INSTITUTE FOR ADVANCED COMPUTING AND SOFTWARE DEVELOPMENT (IACSD) AKURDI, PUNE.

Documentation On

Food At Click

Online Food Portal

PG-DAC MARCH 2023.

Submitted By

Group No : 49

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ABSTRACT

In the digital era, the food industry has witnessed a significant transformation with the advent of online food portals. This project introduces an innovative online food portal system that aims to streamline the interactions between customers, restaurant managers, and delivery personnel. The platform capitalizes on modern technology to enhance convenience, efficiency, and user experience throughout the entire food ordering and delivery process.

The primary objective of this project is to provide a seamless and user-friendly interface for customers, enabling them to browse through a diverse range of restaurants, view menus, place orders, and make payments online. In parallel, restaurant managers gain access to a dedicated dashboard where they can efficiently manage incoming orders, Add and update menu items. Delivery personnel, on the other hand, have their own interface that allows them to accept delivery requests, and ensure timely order deliveries.

This project aligns with the growing demand for digital solutions in the food industry and addresses the needs of customers, restaurant managers, and delivery personnel. By revolutionizing the way food is ordered and delivered, this online food portal strives to enhance the overall dining experience for all stakeholders involved.

ACKNOWLEDGEMENT

I take this occasion to thank God, almighty for blessing us with his grace and taking our endeavour to a successful culmination. I extend my sincere and heartfelt thanks to our esteemed guide, **Mrs. Geeta Darunte** for providing me the right guidance and advice at the crucial juncture sand for showing me the right way. I extend my sincere thanks to our respected **Centre Co-Ordinator Mr. Rohit Puranik**, for allowing us to use the facilities available. I would like to thank the other faculty members also, at this occasion. Last but not the least, I would like to thank my friends and family for the support and encouragement they have given me during the course of our work

Shubham Tigane (233093)

Sourabh Magdum (233097)

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INTRODUCTION

This online food portal is the one stop web application which enables restaurants to showcase their cuisines online, customers to browse through the portal and order the food. Portal provide user with easy, personalized web-interface for facilitating access to restaurant information and food services that are of primary relevance and interests to the users. Food At Click food Portal is nothing but a portal which thinks customers as the main target users and provides so many useful services to customers at a single place. It helps to deliver various cuisine from various restaurant to customers with the help of delivery person.

Features:

1. Separate login for customers/Restaurant Manager/Delivery Person
2. Customer can browse through different restaurants and order food
3. Easy to add or update food menu by Restaurant Manager
4. Restaurant Manager can easily assign Delivery
5. Delivery person can see his assigned deliveries

1.1 PROJECT OBJECTIVE

The main purpose of this system, is to increase the awareness about various food items available in an area. To make cross cultural awareness among the people and to generate the feeling of oneness. Provide on time delivery of foods. In other words, our FOOD AT CLICK online food portal has following objectives:

- Simple database is maintained.
- Easy operations for the operator of the system.
- User interfaces are user accommodating and attractive; it takes very less time for the to use the system.
- Easy operations for the operator of the system.

1.2 PROJECT SCOPE

This system provides an easy way for customers to view and order the various cuisines. Restaurant staff to manage their food orders and deliver the food with help of delivery persons. The online food portal enables restaurants (system user) to showcase their cuisines online, customers to browse through portal can buy the food. This product aims towards a person who don’t want to visit the restaurants but want to taste the food items in his home or office etc. She/he can use the web application for ease.

1.3 STUDY OF THE SYSTEM

1.3.1 MODULES:

The system after careful analysis has been identified to be presented with the following modules and roles.

The modules involved are:

- Customer
- Restaurant Manager
- Delivery Person

Customer Activity:

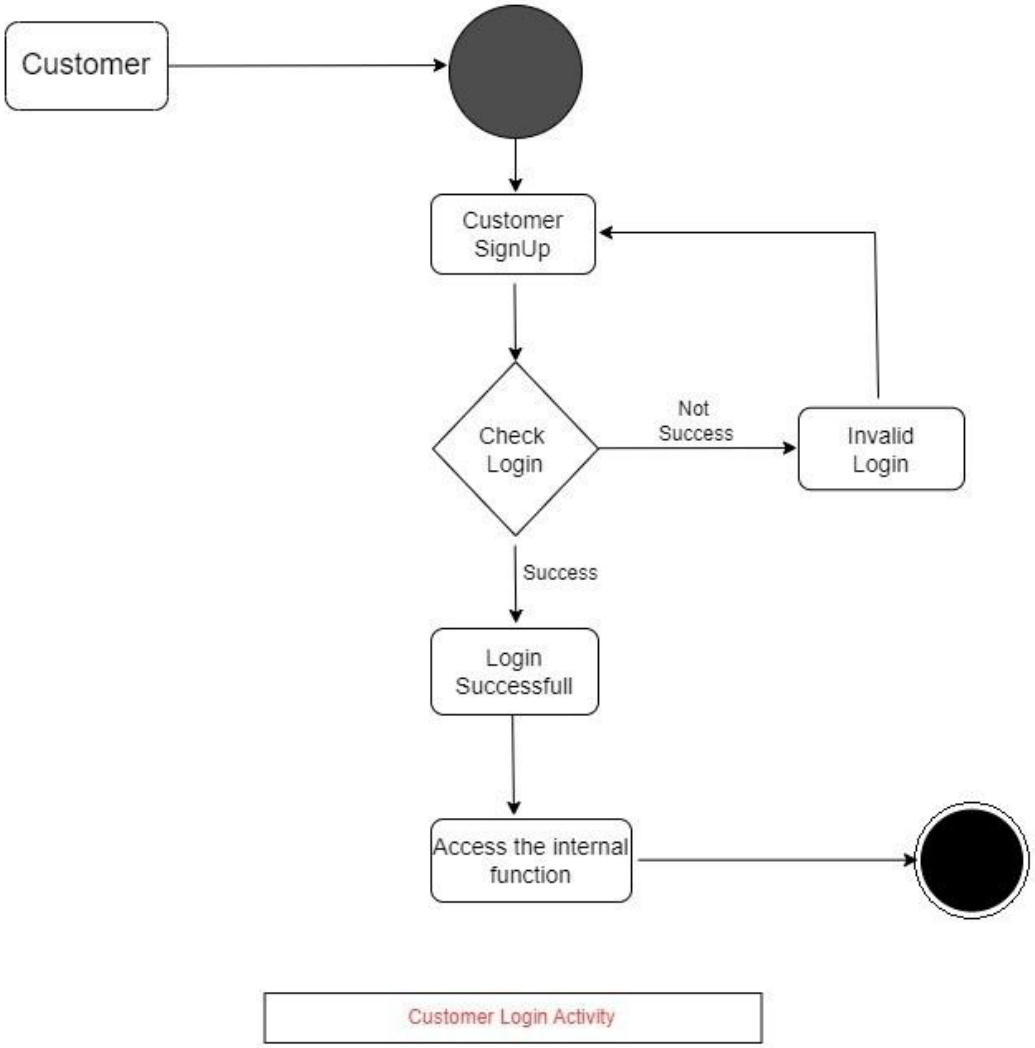


Figure 1 Customer Activity Diagram

Restaurant Manager Activity:

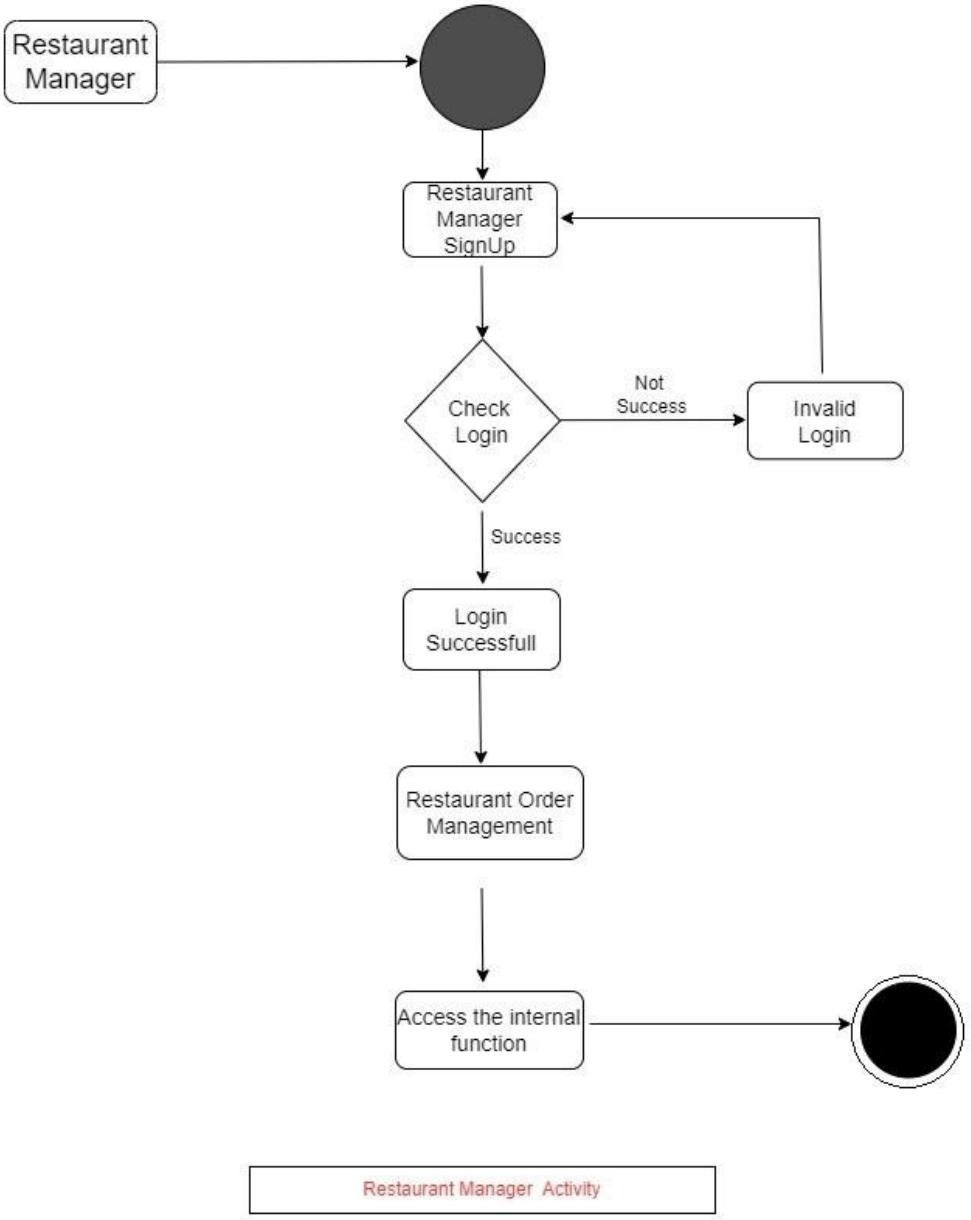


Figure 2 Restaurant Manager Activity Diagram

Delivery Person Activity:

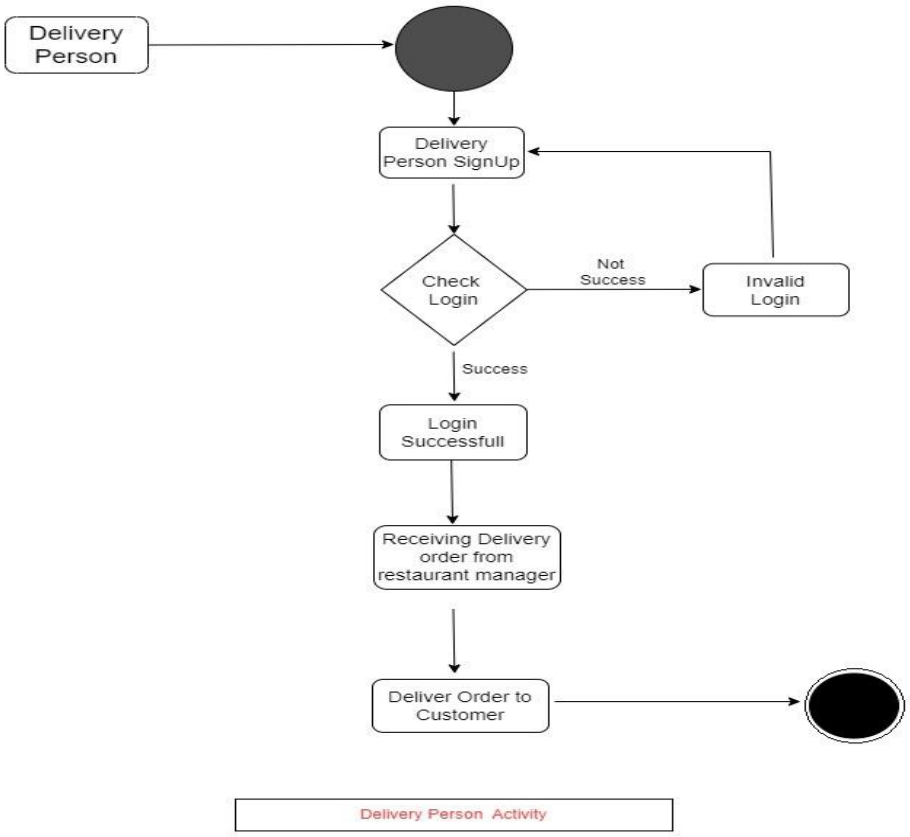


Figure 3 Delivery Person Activity Diagram

SYSTEM ANALYSIS

System analysis is the process of gathering and interpreting facts, diagnosing problems, and using the information to recommend improvements on the system. System analysis is a problem-solving activity that requires intensive communication between the system users and system developers.

System analysis or study is an important phase of any system development process. The system is viewed as a whole, the inputs are identified, and the system is subjected to close study to identify the problem areas. The solutions are given as a proposal. The proposal is reviewed on user request and suitable changes are made. This loop ends as soon as the user is satisfied with the proposal.

2.1 EXISTING SYSTEM

There are many problems found in the today's food portal system. The problems created in the existing system enforced us to develop the new system which minimize the problem of the existing system. The problems are Low quality of food, Unhygienic kitchen and lack of inclusion of all type of food. Its application depends on location of the customer and location of restaurant

2.2 PROPOSED SYSTEM

This system provides an easy way for customers to view and order the various cuisines. Restaurant staff to manage their food orders and deliver the food with help of delivery persons. The online food portal enables restaurants (system

user) to showcase their cuisines online, customers to browse through portal can buy the food. This product aims towards a person who don't want to visit the restaurants but want to taste the food items in his home or office etc. She/he can use the web application for ease.

Operating Environment:

Server side

- Processor: Intel i3 8th gen & above
- HDD : 500gb & above
- RAM :4gb & above
- OS: Windows 10 & above
- Database :MySQL
- JDK 11 & above
- Eclipse IDE
- Visual Studio Code

Client Side

- Latest Browser Chrome / Edge /Mozilla Fire Fox etc
- RAM :4gb & above
- OS: Android / Windows 10 & above
- Stable Internet Connection

2.3.2 SYSTEM OBJECTIVES

- To provide a Web site for online food management.

2.3.3 SYSTEM REQUIREMENTS

2.3.3.1 NON-FUNCTIONAL REQUIREMENTS

i. EFFICIENCY REQUIREMENT

When Customer, Restaurant manager or Delivery Person visits system it should access in an efficient manner.

ii. RELIABILITY REQUIREMENT

The system should provide a reliable environment to secretary and flat owner. All data should be store on server.

iii. USABILITY REQUIREMENT

The Web application is designed for user friendly environment and ease of use.

iv. IMPLEMENTATION REQUIREMENT

Implementation of the system using React in front end with Spring Boot as back end and it will be used for database connectivity. And the database part is developed by MySQL. Responsive web designing is used for making the website compatible for any type of screen.

v. DELIVERY REQUIREMENT

The whole system is expected to be delivered in four months of time with a weekly Evaluation by the project guide.

2.3.3.2 FUNCTIONAL REQUIREMENTS

Registration

Customers, Restaurant Managers and Delivery person must register to access the functionalities of FOOD AT CLICK portal unregistered users can only view the food portal.

Login

Customers

Registered customers can log in using valid user credentials to place orders and make online payments. Registered Managers can add/update their food menu and assign delivery Person for the placed orders. Registered Delivery person can accept order from restaurants to deliver it to customers

Restaurants

The system enables real-time menu and inventory updates for restaurants.

Restaurants can process orders and new establishments can join the platform.

