DELIGHDINE C-DAC NOIDA



# **DELIGHTDINE**

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PROJECT TITLE: DELIGHTDINE

1. INTRODUCTION: -

To simplify communication between the restaurant and kitchen staff, all orders taken by the

manager will result in a request on the monitors in with all orders being separated by table.

ease of setup for management- adding categories, cost, menus etc to the system ease of figure

generating revenue, turnover, profit, and operating costs. overall improves efficiency and

coordinates of whole management system

**1.1.PURPOSE**: -

The DelightDine project aims to revolutionize and enhance the dining experience for both

customers and restaurant owners by leveraging technology and innovative solutions. The

primary objectives and purposes of the project could include:

1.1.1. Efficient Restaurant Management: DelightDine offer tools for restaurant owners and

managers to streamline their operations. This could include functionalities for managing

reservations, optimizing table turnover, tracking inventory, and automating order processing

to improve efficiency.

**1.1.2. Supporting Small Businesses:** The project could have a social impact element by

supporting local and small-scale restaurants, helping them adapt to changing consumer

behaviors and market dynamics.

The overall purpose of DelightDine could be to drive continuous improvement in the restaurant

industry by offering a comprehensive platform that enhances the way restaurants operate and

cater to their customers.

2. PROJECT SCOPE: -

The scope of the "DelightDine" project would encompass a wide range of features,

functionalities and objectives aimed at enhancing the dining experience and improving

restaurant operations through technology. This project allows admin/owner to Maintain the

data of the restaurant and the customer as well as the details of the orders and activity of

managers and chef.

**Submitted By:-**

Janhavi Patil, Pooja Gadadre Vivek Kumar, Rajneesh Kumar

#### 2.1.Digital Menu Presentation:

Create an interactive digital menu that showcases dishes, descriptions, and allergen information. Offers the dishes and quantity along with price.

#### 2.2. Contactless Ordering:

Enable customers to browse the menu, place orders, and request service from their smartphones.

## 2.3. Order Tracking and Status Updates:

Provide real-time updates on the status of orders, from preparation to delivery.

Notify owner when their orders are ready for serve or when the table is being set.

## 2.4. Analytics and Insights:

Develop a dashboard for restaurant owners to access data analytics and insights.

Provide information about the activity of manager and chef how they work.

#### 2.5. Table Management:

Create tools for restaurant staff to manage table assignments, reservations, and walk-in customers. Optimize table turnover to maximize seating capacity.

#### 2.6. Easy Payments:

Implement secure and convenient payment options.

Allow customers to settle bills using card and cash payment mode.

#### 2.7. User Experience (UX) Design:

Design an intuitive and user-friendly interface for both customers and restaurant staff.

Focus on ease of use and accessibility.

#### 2.8. Security and Privacy:

Implement robust security measures to protect customer data, payment information, and personal details. Comply with data protection regulations and privacy standards.

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The scope of the "DelightDine" project would involve a comprehensive approach to transforming the dining experience by integrating technology, data analysis, and user-centric design. It would aim to bridge the gap between customers and restaurants while optimizing operations for improved efficiency and customer satisfaction.

#### 3. OVERALL DESCRIPTION

There are four modules in this project.

- 1. Admin/Owner
- 2. Manager
- 3. chef

**3.1 Project Perspective: -** This project will provide facility to manage the restaurant. If admin/owner want to see all activity of the manager and chef, then first he will sing in in this website and then he can see all the details about the manager, chef and dashboard in which he can see the order list and booked table along with the bill.

#### 3.2 PROJECT FUNCTION: -

#### 3.2.1 Admin

- Ability to add new, edit or delete waiters, Manager, Chef i.e. Employees to the system.
- Details of complete orders.
- Ability to alter the grid size of the meals, menu sections and menus.
- Ability to alter the price of menu.
- Ability to add, edit and remove products & Category.
- Ability to change the status of Payment.
- Ability To check the Complete Transaction history of day wise or yearly & total revenue check.
- Ability to add, edit and remove offers.

## 3.2.2 Manager

- Ability to add a new order to a table.
- Ability to add a suborder to an existing order.
- Ability to delete a suborder that has not yet been confirmed within the order system.
- Ability to view the status of all active suborders.
- Ability to print customer receipts on order completion.
- Ability to view transaction list of current order.
- Ability to delete an item or clear the transaction list.
- statistics of complete orders.

#### 3.2.3 Chef

- Organized display of active orders.
- View preferences and optional choices of every meal. Inform Manager; update order to 'in progress'.
- Inform Manager; update order to 'ready'.

