LAB REPORT

Submitted by

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Under the Guidance of

Dr. P. Gouthaman

Assistant Professor, Department of Networking and Communications

In partial satisfaction of the requirements for the degree of

BACHELOR OF TECHNOLOGY
in
COMPUTER SCIENCE ENGINEERING

with specialization in Cloud Computing

SCHOOL OF COMPUTING

COLLEGE OF ENGINEERING AND TECHNOLOGY

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

KATTANKULATHUR - 603203

JUNE 2022

SRM INSTITUTION OF SCIENCE AND TECHNOLOGY
KATTANKULATHUR-603203

BONAFIDE CERTIFICATE

Certified that this lab report titled “Foodie” is the bonafide work done by Marla Sai Ruthwik RA2011028010124 who carried out the lab exercises under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other work.

SIGNATURE

Dr. P. Gouthaman

SEPM – Course Faculty

Assistant Professor

Department of Networking and

Communications

ABSTRACT

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. Our project 'Foodie' is aimed at developing a complete online ordering system for use in the food service industry which will allow the restaurants to quickly and easily manage an online menu which customer can browse and use to place orders with just a few clicks. The customers will have to choose whether they want the food to be delivered to them or it will be packaged for pick up and the payment method will be upon delivery or pick up. There will be a system administrator who will have the right to add and manage user accounts, a manager who will be managing product and orders and last but not least a meal deliverer who will be dealing specifically with pending deliveries. The customer will be in a position to view the products, register and place an order. There will be a confirmation receipt for each and every order made by the customer which can be printed.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF ABBREVIATIONS

1) DFD: Data Flow Diagram
2) ER Diagram : Entity Relationship Diagram
3) UML : Unified Modeling Language
4) DB: Database
5) I/O : Input/Output
6) UI : User Interface
7) API : Application Programming Interface
8) MST : Minimum Spanning Tree

Department of Networking and Communications

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	1
Title of Experiment	To identify the Software Project, Create Business Case, Arrive at a Problem Statement
Name of the candidate	Marla Sai Ruthwik
Team Members	Gatta Venkata Amruth (RA2011028010136) M Victor Zephaniah(RA2011028010121) Ridhwan Athief (RA2011028010141)
Register Number	RA2011028010124
Date of Experiment	15/03/2022

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To Frame a project team, analyze and identify a Software project. To create a business case and Arrive at a Problem Statement for the Online Food Ordering System.

Team Members:

S. No	Register No	Name	Role
1	RA2011028010136	Gatta Venkata Amruth	**Lead/Rep**
2	RA2011028010124	Marla Sai Ruthwik	**Member**
3	RA2011028010121	M Victor Zephaniah	**Member**
4	RA2011028010141	Ridhwan Athief	**Member**

Project Title:- Online Food Ordering

Project Description:-

Online Food ordering system is a process in which one can order various foods and beverages from some local restaurant and hotels through the use of internet, just by sitting at home or any place. And the order is delivered to the told location.

Nowadays everyone is having busy schedule whether it is urban area or rural. But talking specifically about the urban areas and deeply about the big cities, people out there are so busy in their life that they don't get enough of time to have their meals properly.

So food ordering system these days has one of the fastest growing market, though being a new idea. In this project we have developed something like the same to earn from and serve the nation in a much better way possible.

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 confidential because it maintains a separate account for each user. An id and password is 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 secured and safe ordering system.

ONE PAGE BUSINESS CASE TEMPLATE

Foodie

Awesome food and Beverages

DATE	15/03/2022
SUBMITTED BY	Gatta Venkata Amruth – RA2011028010136(Team Representative) Marla Sai Ruthwik - RA2011028010124 M Victor Zephaniah - RA2011028010121 Ridhwan Athief - RA2011028010141
TITLE / ROLE	Online Food Ordering

THE PROJECT

In bullet points, describe the problem this project aims to solve or the opportunity it aims to develop.

- Ordering food online
- Charing no extra distance fee from the customer
- Food is considered free to the customer if not delivered within the estimated time of arrival
- Adding more exclusive restaurants
- More interactive and efficient customer care/feedback service
- Adding discounts exclusively for students
- Coins and credit system(which is first of its kind)

THE HISTORY

In bullet points, describe the current situation.

- The food delivery apps are charging heavy amounts as distance fee from the customer which is very odd and considered a burden for customers
- No proper customer interaction system

LIMITATIONS

List what could prevent the success of the project, such as the need for expensive equipment, bad weather, lack of special training, etc.

- The primary obstacle would be budget in order to develop a fully updated software
- Getting familiar to the software by the user might take a little much time as it may be a startupproject
- Finding sponsors at the beginning for raw material may be a trouble at the early stages
- Mainly it should be capable of competing with pre – existing softwares in the market

APPROACH

List what is needed to complete the project.

- Sponsors who are ready to invest in startups
- Good and skilled app and web developer's
- A good physical workplace in metropolitan city's
- Dedicated and skilled team of employees
- Launching app is an essential thing
- Promotions before launching a website would become a key factor

BENEFITS

In bullet points, list the benefits that this project will bring to the organization

- Smooth and user friendly interface
- Ordering food online is fast , easier and comfortable
- Large and wide ranges of options available for ordering food
- Frequent discounts and customer benefits
- Exclusive benefits for students

Result:-

Thus, the project team formed, the project is described, the business case wasprepared and the problem statement was arrived.

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Department of Networking and Communications

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	2
Title of Experiment	Identification of Process Methodology and Stakeholder Description
Name of the candidate	Marla Sai Ruthwik
Team Members	Gatta Venkata Amruth (136), M Victor Zephaniah (121), RidhwanAthief (141)
Register Number	RA2011028010124
Date of Experiment	22/03/22

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To identify the appropriate Process Model for the project and prepare Stakeholder and User Description.

Team Members:

Sl No	Register No	Name	Role
1	RA2011028010136	Gatta Venkata Amruth	Rep/Member
2	RA2011028010121	M Victor Zephaniah	Member
3	RA2011028010124	Marla Sai Ruthwik	Member
4	RA2011028010141	Ridhwan Athief	Member

Project Title: Online Food Ordering System

Selection of Methodology : Scrum Methodology

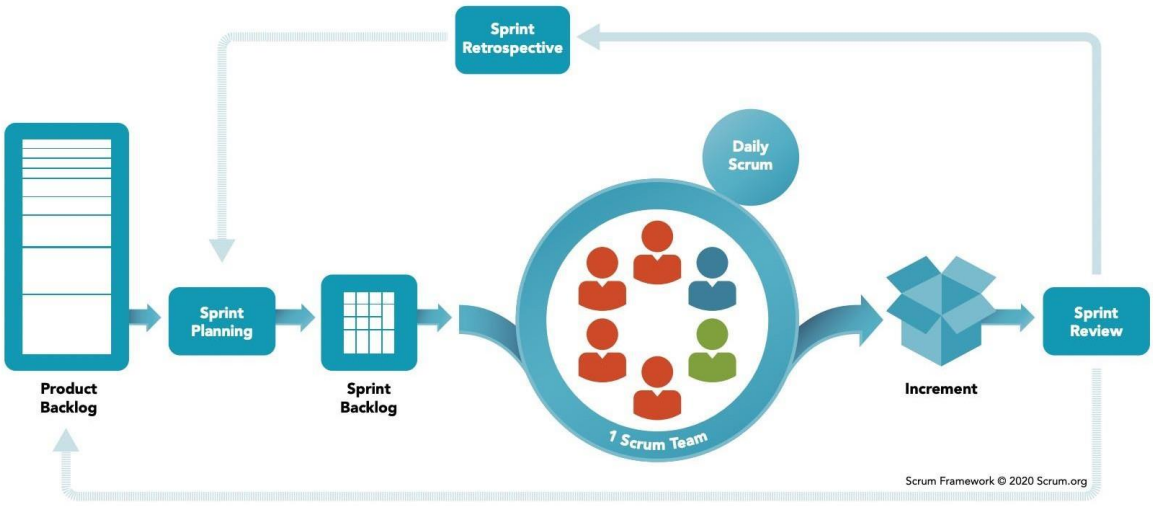
Scrum is an agile development methodology used in the development of Software based on an iterative and incremental processes. Scrum is adaptable, fast, flexible and effective agile framework that is designed to deliver value to the customer throughout the development of the project.

As this project goes well with scrum methodology because it involves the regular reviews and daily scrums which leads to proper progression of the project and it also can be implemented to short time projects very efficiently.

The Scrum Framework

Scrum is simple. It is the opposite of a big collection of interwoven mandatory components. Scrum is not a *methodology*. Scrum implements the scientific *method* of empiricism. Scrum replaces a programmed algorithmic approach with a heuristic one, with respect for people and self-organization to deal with unpredictability and solving complex problems.