Delivery Person

Individuals can register as delivery personnel via the portal.

Logout

Users can log out, redirecting them to the homepage.

SYSTEM DESIGN

System design is the solution for the creation of a new system. This phase focuses on the detailed implementation of the feasible system. Its emphasis on translating design. Specifications to performance specification. System design has two phases of development.

- Logical Design
- Physical Design

During logical design phase the analyst describes inputs (sources), outputs(destinations), databases (data sores) and procedures (data flows) all in a format that meets the user requirements. The analyst also specifies the needs of the user at a level that virtually determines the information flow in and out of the system and the data resources. Here the logical design is done through data flow diagrams and database design. The physical design is followed by physical design or coding. Physical design produces the working system by defining the design specifications, which specify exactly what the candidate system must do. The programmers write the necessary programs that accept input from the user, perform necessary processing on accepted data and produce the required report on a hard copy or display it on the screen.

3.1 INPUT AND OUTPUT DESIGN

3.1.1 INPUT DESIGN:

Input design is the link that ties the information system into the world of its users. The input design involves determining the inputs, validating the data, minimizing the data entry and provides a multi-user facility. Inaccurate inputs are the most common cause of errors in data processing. Errors entered by the data entry operators can be controlled by input design. The user-originated inputs are converted to a computer-based format in the input design. Input data are collected and organized into groups of similar data. Once identified, the appropriate input media are selected for processing. All the input data are validated and if any data violates any conditions, the user is warned by a message. If the data satisfies all the conditions, it is transferred to the appropriate tables in the database. In this project the student details are to be entered at the time of registration. A page is designed for this purpose which is user friendly and easy to use. The design is done such that users get appropriate messages when exceptions occur.

3.1.2 OUTPUT DESIGN:

Computer output is the most important and direct source of information to the user. Output design is a very important phase since the output needs to be in an efficient manner. Efficient and intelligible output design improves the system relationship with the user and helps in decision making. Allowing the user to view the sample screen is important because the user is the ultimate judge of the quality of output. The output module of this system is the selected notifications.

DATABASE DESIGN

3.2 DATABASE

Databases are the storehouses of data used in the software systems. The data is stored in tables inside the database. Several tables are created for the manipulation of the data for the system. Two essential settings for a database are

- Primary key - the field that is unique for all the record occurrences
- Foreign key - the field used to set relation between tables

Normalization is a technique to avoid redundancy in the tables.

3.3 SYSTEM TOOLS

The various system tools that have been used in developing both the front end and the back end of the project are being discussed in this chapter.

3.3.1 FRONT END:

React is a library which is developed by Facebook are utilized to implement the frontend. React (also known as React.js or ReactJS) is a free and open-source front-end JavaScript library for building user interfaces or UI components. It is maintained by Facebook and a community of individual developers and companies. React can be used as a base in the development of single page or mobile applications. However, React is only concerned with state management and rendering that state to the DOM, so creating React applications usually requires the use of additional libraries for routing, as well as certain client-side functionality.

3.3.2 BACKEND:

The back end is implemented using MySQL which is used to design databases.

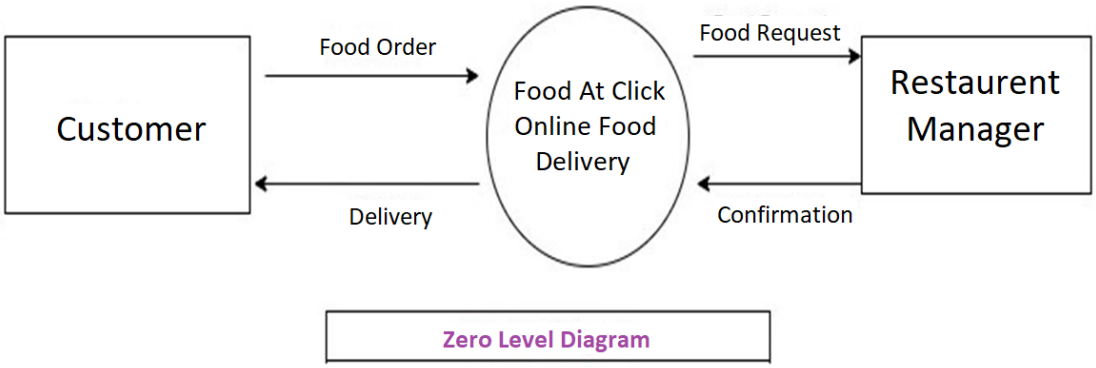
MySQL:

MySQL is the world's second most widely used open-source relational database management system (RDBMS). The SQL phrase stands for Structured Query Language.

Spring-Boot:

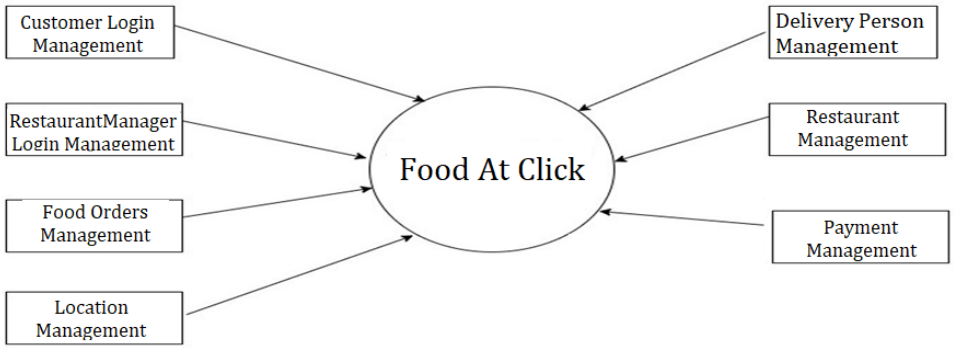
This is used to connect MYSQL and fetch data from database and store the data in database. The Spring Framework is an application framework and inversion of control container for the Java platform. The framework's core features can be used by any Java application, but there are extensions for building web applications on top of the Java EE (Enterprise Edition) platform. Although the framework does not impose any specific programming model, it has become popular in the Java community as an addition to the Enterprise JavaBeans (EJB) model. The Spring Framework is Open-source Framework.

