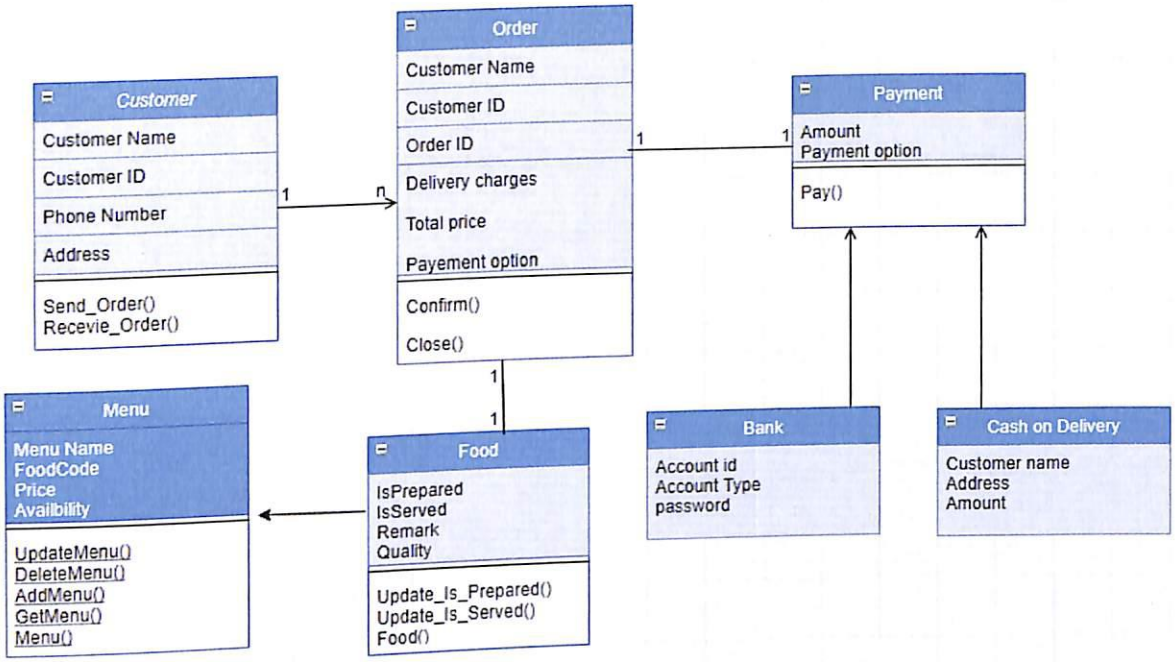
- This application will provide, quality food at their favourite store or restaurant.
- Also an advantage of keeping a track order, and admin can maintain customer's database and advance the food delivery system.
- The main aim of this application is, it is designed to provide customer for a way to place an order at a restaurant over the internet.
- Also provide information such as category, name, price, image, description and so on.
- Gives information your food calories , vitamins , fats etc it contains.

2.6Conceptual Model

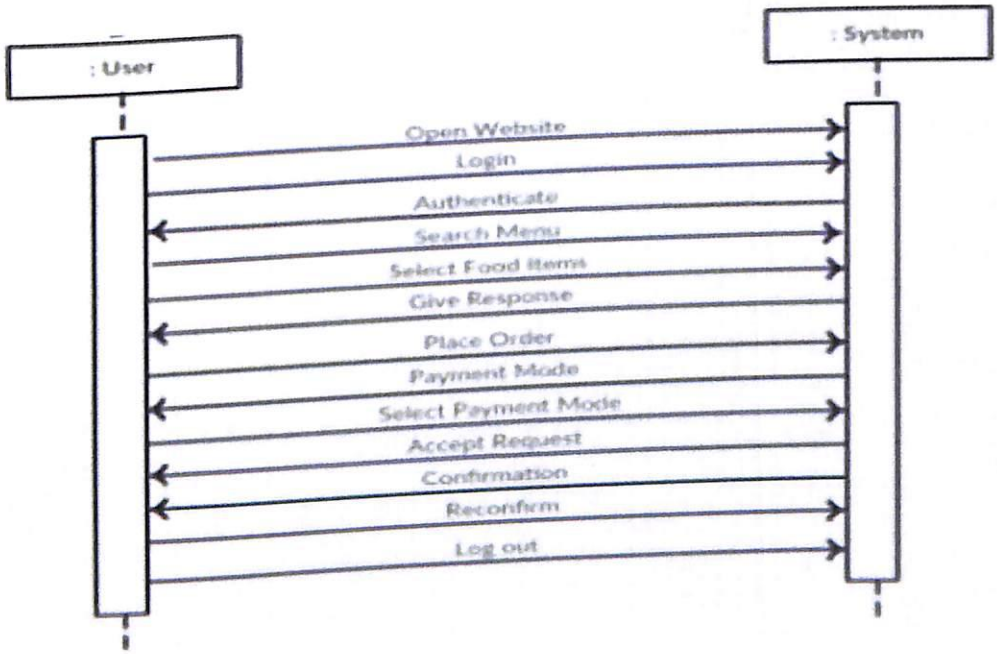
• 2.6.1Entity Relationship Diagram:



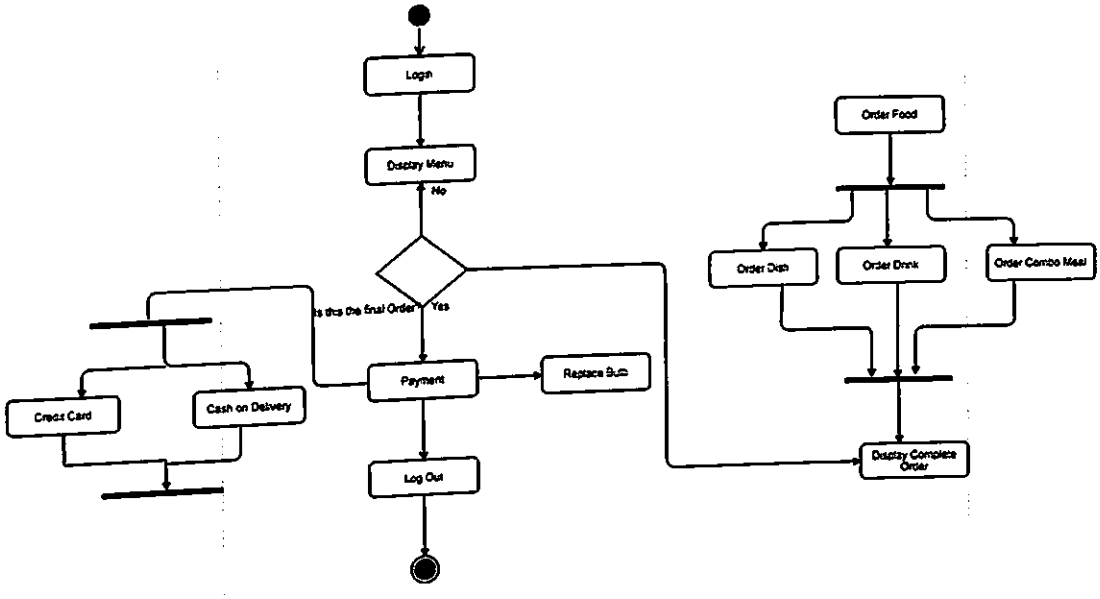
• 2.6.3CLASS DIAGRAM:



- **2.6.4SEQUENCE DIAGRAM:**



- **2.6.5ACTIVITY DIAGRAM:**

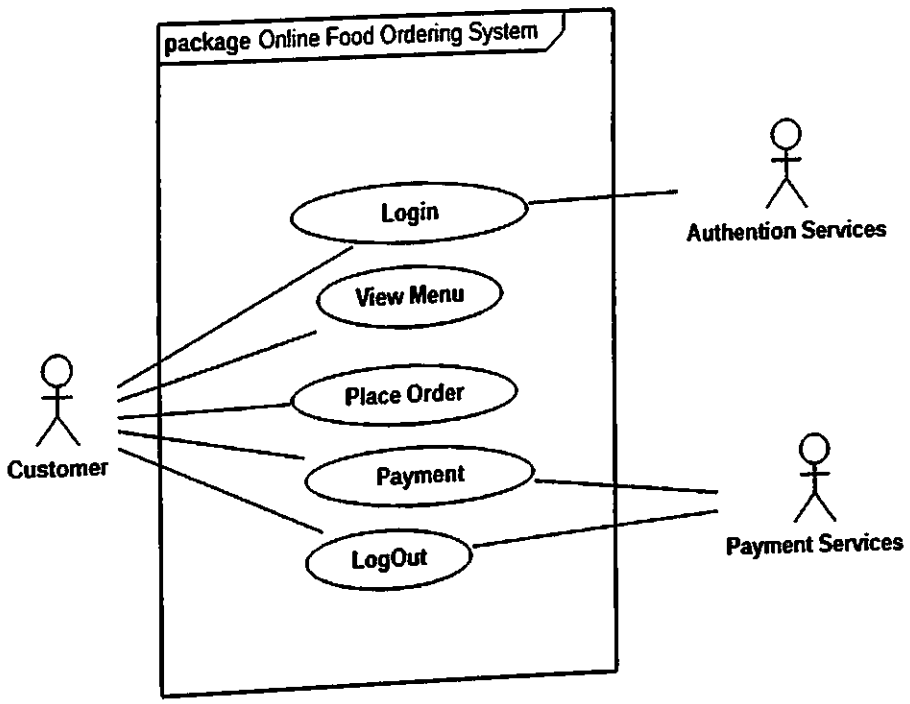


Chapter 3

SYSTEM DESIGNS

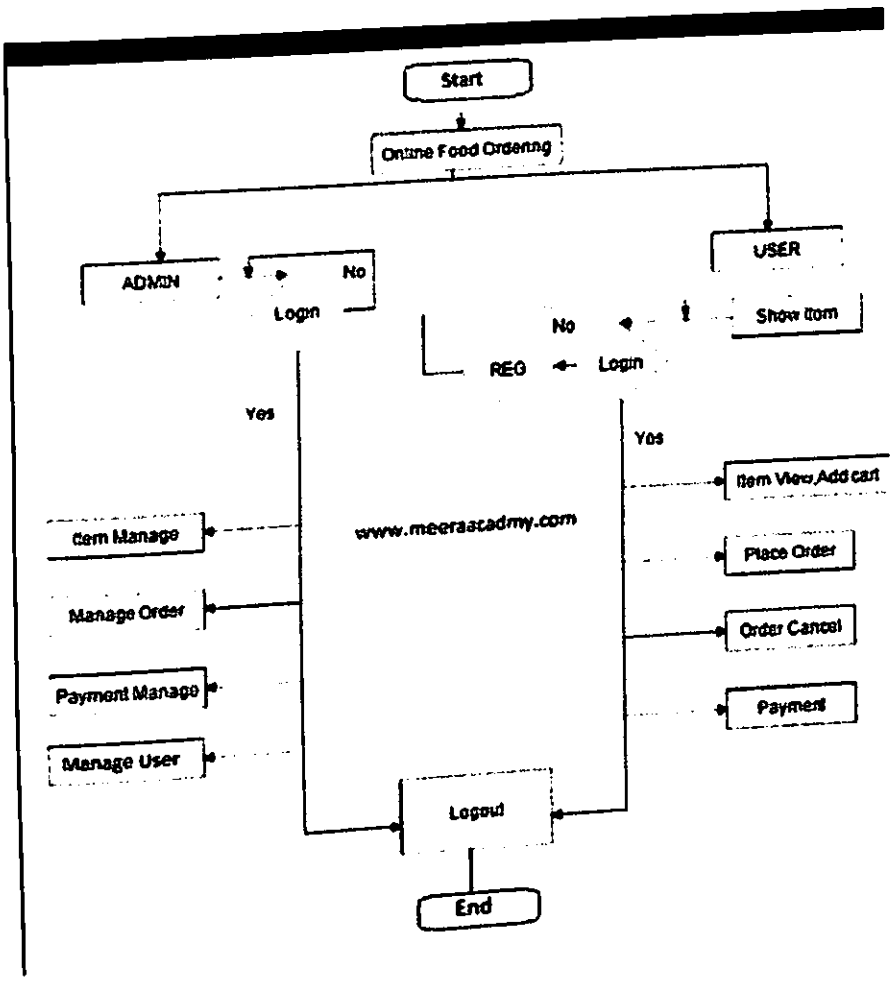
3.1BASIC MODEL

- **USECASE DIAGAM:**



3.3.1 LOGIC DIGRAM

- **FLOW CHART:**



Chapter 4

Implementation And Testing

4.1) Implementation Approach

Ordering is implemented using popular MVP (Model View Presenter) which is a pattern to use in android to organize the data. MVP (Model View Presenter) pattern is a derivative from the well-known MVC (Model View Controller), and one of the most popular patterns to organize the presentation layer in Android Applications.