SCRUM FRAMEWORK



Stakeholder Name	Activity/ Area / Phase	Interest	Influence	Priority (High/ Medium/ Low)
Project Sponsor	**Provides the market for project and reviews the changes**	Low	High	2
Team Members	**Does the work required for developing the project**	High	High	3
Project Manager	**Manages the project and reviews the progress**	High	Low	4

Resource Manager	**Supplies the the requirements which are essential to the project.**	High	High	1
Investor	**Provides the necessary financial benefits which are required**	Low	High	3
End User	**Provides the Feedback**	Low	Low	4
Owner	**Who is the person comes out with project idea**	High	High	1

Result

Thus the Project Methodology was identified and the stakeholders were described.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	3
Title of Experiment	System, Functional and Non-Functional Requirements of theProject
Name of the candidate	Marla Sai Ruthwik
Team Members	Gatta Venkata Amruth (136), M Victor Zephaniah(121), Ridhwan Athief(141)
Register Number	RA2011028010124
Date of Experiment	3/04/2022

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To identify the system, functional and non-functional requirements for the project.

Team Members:

S No	Register No	Name	Role
1	RA2011028010136	Gatta Venkata Amruth	Rep/Member
2	RA2011028010124	Marla Sai Ruthwik	Member
3	RA2011028010121	M Victor Zephaniah	Member
4	RA2011028010141	Ridhwan Athief	Member

Project Title:- Online Food Ordering System Software

System Requirements:-

- **Operating System –** Windows 7 or greater
- **RAM** – Minimum 4GB RAM or greater
- **Internet** – Required to access the software
- **Devices Supported –** Android, IOS, Web-based

Functional Requirements

- **Registration**– If customer wants to order food then he/she must be registered. Unregistered user can't go to the shopping cart.

- **Login**- Customer logins to the system by entering valid user id and password for food ordering.
- **Adding items to cart**- Customers can add food of their choice to the cart.
- **Changes to Cart**- Changes to cart means the customer after login or registration can make order or cancel order of the food from the shopping cart.
- **Transaction Log**- This has all the essential features required for a successful transactions such as UPI, Net Banking and credit/debit card payment feature in order to make the payment after the completion of order.
- **Order Tracking**- Once the order is confirmed by the restaurant , customer can track the progress of food preparation and movement of delivery partner.
- **Feedback Column**- It involves the recording of feedback given by the customer for a particular service and even to the worker also, which helps in providing better service

Non-Functional Requirements

- **Security**- Takes care of the transaction security while a transaction is proceeding and includes authentication as captcha or OTP as a verification feature. The system must automatically log out all customers after a period of inactivity. The system should not leave any cookies on the customer's computer containing the user's password.
- **Flexibility**- As we are undergoing many changes in day to day life even a software also should get updated often so our backend developers does this

task by fixing the bugs after every patch update.

- **Maintenance-** This is the key factor for the software are the creation ,so it should be maintained effectively by a maintenance team ensuring that software is working without any faults.
- **Data Integrity-** The system shall maintain data integrity by keeping backups of all updates to the database for every record transaction.
- **Usability-** The website's interface has to be user-friendly and easy to use.

Result

Thus the requirements were identified and accordingly described.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	4
Title of Experiment	Prepare Project Plan based on scope, Calculate Project effort based on resources and Job roles and responsibilities
Name of the candidate	Marla Sai Ruthwik
Team Members	Gatta Venkata Amruth (136), Victor Zephaniah(121), Ridhwan Athief(141)
Register Number	RA2011028010124
Date of Experiment	11/04/2022

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To Prepare Project Plan based on scope, Calculate Project effort based on resources, Find Job roles and responsibilities

Team Members:

Sl No	Register No	Name	Role
1	RA2011028010136	Gatta Vankata Amruth	Lead
2	RA2011028010124	Marla Sai Ruthwik	Member
3	RA2011028010141	Ridhwan Athief	Member
4	RA2011028010121	Victor Zephaniah	Member

1. Estimation

1.1. Effort and Cost Estimation

Activity Description	Sub-Task	Sub-Task Description	Effort (in hours)	Cost in INR
Design the user screen	designing ui/ux	It interacts with a product such colors , menu ,bars and more	20 hrs	Rs. 5000
	codes for frontend and backend	Frontend-HTML,CSS , Javascript Backend-Python,	20 – 30 hrs	Rs.20000
	database management, cloud deployment.	will manage data required like different food items restaurants offer and user data and deploying the website on cloud for easy access	20 – 25 hrs	Rs.12000
Identify Data Source for displaying units of Energy Consumption		Go through Interface contract (Application Data Exchange) documents	5	Rs. 8000
		Document	4	Rs. 4000

Effort (hr)	Cost (INR)
1	500

1.2. Infrastructure/Resource Cost [CapEx]

Infrastructure Requirement	Qty	Cost per qty	Cost per item
Data Centers	1	12,00,000	12,00,000
Cloud	1	1,00,000	1,00,000

2.3 Maintenance and Support Cost [OpEx]

Category	Details	Qty	Cost per qty per annum	Cost per item
People	Network, System, Middleware and DB admin Developer , SupportConsultant	3	2,000,000	6,000,000
License	Operating System Database Middleware IDE	10	10000	100,000
Infrastructures	Server, Storage and Network	20	20000	400,000

2. Project Team Formation

2.1 Identification Team members

Name	Role	Responsibilities
Amruth	Key Business User (Product Owner)	Provide clear business and user requirements
Ruthwik	Project Manager	Manage the project
Athief	Business Analyst	Discuss and Document Requirements
Victor	Technical Lead	Design the end-to-end architecture
Athief	UX Designer	Design the user experience
Amruth	Frontend Developer	Develop user interface
Ruthwik	Backend Developer	Design, Develop and Unit Test Services/API/DB
Victor	Cloud Architect	Design the cost effective, highly available and scalable architecture
Amruth , Victor	Cloud Operations	Provision required Services
Ruthwik, Athief	Tester	Define Test Cases and Perform Testing

2.2 Responsibility Assignment Matrix

RACI Matrix	Team Members			
Activity	**Name (BA)**	**Name (Developer)**	**Name (Project Manager)**	**Key Business User**
User Requirement Documentation	A	C/I	I	R
User Interface	Athief and Victor	Ruthwik and Amruth	Ruthwik	Amruth
Data Management	Ruthwik	Ruthwik	Athief	Athief
Cloud Management	Amruth	Amruth	Victor	Victor

A	Accountable
R	Responsible
C	Consult
I	Inform

Result:

Thus, the Project Plan was documented successfully

Department of Networking and Communications

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	5
Title of Experiment	Prepare Work breakdown structure, Timeline chart, Risk identification table
Name of the candidate	Marla Sai Ruthwik
Team Members	Gatta Venkata Amruth (136), Victor Zephaniah(121), Ridhwan Athief(141)
Register Number	RA2011028010124
Date of Experiment	18/04/2022