0 Level DFD



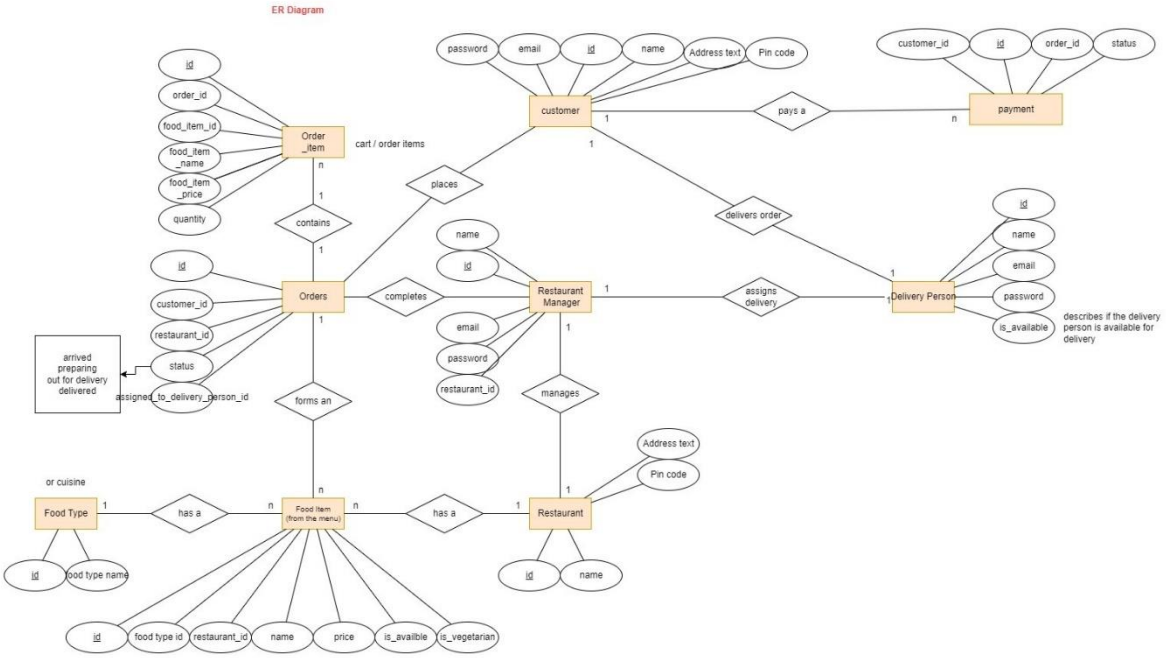
Zero Level Diagram

1 Level DFD



First Level Diagram

E-R Diagram:


ER Diagram
password
email
id
name
Address text
Pin code
customer
pays a
customer_id
id
order_id
status
payment
id
order_id
food_item_id
food_item _name
food_item _price
quantity
Order _item
cart / order items
n
1
contains
places
delivers order
id
customer_id
restaurant_id
status
assigned_to_delivery_person_id
Orders
completes
name
id
email
password
restaurant_id
Restaurant Manager
assigns delivery
Delivery Person
id
name
email
password
is_available
describes if the delivery person is available for delivery
arrived
preparing
out for delivery
delivered
forms an
manages
or cuisine
Food Type
has a
Food Item (from the menu)
has a
Restaurant
Address text
Pin code
id
food type name
id
food type id
restaurant_id
name
price
is_availble
is_vegetarian
id
name