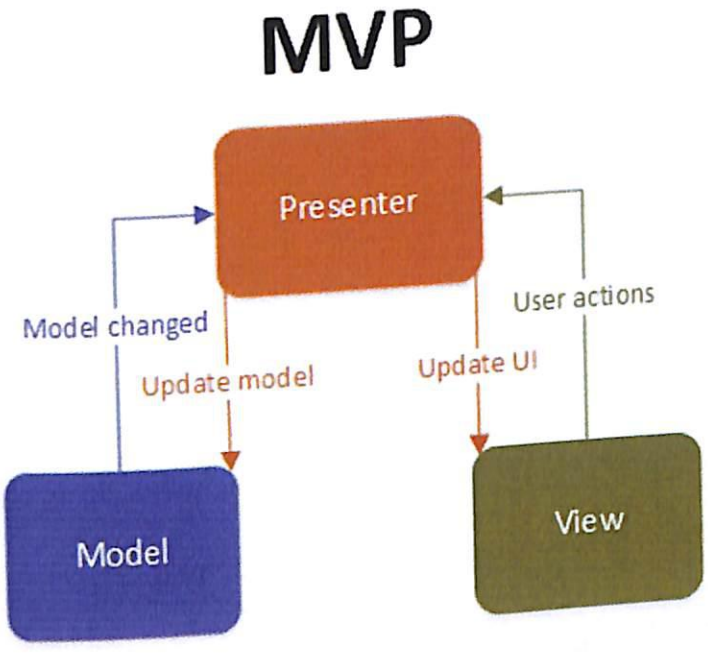
The MVP pattern allows separating the presentation layer from the logic so that everything about how the UI works is agnostic from how we

represent it on screen. Ideally, the MVP pattern would achieve that the same logic might have completely different and interchangeable views.
The first thing to clarify is that MVP is not an architecture by itself, it's only responsible for the presentation layer. This has been a controversial assessment, so I want to explain it a bit deeper.
You may find that MVP is defined as an architectural pattern because it can become part of the architecture of your App, but don't consider that just because you are using MVP, your architecture is complete. MVP only models the presentation layer, but the rest of layers will still require a good architecture if you want a flexible and scalable App.
An example of a complete architecture could be Clean Architecture, though there are many other options.
In any case, it is always better to use it for your architecture that not using it at all.

MVP has some risks, and the most important we use to forget is that the presenter is attached to the view forever. And the view is an activity, which means that:

- We can leak the activity with long-running tasks
- We can try to update activities that have already died
- View more separated from Model. The Presenter is the mediator between Model and View.
- Easier to create unit tests
- Generally there is a one to one mapping between View and Presenter, with the possibility to use multiple Presenters for complex Views
- Listen to user action and model updates
- Updates model and view as well

For the first point, if we can ensure that our background tasks finish in a reasonable amount of time, we wouldn't worry much. Leaking an activity 5-10 seconds won't make your App much worse, and the solutions to this are usually complex.
The second point is more worrying. Imagine if we send a request to a server that takes 10 seconds, but the user closes the activity after 5 seconds. By the time the call-back is called and the UI is updated, it will crash because the activity is finishing.



4.3) Testing Approach:

Software testing methodologies are the various strategies or approaches used to test an application to ensure it behaves and looks as expected. These encompass everything from front to back-end testing, including unit and system testing.