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

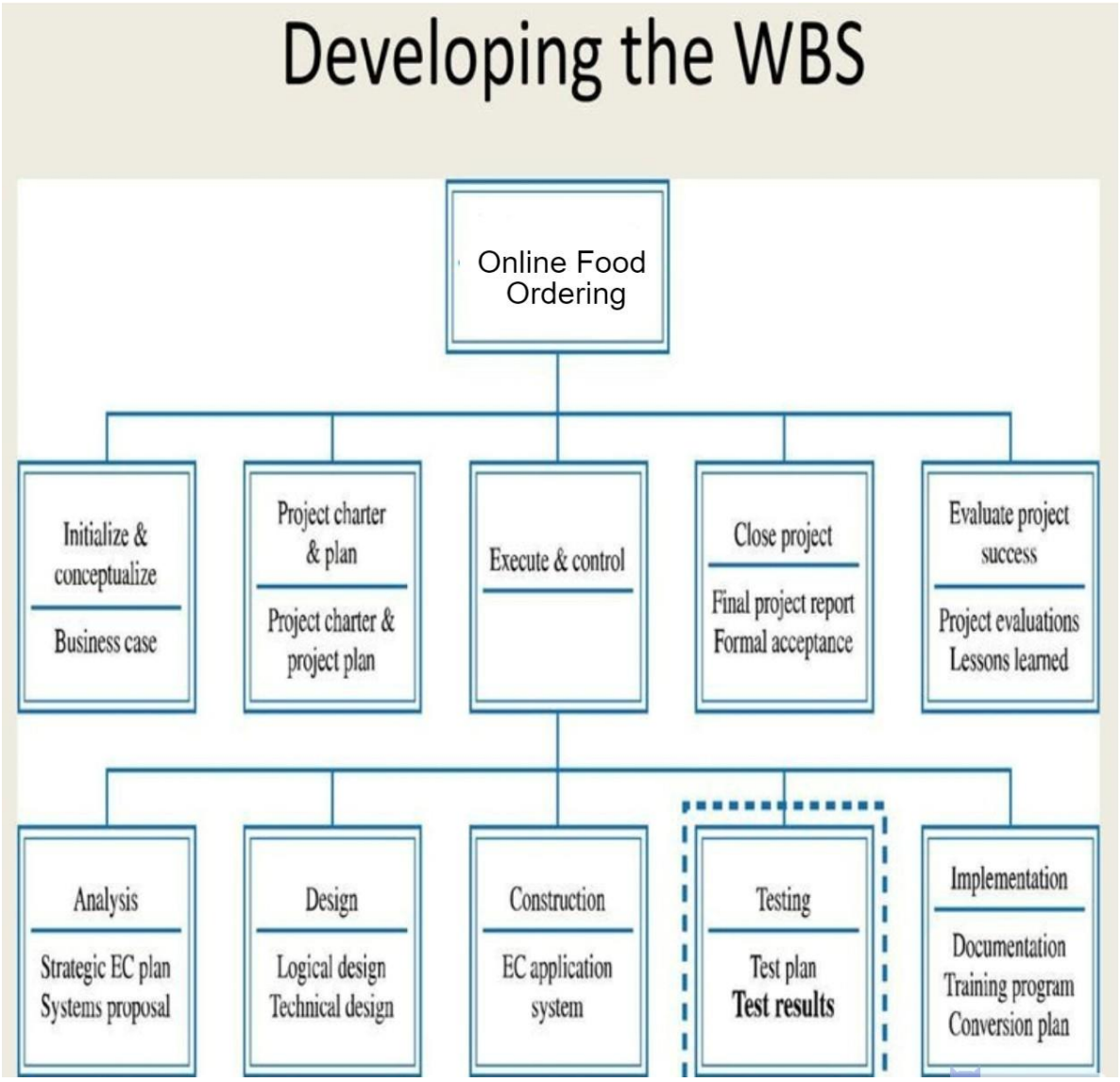
Aim

To Prepare Work breakdown structure, Timeline chart and Risk identification table

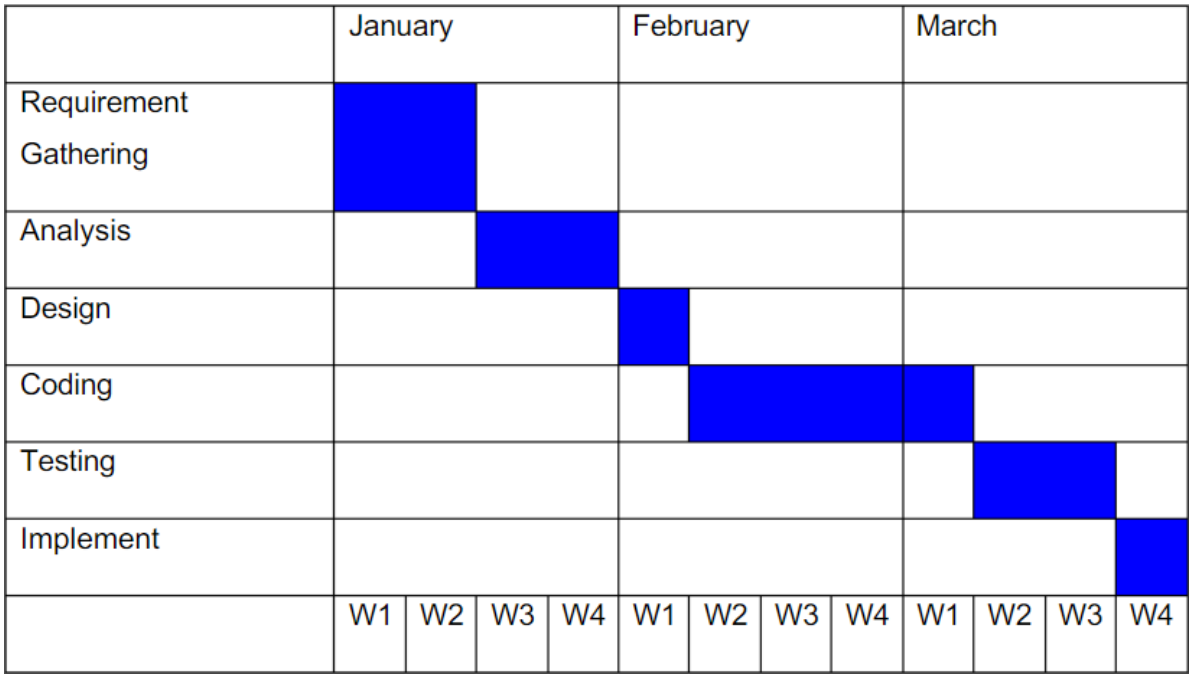
Team Members:

Sl No	Register No	Name	Role
1	RA2011028010136	Gatta Venkata Amruth	Rep
2	RA2011028010124	Marla Sai Ruthwik	Member
3	RA2011028010141	Ridhwan Athief	Member
4	RA2011028010121	Victor Zephaniah	Member

Work Breakdown Structure:-



Gantt Chart:-



Risk Analysis – SWOT & RMMM:-

Strength	Weakness
• Quick Delivery • Better Customer Support • Wide Range of Restaurants • Innovative Culture • Financial Leverage • Technology	• High Staff • Low Turnover of Content • Diverse App Features • Not Customized for each target market
Opportunities	**Threats**
• Growing Market for Potential Customers • Global Expansion • Delivery Service	• Growing Potential Competetors

Result:-

Thus, the work breakdown structure with timeline chart and risk table were formulated successfully.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	6
Title of Experiment	Design a System Architecture, Use Case and Class Diagram
Name of the candidate	Marla Sai Ruthwik
Team Members	Gatta Venkata Amruth (136), Victor Zephaniah (121), Ridhwan Athief (141)
Register Number	RA2011028010124
Date of Experiment	26/04/2022