Class Diagram

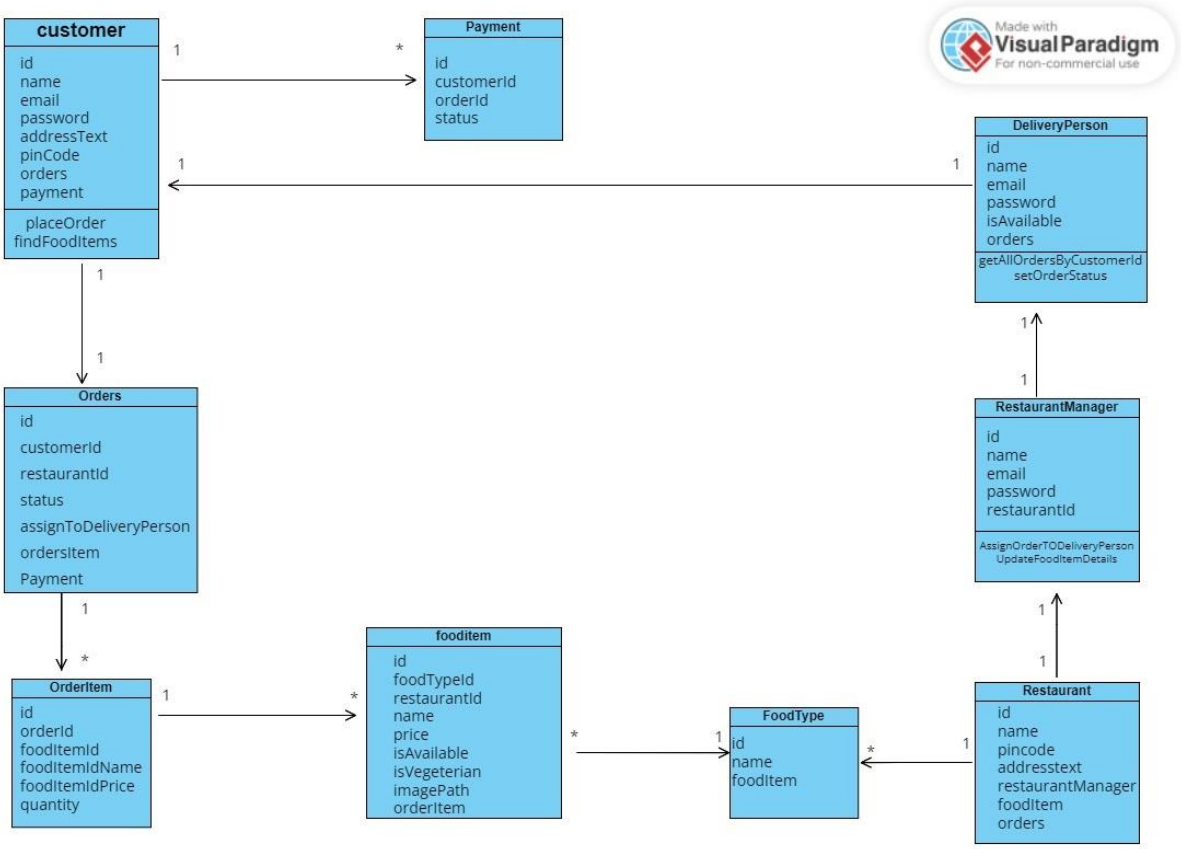


TABLE STRUCTURE:

Tables:

```
mysql> use project
Database changed
mysql> show tables;
+--------------------+
| Tables_in_project  |
+--------------------+
| customer           |
| delivery_person    |
| food_item          |
| food_type          |
| order_item         |
| orders             |
| payment            |
| restaurant         |
| restaurant_manager |
+--------------------+
```

Customer:

```
mysql> desc customer;
+--------------+--------------+------+-----+---------+----------------+
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| id           | int          | NO   | PRI | NULL    | auto_increment |
| address_text | varchar(255) | YES  |     | NULL    |                |
| email        | varchar(255) | YES  |     | NULL    |                |
| name         | varchar(255) | YES  |     | NULL    |                |
| password     | varchar(255) | YES  |     | NULL    |                |
| pin_code     | int          | YES  |     | NULL    |                |
+--------------+--------------+------+-----+---------+----------------+
```

Restaurant Manager:

```
mysql> desc restaurant_manager;
+---------------+--------------+------+-----+---------+----------------+
| Field         | Type         | Null | Key | Default | Extra          |
+---------------+--------------+------+-----+---------+----------------+
| id            | int          | NO   | PRI | NULL    | auto_increment |
| email         | varchar(255) | YES  |     | NULL    |                |
| name          | varchar(255) | YES  |     | NULL    |                |
| password      | varchar(255) | YES  |     | NULL    |                |
| restaurant_id | int          | YES  | MUL | NULL    |                |
+---------------+--------------+------+-----+---------+----------------+
```

Restaurant:

```
mysql> desc restaurant;
+--------------+--------------+------+-----+---------+----------------+
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| id           | int          | NO   | PRI | NULL    | auto_increment |
| address_text | varchar(255) | YES  |     | NULL    |                |
| name         | varchar(255) | YES  |     | NULL    |                |
| pin_code     | int          | YES  |     | NULL    |                |
+--------------+--------------+------+-----+---------+----------------+
```

Delivery Person:

```
mysql> desc delivery_person;
+--------------+--------------+------+-----+---------+----------------+
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| id           | int          | NO   | PRI | NULL    | auto_increment |
| email        | varchar(255) | YES  |     | NULL    |                |
| is_available | bit(1)       | YES  |     | NULL    |                |
| name         | varchar(255) | YES  |     | NULL    |                |
| password     | varchar(255) | YES  |     | NULL    |                |
+--------------+--------------+------+-----+---------+----------------+
```

Food Item:

```
mysql> desc food_item;
+---------------+--------------+------+-----+---------+----------------+
| Field         | Type         | Null | Key | Default | Extra          |
+---------------+--------------+------+-----+---------+----------------+
| id            | int          | NO   | PRI | NULL    | auto_increment |
| image_path    | varchar(255) | YES  |     | NULL    |                |
| is_vegetarian | bit(1)       | YES  |     | NULL    |                |
| name          | varchar(255) | YES  |     | NULL    |                |
| price         | double       | YES  |     | NULL    |                |
| food_type_id  | int          | YES  | MUL | NULL    |                |
| restaurant_id | int          | YES  | MUL | NULL    |                |
+---------------+--------------+------+-----+---------+----------------+
```

Food Type:

```
mysql> desc food_type;
+-------+--------------+------+-----+---------+----------------+
| Field | Type         | Null | Key | Default | Extra          |
+-------+--------------+------+-----+---------+----------------+
| id    | int          | NO   | PRI | NULL    | auto_increment |
| name  | varchar(255) | YES  |     | NULL    |                |
+-------+--------------+------+-----+---------+----------------+
```