4.3.1) Unit Testing:

In computer programming, unit testing is a software testing method by which individual units of source code, sets of one or more computer program modules together with associated control data, usage procedures, and operating procedures, are tested to determine whether they are fit for use. Intuitively, one can view a unit as the smallest testable part of an application. In procedural programming, a unit could be an entire module, but it is more commonly an individual function or procedure. In object-oriented programming, a unit is often an entire interface, such as a class, but could be an individual method. Unit tests are short code fragments created by programmers or occasionally by white box testers during the development process. It forms the basis for component testing. Ideally, each test case is independent from the others. Substitutes such as method stubs, mock objects, fakes, and test harnesses can be used to assist testing a module in isolation. Unit tests are typically written and run by software developers to ensure that code meets its design and behaves as intended.

4.3.2) Integrate Testing

After each unit is thoroughly tested, it is integrated with other units to create modules or components that are designed to perform specific tasks or activities. Integration testing (sometimes called integration and testing, abbreviated I&T) is the phase in software testing in which individual software modules are combined and tested as a group. It occurs after unit testing and before validation testing. Integration testing takes as its input modules that have been unit tested, groups them in larger aggregates, applies tests defined in an integration test plan to those aggregates, and delivers as its output the integrated system ready for system testing.

Chapter 5

5.1) TESING REPORT

Test Case ID: 1

Test Priority (Low/Medium/High): Med.

Module Name: Food order login page.

Test Title: Verify login with valid username and password.

Description: Test the login page.

Pre-conditions: User has valid username and password

Step	Test Steps	Test Data	Expected Result	Actual Result	status Pass/Fail)
1	Navigate to login page	User= example@gmail.com	User should be able to login	User should be able to login	PASS
2	Provide valid username	Password: 1234			
3	Provide valid password				
4	Click on Login button				

Post-conditions: User is validated with database and successfully login to account. The account session details are logged in database.

Test Case ID: 2

Test Priority (Low/Medium/High): MED

Module Name: Order the item

Test Title: Verify the food item are adding in card

Description: Test Food item are added and order

Pre-conditions: User has entered valid food name and qty

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)
1	Navigate to adding item page	Food name= Burger	Should be able to choose Qty	Food name=burger Qty=2	PASS
2	Provide valid Food name valid	Qty=2			
3	Provide valid Qty valid				
4	Click on calculate				

Post-conditions: User is validated with database and successfully login to account. The account session details are logged in database.

Test Case ID: 3

Test Priority (Low/Medium/High): HIGH

Module Name: Order the item

Test Title: Verify the food item are adding in card

Description: Test Food item are added and order

Pre-conditions: User has entered invalid food name and qty

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)
1	Navigate to adding item page	Food name=burger	order should be displayed	There are no option to select selected food category for qty	PASS
2	Provide valid Food name valid	Qty=0			
3	Provide invalid Qty				
4	Click on calculate				

Post-conditions: User updates the details to database successfully.

Chapter 6

Conclusion

Limitations:

Therefore, conclusion of the proposed system is based on user's need and is user centred. The system is developed in considering all issues related to all user which are included in this system. Wide range of people can use this if they know how to operate android smart phone. Various issues related to Mess/Tiffin Service will be solved by providing them a full-fledged system. Thus, implementation of Online Food Ordering system is done to help and solve one of the important problems of people. Based on the result of this research, it can be concluded: It helps customer in making order easily; It gives information needed in making order to customer. The Food website application made for restaurant and mess can help restaurant and mess in receiving orders and modifying its data and it is also made for admin so that it helps admin in controlling all the Food system. With online food ordering system, a restaurant and mess menu online can be set up and the customers can easily place order. Also, with a food menu online, tracking the orders is done easily, it maintain customer's database and improve the food delivery service. The restaurants and mess can even customize online restaurant menu and upload images easily. Having a restaurant menu on internet, potential customers can easily access it and place order at their convenience. Thus, an automated food ordering system is presented with features of feedback and wireless communication. The proposed system would attract customers and adds to the efficiency of maintaining the restaurant and mess ordering and billing sections. Scope of the proposed system is justifiable because in large amount peoples are shifting to different cities so wide range of people can make a use of proposed system.

Chapter 7

References

1. https://www.youtube.com/watch?v=ZBgTzx46B8s&list=WL (For project reference)
2. https://www.irjet.net/archives/V5/i6/IRJET-V5I679.pdf
3. https://www.coursehero.com/file/56338868/ijrar-issue-20542895pdf/