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

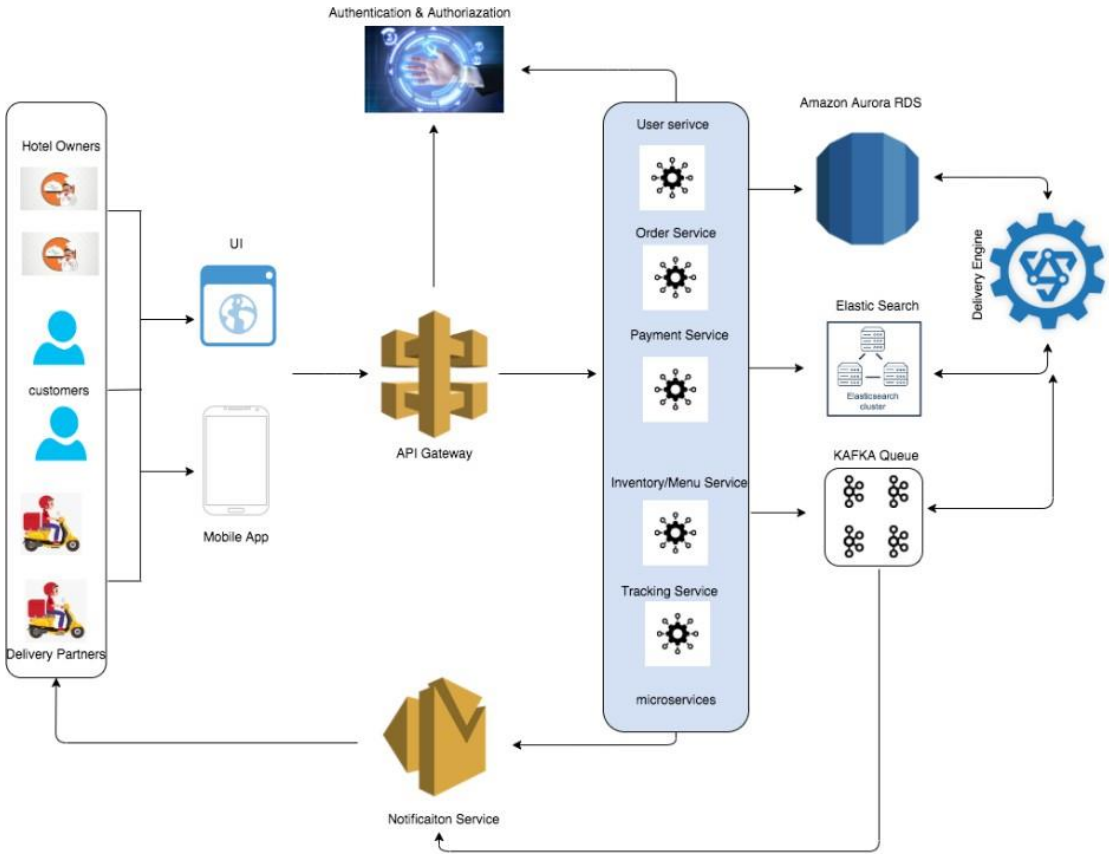
Aim

To Design a System Architecture, Use case and Class Diagram

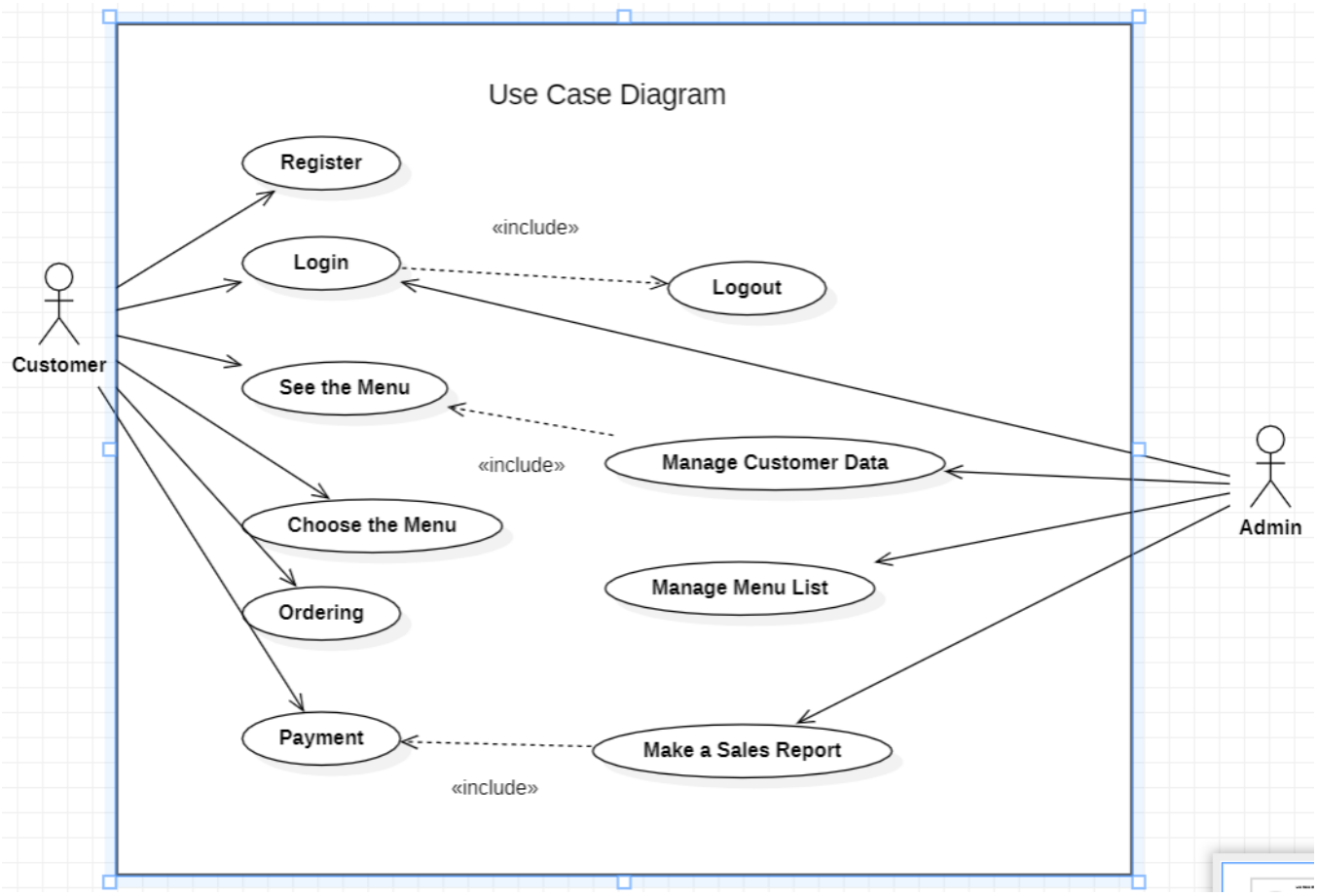
Team Members:

Sl No	Register No	Name	Role
1	RA2011028010136	Gatta Venkata Amruth	Rep
2	RA2011028010124	Marla Sai Ruthwik	Member
3	RA2011028010141	Ridhwan Athief	Member
4	RA2011028010121	Victor Zephaniah	Member

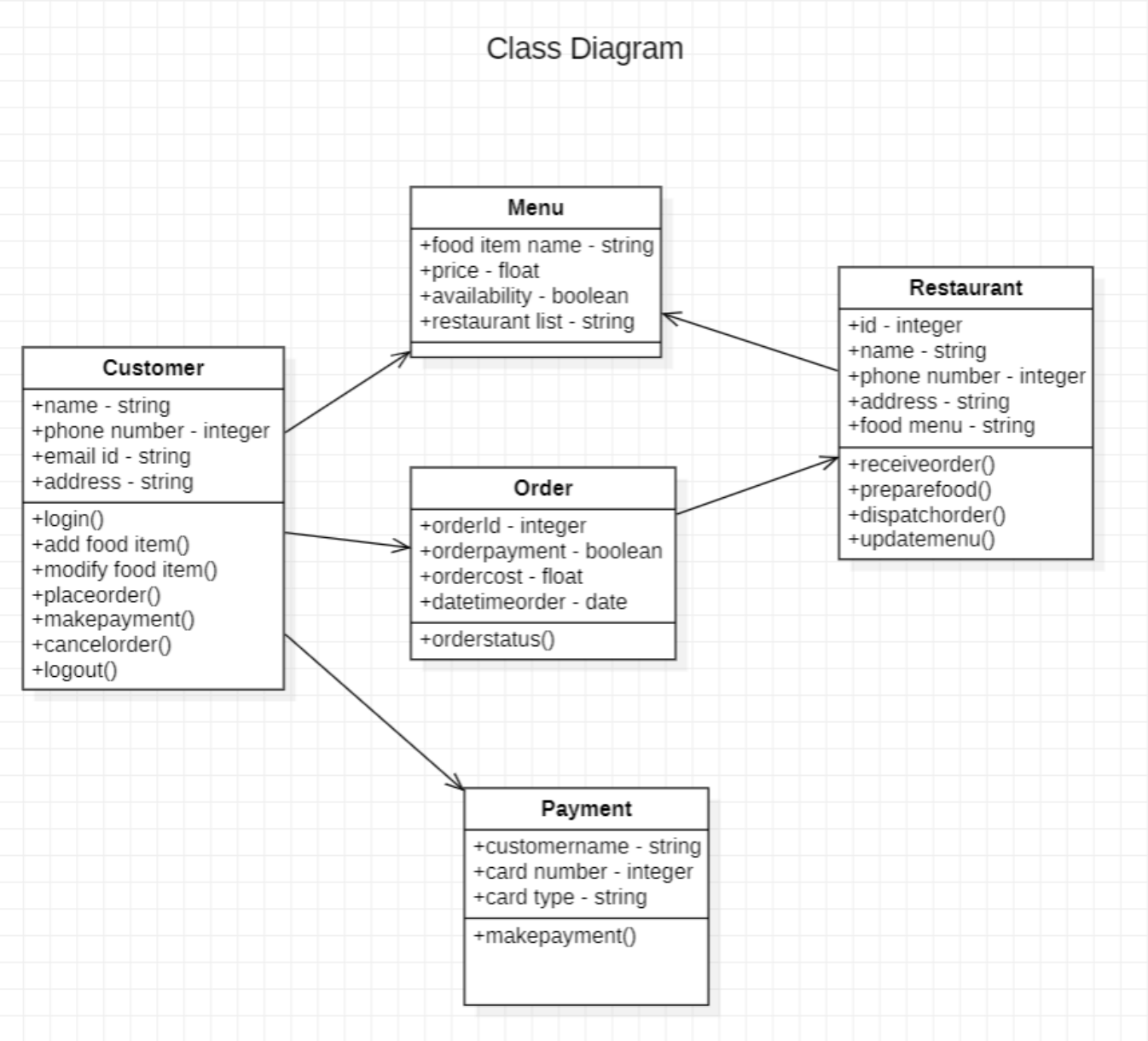
System Architecture Diagram:-



Use Case Diagram:-



Class Diagram:-



Result:-

Thus, the system architecture, use case and class diagram created successfully.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	7
Title of Experiment	Design a Entity relationship diagram
Name of the candidate	Marla Sai Ruthwik
Team Members	Gatta Venkata Amruth (136), Victor Zephaniah (121), Ridhwan Athief (141)
Register Number	RA2011028010124
Date of Experiment	3/5/2022