Orders:

```
mysql> desc orders;
+--------------------------------+--------------+------+-----+---------+----------------+
| Field                          | Type         | Null | Key | Default | Extra          |
+--------------------------------+--------------+------+-----+---------+----------------+
| id                             | int          | NO   | PRI | NULL    | auto_increment |
| status                         | varchar(255) | YES  |     | NULL    |                |
| assigned_to_delivery_person_id | int          | YES  | MUL | NULL    |                |
| customer_id                    | int          | YES  | MUL | NULL    |                |
| restaurant_id                  | int          | YES  | MUL | NULL    |                |
+--------------------------------+--------------+------+-----+---------+----------------+
```

Order item:

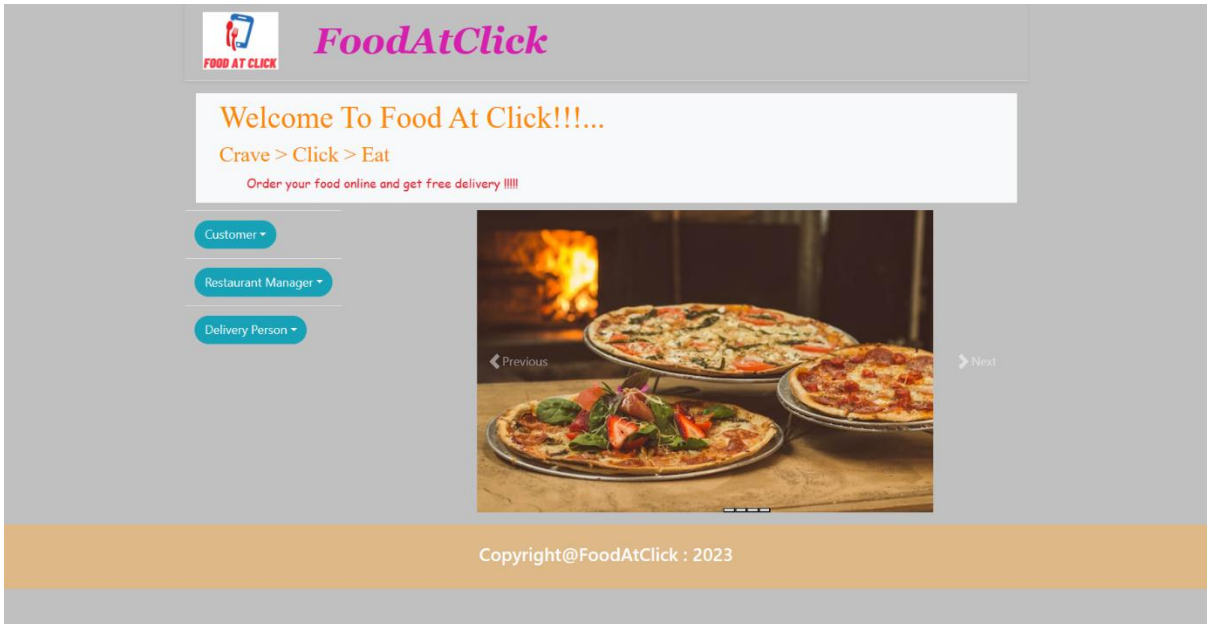
```
mysql> desc order_item;
+-----------------+--------------+------+-----+---------+----------------+
| Field           | Type         | Null | Key | Default | Extra          |
+-----------------+--------------+------+-----+---------+----------------+
| id              | int          | NO   | PRI | NULL    | auto_increment |
| food_item_name  | varchar(255) | YES  |     | NULL    |                |
| food_item_price | double       | YES  |     | NULL    |                |
| quantity        | int          | YES  |     | NULL    |                |
| food_item_id    | int          | YES  | MUL | NULL    |                |
| order_id        | int          | YES  | MUL | NULL    |                |
+-----------------+--------------+------+-----+---------+----------------+
```

Payment:

```
mysql> desc payment;
+-------------+--------------+------+-----+---------+----------------+
| Field       | Type         | Null | Key | Default | Extra          |
+-------------+--------------+------+-----+---------+----------------+
| id          | int          | NO   | PRI | NULL    | auto_increment |
| status      | varchar(255) | YES  |     | NULL    |                |
| customer_id | int          | YES  | MUL | NULL    |                |
| order_id    | int          | YES  | MUL | NULL    |                |
+-------------+--------------+------+-----+---------+----------------+
```

Project Snapshots

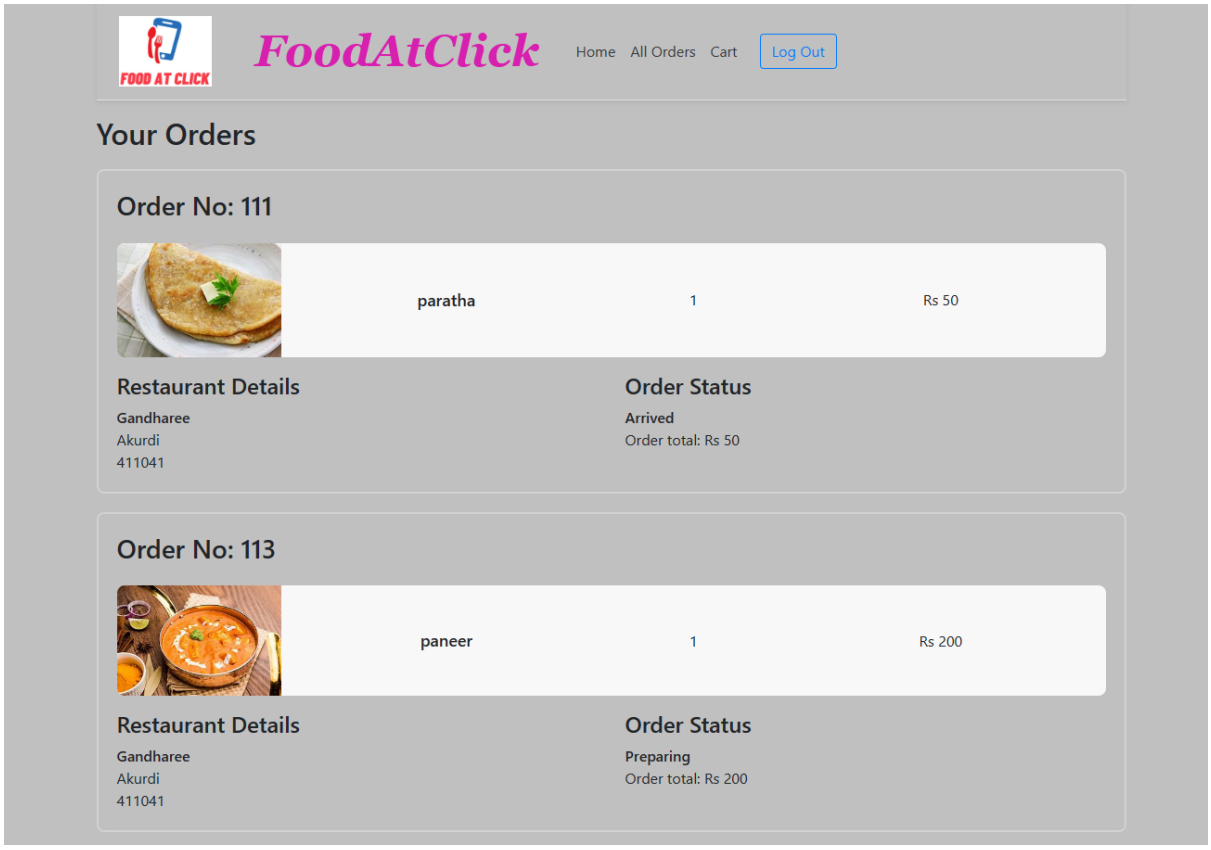
Homepage



Customer Module


FoodAtClick
Home
All Orders
Cart
Log Out
Cart
paneer
+
1
-
Rs 200
Total: 200
Next
Copyright@FoodAtClick : 2023


FoodAtClick
Home
All Orders
Cart
Log Out
Address
Address
wakad
Pincode
411042
Update Address
Previous
Next
Copyright@FoodAtClick : 2023



Restaurant Manager Module:

FoodAtClick Home Restaurant Menu All Orders Log Out

Gandharee

Welcome, **Gman**
Manager

Order No: 104

mushroom 1 Rs 500

Order Total: Rs 500

Deliver To
suraj
pune

Assign Delivery

FoodAtClick Home Restaurant Menu All Orders Log Out

Gandharee

Welcome, **Gman**
Manager

Assign To Delivery Person

Order No: 111

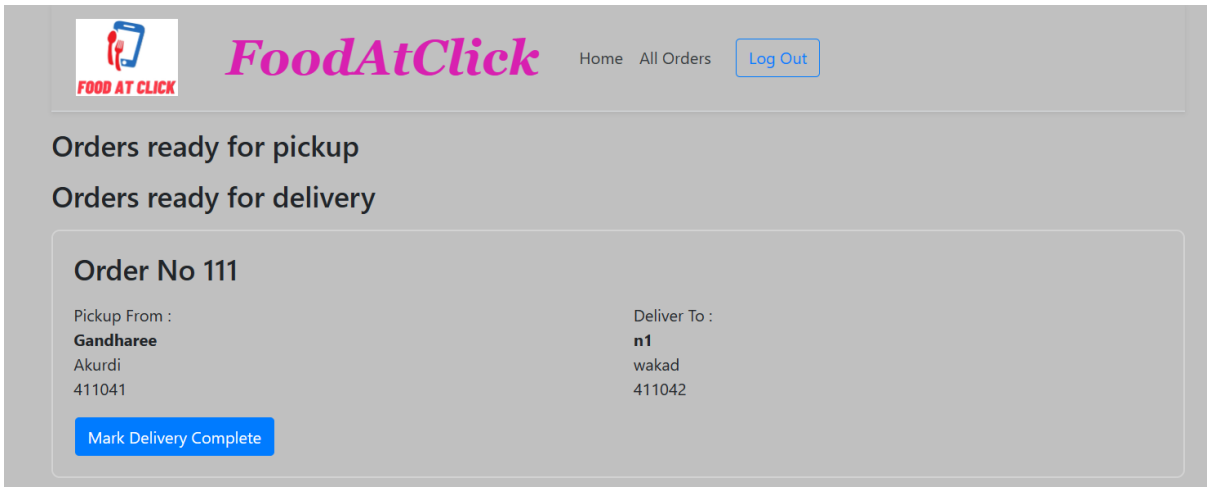
del1 Assign

d3 Assign

Back to Home

Copyright@FoodAtClick : 2023

Delivery Person Module:



CONCLUSION

The project entitled **FOOD AT CLICK** Online Food Management System was completed successfully.

The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this project was to develop a web application and an android application for purchasing items from a shop.

This project helped us in gaining valuable information and practical knowledge on several topics like designing web pages using React.js, usage of responsive templates, designing of android applications, and management of database using MySQL. The entire system is secured. Also, the project helped us understanding about the development phases of a project and software development life cycle. We learned how to test different features of a project. This project has given us great satisfaction in having designed an application which can be implemented to any nearby shops or branded shops selling various kinds of products by simple modifications.

There is a scope for further development in our project to a great extent. A number of features can be added to this system in future like live tracking system, review and ratings Feedback system for detailed analysis. Real time payment system These features could have implemented unless the time did not limit us.

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