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

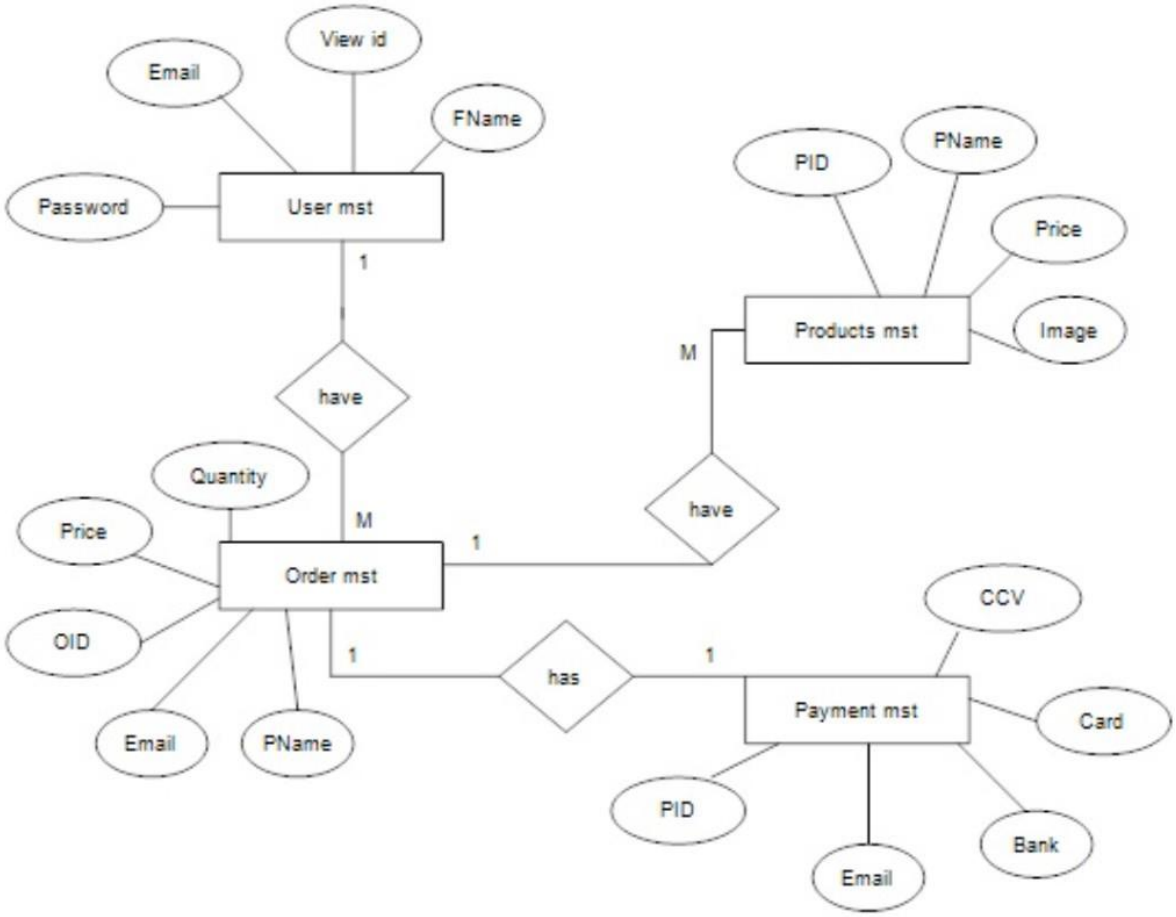
Aim

To create the Entity Relationship Diagram

Team Members:

S No	Register No	Name	Role
1	RA2011028010136	Gatta Venkata Amruth	Rep
2	RA2011028010124	Marla Sai Ruthwik	Member
3	RA2011028010141	Ridhwan Athief	Member
4	RA2011028010121	Victor Zephaniah	Member

E-R Diagram:-



Result:-

Thus, the entity relationship diagram was created successfully

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	8
Title of Experiment	Develop a Data Flow Diagram (Process-Up to Level 1)
Name of the candidate	Marla Sai Ruthwik
Team Members	Gatta Venkata Amruth (136), Victor Zephaniah (121), RidhwanAthief (141)
Register Number	RA2011028010124
Date of Experiment	10/05/2022

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

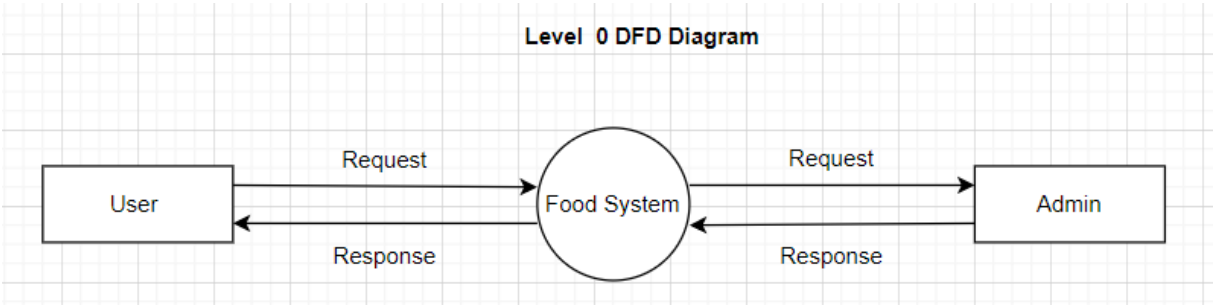
Aim

To develop the data flow diagram up to level 1 for the Online Food Ordering System

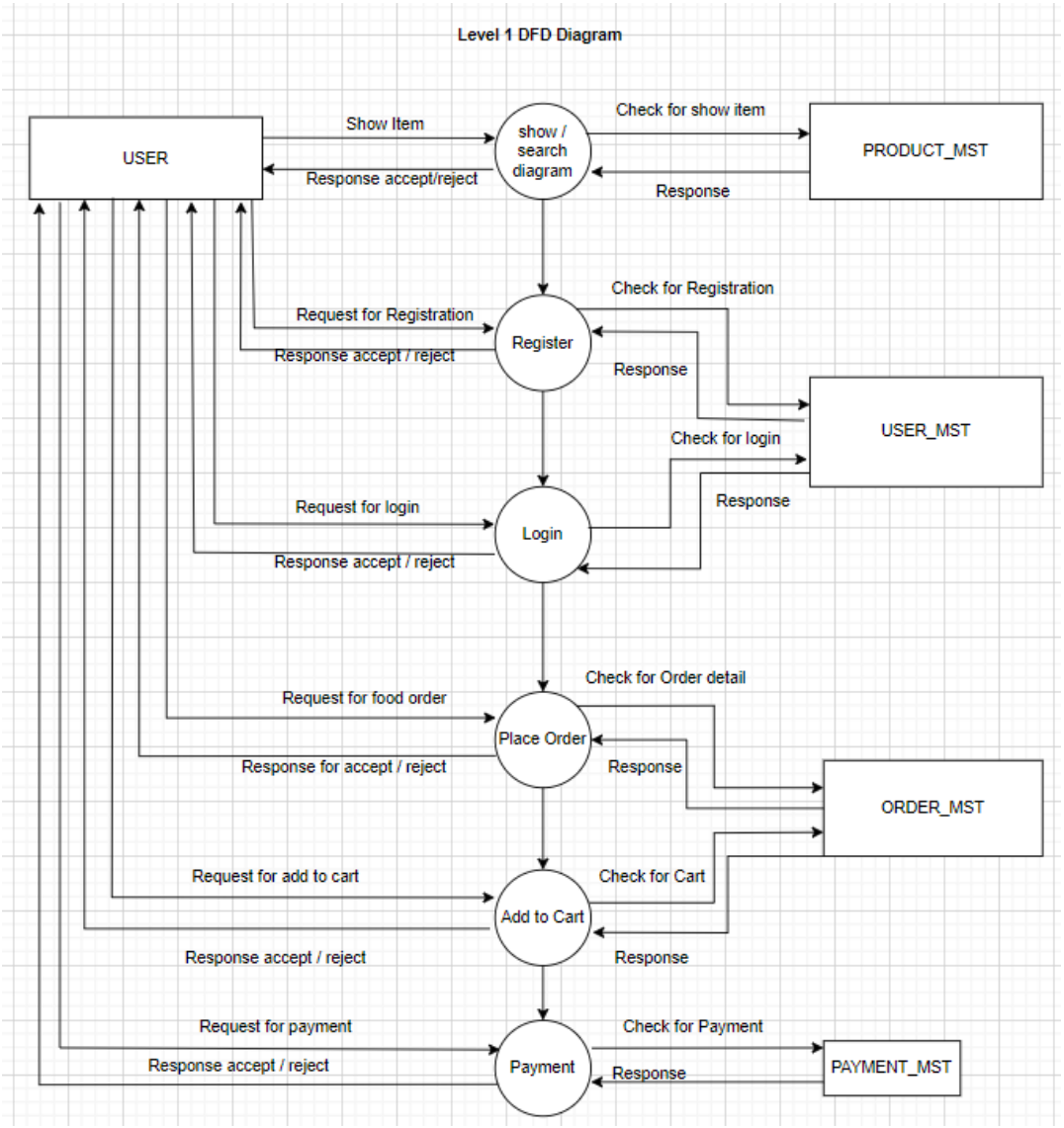
Team Members:

S No	Register No	Name	Role
1	RA2011028010136	Gatta Venkata Amruth	Rep
2	RA2011028010124	Marla Sai Ruthwik	Member
3	RA2011028010141	Ridhwan Athief	Member
4	RA2011028010121	Victor Zephaniah	Member

Level 0 Data Flow Diagram:-



Level 1 Data Flow Diagram:-



Result:-

Thus, the data flow diagrams have been created for the Online Food Ordering System.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	9
Title of Experiment	Design a Sequence and Collaboration Diagram
Name of the candidate	MARLA SAI RUTHWIK
Team Members	GATTA VENKATA AMRUTH (136), RIDHWAN ATHIEF (141) ,VICTOR ZEPHANIAH (121)
Register Number	RA2011028010124
Date of Experiment	17/05/2022

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

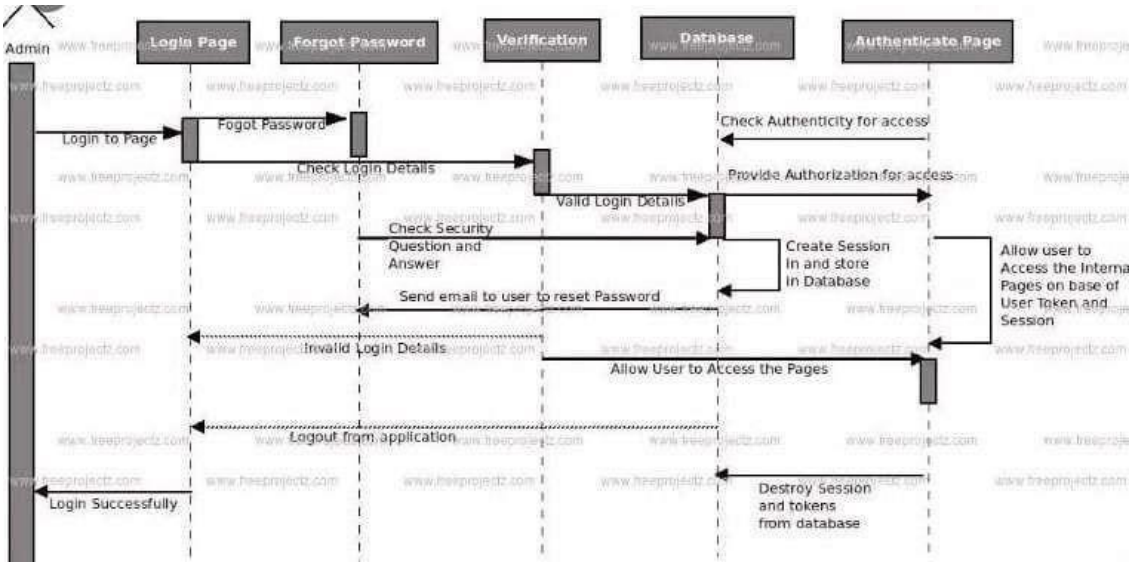
Aim

To create the sequence and collaboration diagram for the Online Food Ordering System

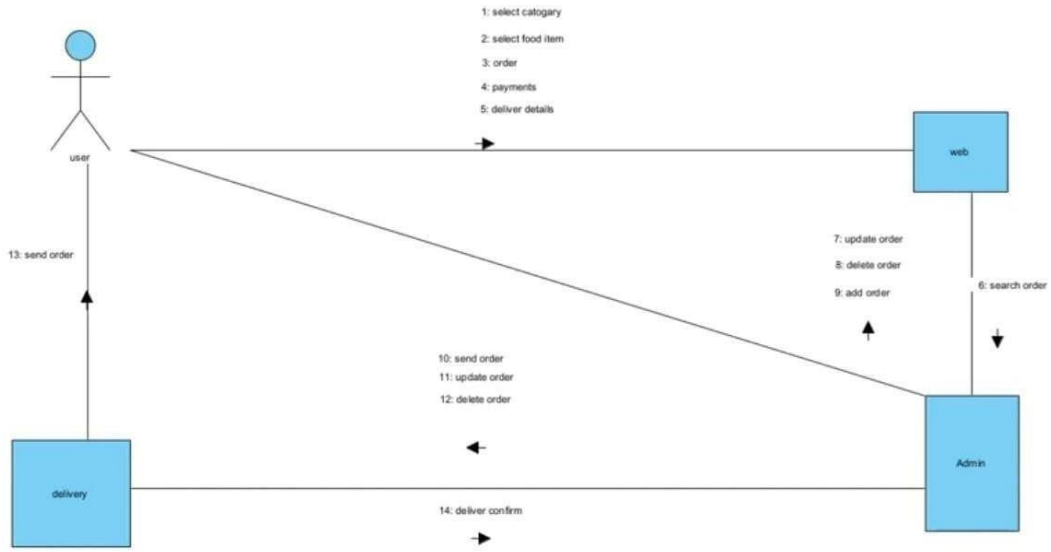
Team Members:

S No	Register No	Name	Role
1	RA2011028010136	GATTA VENKATA AMRUTH	Rep/Member
2	RA2011028010124	MARLA SAI RUTHWIK	Member
3	RA2011028010141	RIDHWAN ATHIEF	Member
4	RA2011028010121	VICTOR ZEPHANIAH	Member

SEQUENCE DIAGRAM:-



COLLABORATION DIAGRAM:-



Result:-

Thus, the sequence and collaboration diagrams were created for the Online Food Ordering System.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	10
Title of Experiment	Develop a Testing Framework/User Interface
Name of the candidate	Marla Sai Ruthwik
Team Members	Gatta Venkata Amruth (136), Ridhwan Athief(141), VictorZephaniah(121)
Register Number	RA2011028010124
Date of Experiment	24/5/2022

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim:-

To develop the testing framework and/or user interface framework for the Online Food Ordering System

Team Members:-

S No	Register No	Name	Role
1	RA2011028010136	Gatta Venkata Amruth	Team Lead
2	RA2011028010124	Marla Sai Ruthwik	Member
3	RA2011028010141	Ridhwan Athief	Member
4	RA2011028010121	Victor Zephaniah	Member

Methodology:-

We are planning to use Manual Testing Framework for testing our Online Food Ordering System
The following methods will be used to test our Online Food Ordering System:

1. We will use Python to write the main script.
2. The Espresso library instrumentation to automate application UI control.

Functional Testing of Food Delivery Applications:-

Functional testing of food delivery applications is very important to make sure that the applications fulfil the acceptance criteria by the product owners.

Functional testing includes various use cases such as:

- Installing and updating of food delivery application
- All fields and functionalities should work as per requirements
- The behaviour of the application when there is a new message or phone call
- Behaviour of the application when there is a lack of internet
- Verification of error messages when something is wrong with food delivery application
- Verification that the application should not consume too much memory and space, etc.

Performance Testing of Food Delivery App:-

Performance testing is a very crucial part of testing food delivery applications. We need to evaluate the behaviour and stability of food delivery applications when high stress, load, concurrency, volume is applied.

Different performance testing use cases are:

- Validation of application behaviour under high load
- Validation of application behaviour under peak usage
- Validation under high constant load and identification of various bottlenecks in the application

Usability Testing of Food Delivery Applications:-

It is done to make sure that customers are satisfied with the application experience. The design of the food delivery app should be very easy and user-friendly. Simple and effective design is the key to reach to a high number of customers.

Some usability use cases for food delivery applications are:

- Making sure that functionalities are easy to find
- Navigation should be easy and user-friendly
- Buttons of the application should be visible
- Verification that font should be of appropriate size so that anyone can read them
- Verification that the user can undo the last operation and finally
- The design of the application should be appealing, simple, and user-friendly

Some other use cases are validation that the registration process for food delivery apps should be very simple so that anyone can register and start using it. Addition of address should be very simple, menu navigation should be intuitive and hassle-free, validation that right images should be displayed against food items, images should be clear with proper colors.

Validation that offers and promotions should be easy to find, Bill should be understandable, delivery time and location should be easy to find, making sure that rating process is user-friendly and finally, the checkout process should be damn simple.

Compatibility Testing of Food Delivery Applications:-

This type of testing verifies that the food delivery application works well in different environments like OS: iOS and Android. Food delivery applications should work fine on all mobile devices with different operating systems and with different sizes. We also verify that it works well with high configuration and low configuration phones.

This is very important testing as a little bug here and there can cost lakhs to business. Hence, Compatibility Testing should be done by a larger set of people who have access to many devices to ensure that the application is compatible with all of them. A testbed of devices and configurations needs to be maintained for proper compatibility testing.

Security Testing for Food Delivery Applications:-

Security Testing is very important so that the personal data of customers should not be at stake. It is done to ensure that customer data is protected against all kinds of threats and attacks. Leakage of data can cost hefty fees to the business.

Some of the use cases of security testing are validation of application behaviour under cyber-attacks, validation that application should now to access the application without proper authentication, and validation of session timeout in times of inactivity.

Food delivery applications have integration of customer credit cards and other card data so security testing becomes very important otherwise customer data can be leaked.

Result:-

Thus, the testing framework/user interface framework has been created for the Online Food Ordering System..

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	11
Title of Experiment	Test Cases and Reporting
Name of the candidate	Marla Sai Ruthwik
Team Members	Gatta Venkata Amruth (136), Ridhwan Athief (141), Victor Zephaniah (121)
Register Number	RA2011028010124
Date of Experiment	31/05/2022

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To develop the test cases manual for the Online Food Ordering System

Team Members:

S No	Register No	Name	Role
1	RA2011028010136	**Gatta Venkata Amruth**	**Rep**
2	RA2011028010124	**Marla Sai Ruthwik**	**Member**
3	RA2011028010141	**Ridhwan Athief**	**Member**
4	RA2011028010121	**Victor Zephaniah**	**Member**

Test Case

Functional Test Cases

Test ID (#)	Test Scenario	Test Case	Execution Steps	Expected Outcome	Actual Outcome	Status	Remarks
1.	Verify User Registration from India	Accept Valid India Mobile Number on the Page#1	1. User clicks on User Registration link 2. Enter the mobile Number on the text box 3. Click Register button	User should be taken to the next page for entering more user details	Shifting the current page of the user to the next page.	Pass/Fail	Success/ Failure
	Verify User Registration from India	Don't Accept Non-Indian Mobile Number on the Page#1	Directly exits the login console	Shows ERROR message on the console.	Same	Pass/Fail	Success / Failure

2.	Search Functionality	Validation that the restaurant name, dish name etc. is searchable in the search text box	The user will open the search box in the home page which is present at the top Then the user will type the restaurant name or dish name etc. in the search bar.	When the user will press some restaurant name then if that restaurant typed is present then it will Show details of the restaurant typed. Else if any dish name is typed then the restaurant s in which the dish is present is shown	Same. The actual output is matched with Expected Output.	Pass/Fail	Success/ Failure
3	Ordering Page	User will select some restaurant then it should show all items present there and all dish details	When the user selects the restaurant then it should show all the items that are present should be shown also the dish details with photos should also be shown with the rate included	The menu of the restaurant will be shown . Then the dish searched by the user will be shown with it's photo and rate will be shown	The actual output is matched with Expected Output.	Pass/Fail	Success/ Failure

4	Cart Page	This is the page which shows the items and the quantity ordered by the user. If any offers are applied should also be shown.	User will get the details of items he ordered then he should press on offers section and check for any offers . If applicable then he should press on them. If he wants to give tip then he should press on tips section And can select the amount he can give to the delivery boy	It should show the total rate that is applicable for the order. If the user applies any offer then the offer amount should be taken out from the total amount. Also if the user adds some tip then it shoul be added to the amount and total amount should be displayed	The actual output is matched with Expected Output	Pass/Fail	Success/ Failure
5	Payment Page	Here the user can select his mode of payment to pay the order amount. The page should be secured. Once the order is confirmed the user will get the order details	The user should select the type of payment like card or upi etc. If he selects card then the user will enter the details of the card. Then the user will enter the otp	If the details of the card are correct then the user will be taken to the otp verification page. Then if the OTP entered by the user is correct then the payment is success and it will direct user	The actual output is matched with Expected Output	Pass/Fail	Success/ Failure

				to order confirmation status page			
6	Audit Trail	All transactions and all attempts to access data with a proper set of audit trail information are recorded.	User clicks on the history button. History page is opened with proper time of the accessed data and all the transaction.	User should be taken to history page and the required data is to be displayed	The actual output is matched with Expected Output	Pass/Fail	Success/ Failure

Non-Functional Test Cases

Test ID (#)	Test Scenario	Test Case	Execution Steps	Expected Outcome	Actual Outcome	Status	Remarks
1	Security	Accept only if registered. Do not allow for wrong credentials.	The user has to enter his/her credentials for login	It will Direct you to The home page	The actual output is matched with the expected output	Pass/Fail	Success/ Failure
2	Storage	Storage for user documents	User clicks storage Button.	The occupied memory by the application is displayed.	The actual output is matched with Expected Output.	Pass/Fail	Success/ Failure

Manual Test Case:-

Category	Progress Against Plan	Status
Functional Testing	Green	Completed
Non-Functional Testing	Amber	In-Progress

Functional	Test Case Coverage (%)	Status
User Registration	100%	Completed
Search Functionality	100%	Completed
Ordering Page	100%	Completed
Cart Page	100%	Completed
Payment Page	100%	Completed
Audit Trail		
Non-Functional	**Test Case Coverage (%)**	**Status**
Security	50% (Working Prototype)	In-Progress
Storage	50% (Working Prototype)	In Progress

Result:-

Thus, the test case manual has been created for the Online Food Ordering System.

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	12
Title of Experiment	Provide the details of Framework/Implementation
Name of the candidate	Marla Sai Ruthwik
Team Members	Gatta Venkata Amruth (136), Ridhwan Athief (141), Victor Zephaniah (121)
Register Numbers	RA2011028010124
Date of Experiment	08/06/2022

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

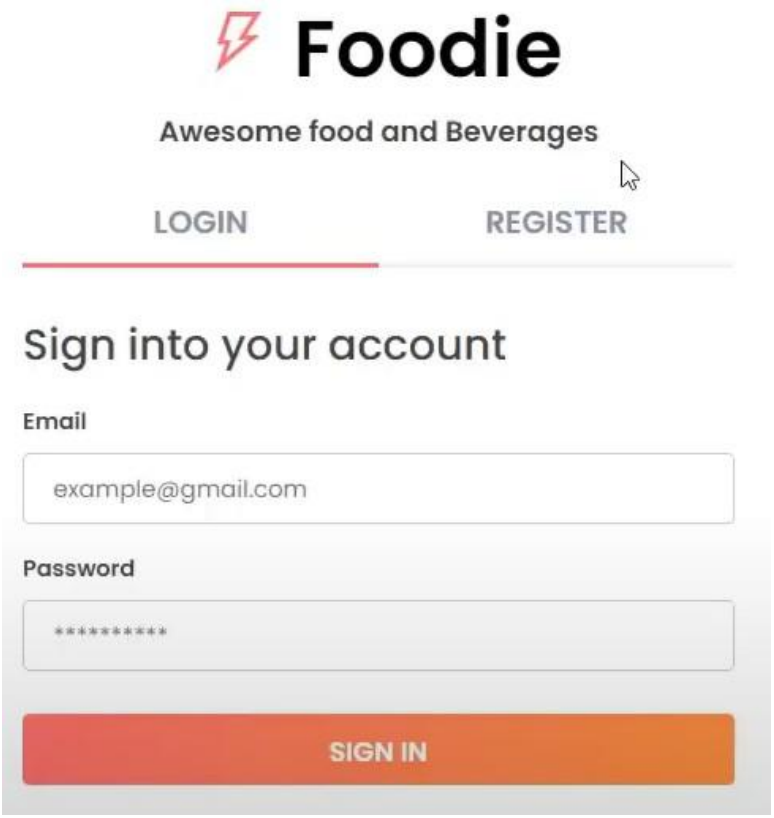
To provide the details of framework/implementation

Team Members:

S No	Register No	Name	Role
1	RA2011028010136	Gatta Venkata Amruth	Rep/Member
2	RA2011028010124	Marla Sai Ruthwik	Member
3	RA2011028010141	Ridhwan Athief	Member
4	RA2011028010121	Victor Zephaniah	Member

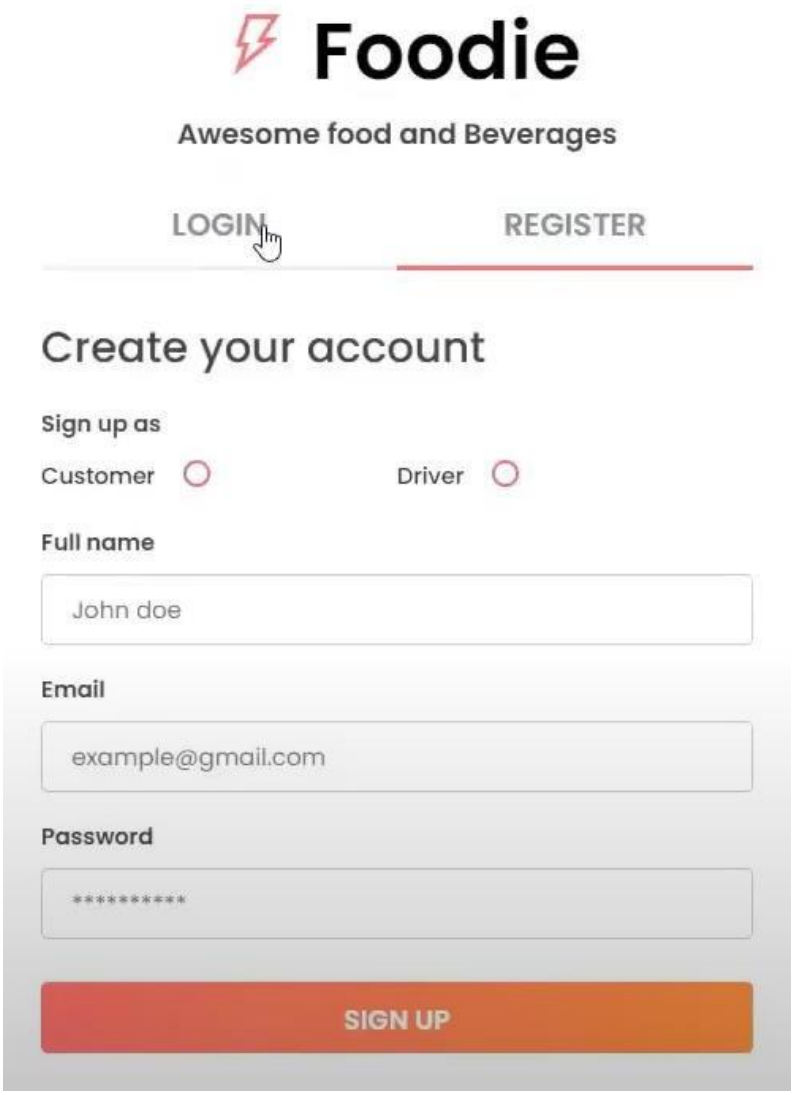
Login Page:-

Here the user can login into the app using the credentials



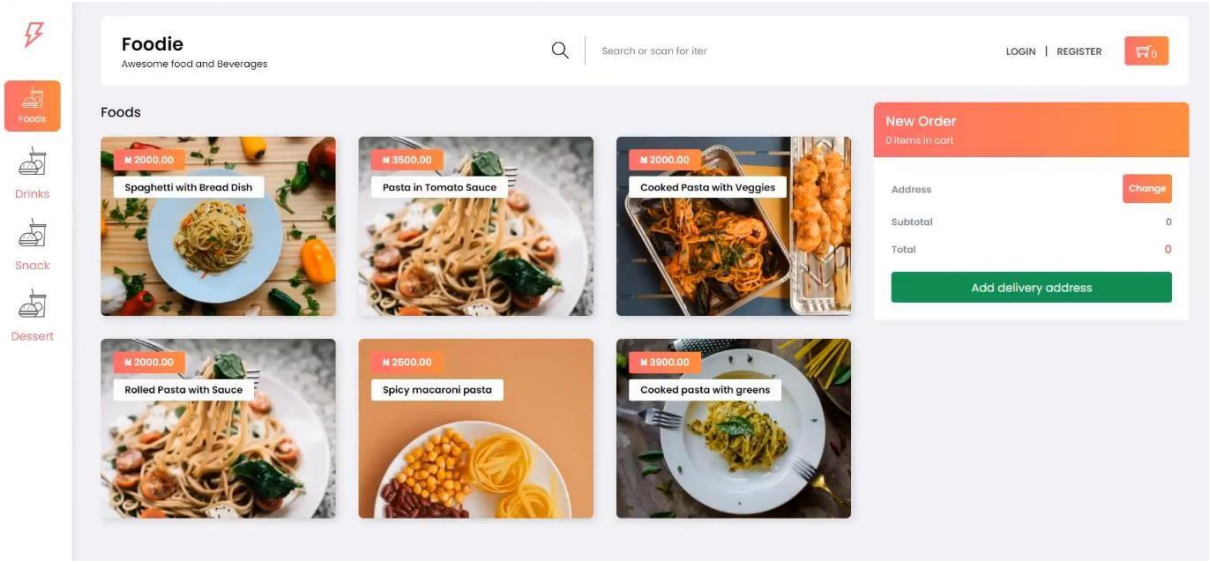
Registration Page:-

- If the user isn't registered then he can register himself by entering the following details.

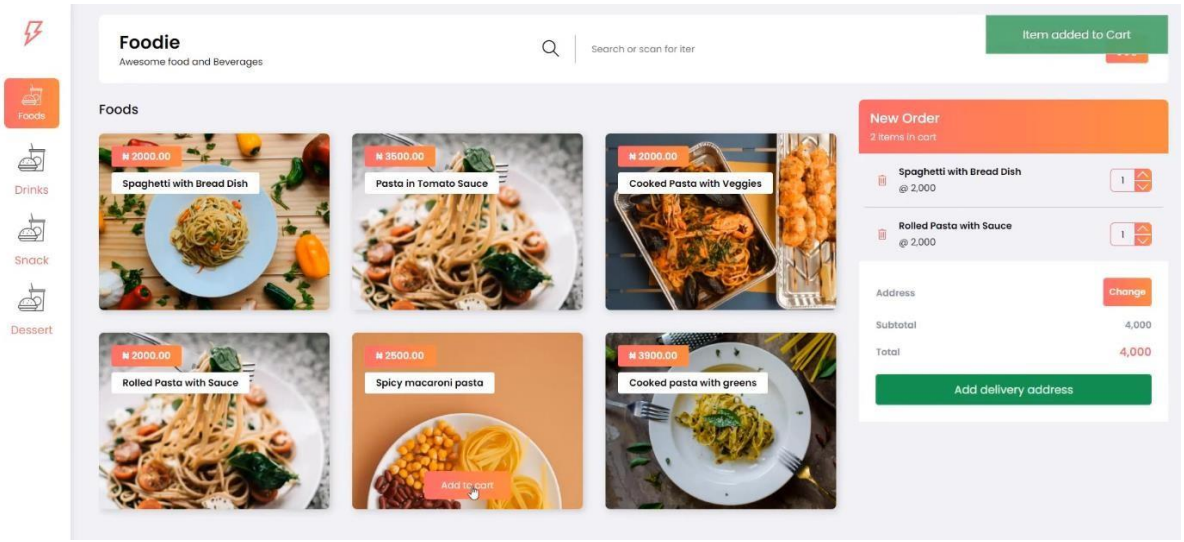


Home Page:-

- In the home page the user can search for dishes or restaurants by typing the name in the search bar

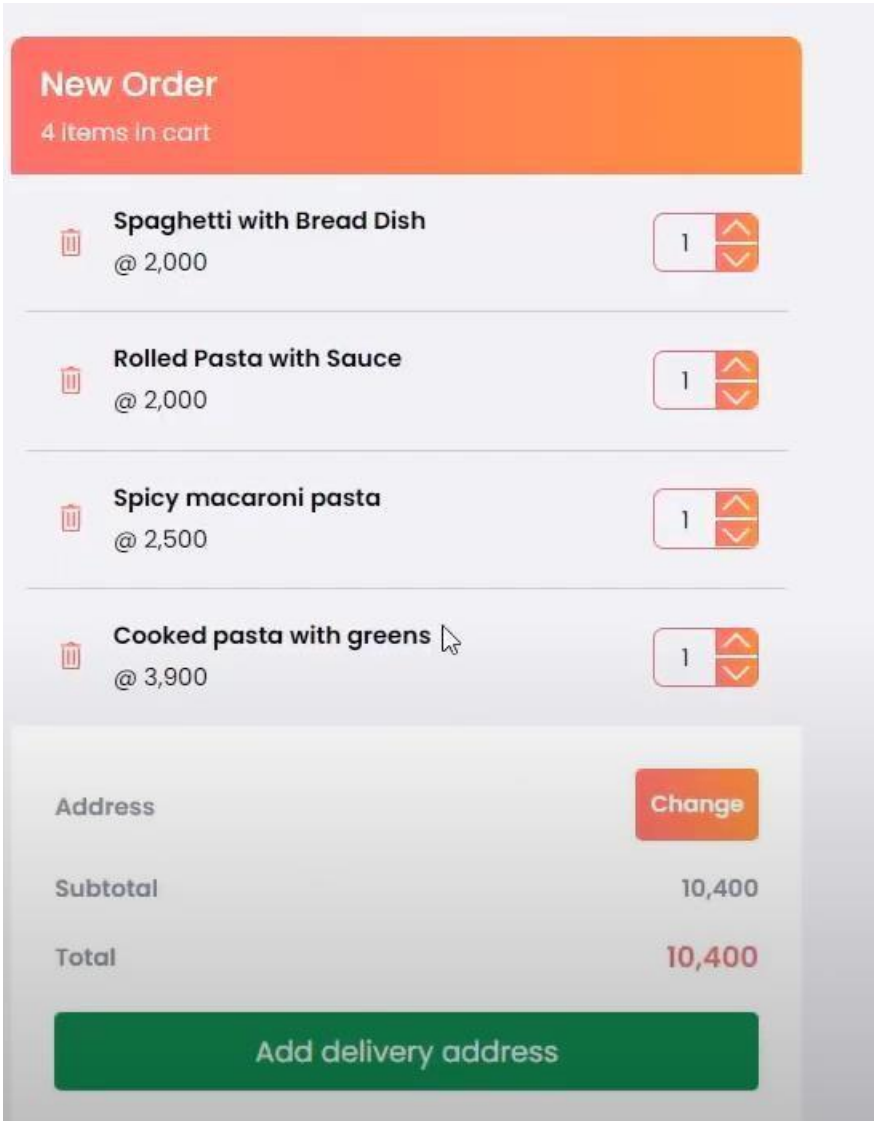


- After finding the dish the user can add the required quantity of the dish to the cart



Cart Page:-

- Here it shows the total quantity of items ordered by the user and thetotal amount for delivery and also the address of the user



Result:-

Thus, the details of framework/implementation along with the screenshots were provided.

Conclusion:-

Our “Foodie” is more affordable and suitable to the masses than the current various applications which are being used. Our application is user friendly and convenient to use. Also we tried to overcome most of the existing problems in the current system. The integration effort Comprises not only the design and realization of interfaces, but also test of those interfaces. The more complex the subsystem are, the more- effort is required for the interface test. Our entire team worked very hard in the development of this application.We also want to thank our professor Dr. P. Gouthaman for his guidance and support provided during the course of this project.

References:-

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