#### 3.2.5 Order to Maintenance status

- **3.2.5.1 Order Place by** Customer
- 3.2.5.2 Order Taken by Manager
- 3.2.5.3 Oder to be prepared status- Chef
  - Not Started
  - In progress
  - Complete
- 3.2.5.4 Order Served by waiter
- 3.2.5.5 Order Complete status Manager
- 3.2.5.6 Bill generation status -Admin
  - Not Completed
  - Completed

#### 3.2.5.7 Payment mode

- online Manager
- Cash/Card -Manager

#### 4. Specific Requirements:

# 4.1 Functional Requirements:

This section provides requirement overview of the system. Various functional modules that can be implemented by the system will be –

#### **Description:**

- **4.1.1 Home** This is our main page where admin, chef and manager can access our home page.
- **4.1.2 Login** Enable a new user to register/add to the system. Authenticate and allow user to login on the web application.
- **4.1.3 Admin** From here Admin can see all the activity of manager and chef in restaurant where he can track all data.
- **4.1.4 Manager** In this page Manager can see status of order as well as bill.
- **4.1.5** Chef From here chef can see the order and he can accept or deny if order is out of stock.
- **4.1.6 Logout** If the user has login to his account, he can logout of his account to maintain safety of account.

#### **4.2 Non-Functional Requirements:**

Following Non-Functional Requirements will be there in the insurance to the internet:

- Secure access to consumer's confidential data.
- 24X7 availability.
- Flexible service-based architecture will be highly desirable for future extension.
- **4.3** Security Requirements: Separate logins with different roles are provided for operator based on the requirement of operation. Administrator will have the overall control over all the users.

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## **4.4 Software Quality Attributes:**

#### **Robustness**

Software is robust; it has to behave reasonably even in circumstances that were not anticipated in requirement specification.

# Reliability

Software is to be reliable, the user can depend on it, and it will operate as expected.

#### **Correctness**

Software is functionally correct if it behaves according to the functional requirement specification.

# **Usability**

Software is user friendly; the user will find it easy to use. Usability depends on the consistency of its user interfaces. Usability is achieved through standard user interfaces.

## **Flexibility**

Software is flexible; it facilitates addition of functionality or modification of existing functions.

# Reusability

Software is reusable; it can be used for similar applications with minor modifications.

# **Availability**

The degree to which the system is operational and accessible when required for use is addressed in terms of making the server availability 24X7.

#### **Adaptability**

The ease with which software satisfies differing system constraints and user needs.

# **5. External Interface Requirements:**

- **5.1 User Interfaces**: The targeted browser Mozilla FireFox 3.6, Google Chrome.
- **5.2 Hardware Interfaces**: The Proposed Server configuration is as follows:

Primary Server (Web server & Database Server)

Sl.	ITEM	Specification
No.		
01	Processor	PENTIUM 4 Or above
02	Speed	1.8 GHz
03	No., of processor	One
04	Memory	50 GB Or Above
05	FSB	1Ghz or more
06	Processor cache	2MB or more
07	RAID controller	0 and 1
08	HDD type	SATA
09	No., of HDD bays	Min 1
10	HDD capacity	1TB
11	Optical Drive	DVD ROM
12	Network	2 Gigabit RJ45 connectors
13	USB ports	Four
14	Motherboard ports	USB/RJ45/Video
15	Expansion slots	Two
16	Tower Model	-
17	OS	Windows 8 And above
18	Monitor	19" TFT Monitor
19	Key board	101 Keys PS2 or USB
20	Mouse	Optical

# **Client Machine: -**

- Desktop
- Pentium IV 2.0 GHz or above
- Minimum 1 GB RAM, HDD 100 GB.
- 107 key keyboards, Scroll Mouse and 15" Monitor

# **6.0 TOOLS AND TECHNOLOGIES:**

React, spring boot, MySQL, Visual Studio Code,

# 6.1 STANDARDS:

**IEEE** and **ISO** 

## 6.2 PLATFORM AND DATABASE: -

Desktop Client Based:

Windows & MySQL

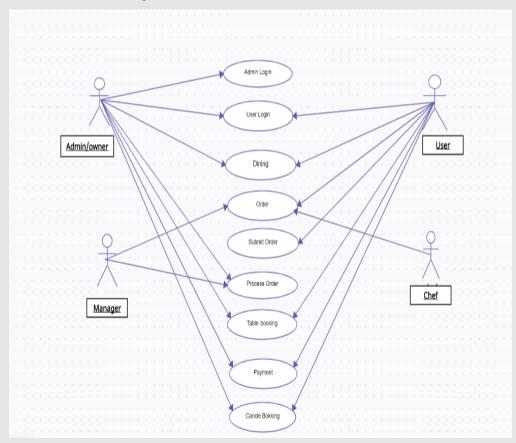
# 6.3. COMMUNICATION PROTOCOLS: -

Desktop Client Based: http, https

Mobile Client Based: 3G/4G, Wi-Fi

# 7. <u>DESIGN DIAGRAM:</u>

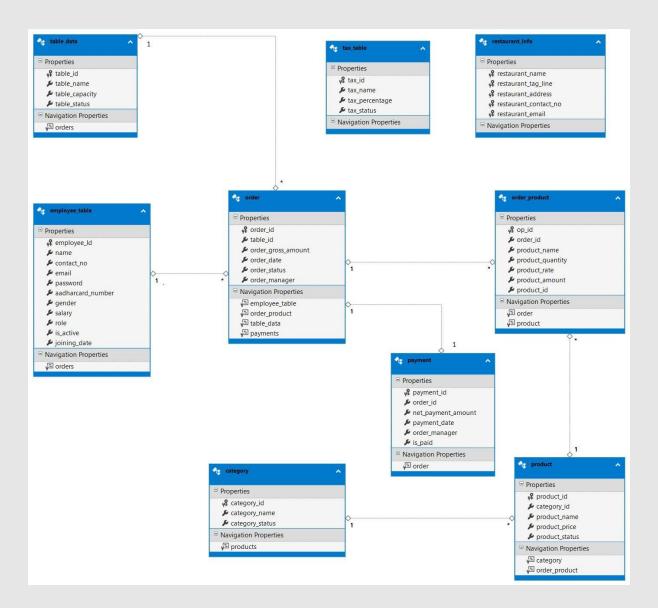
# 7.1. Use Case Diagram



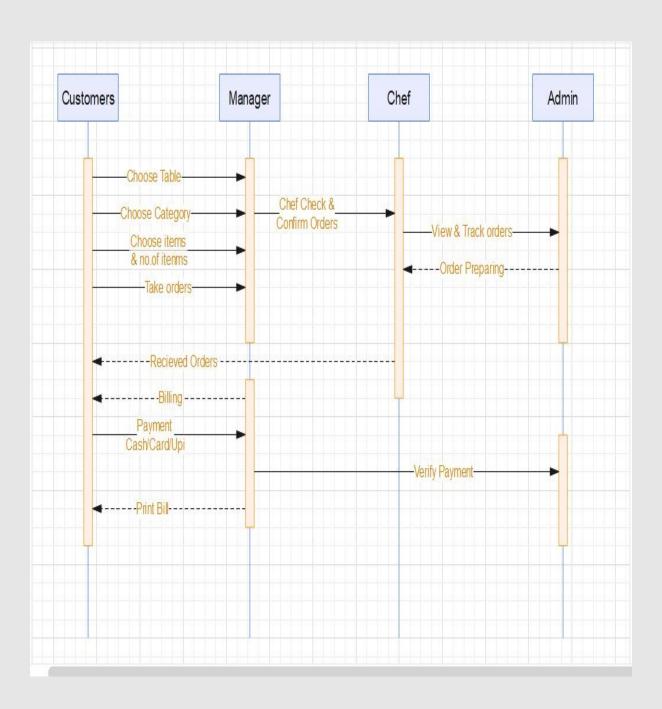
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# 7.2. Class Diagram:

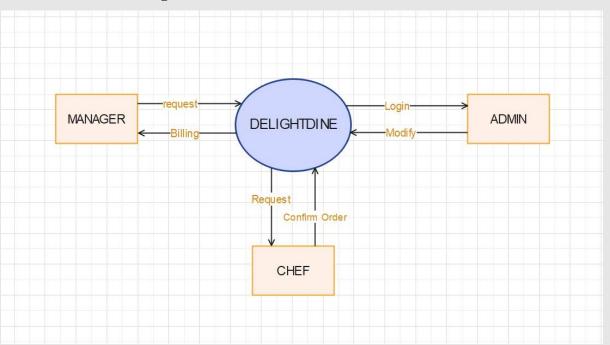


# 7.3 Sequence Diagram:

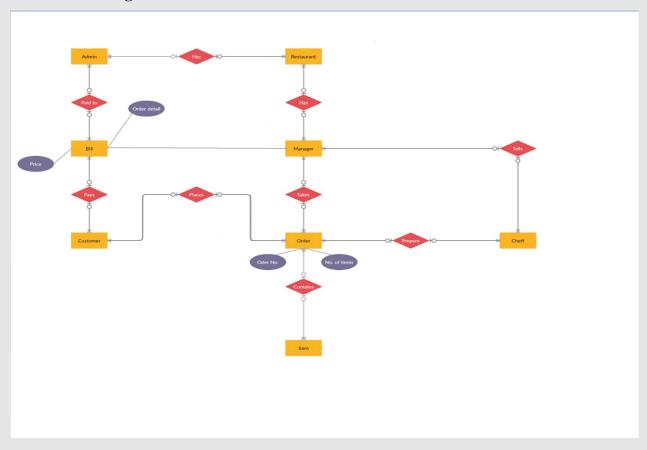


# 7.4. DFD Diagram:

# 7.4.1 Context Level Diagram:



# 7.4.2. Level 1 diagram:



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**8.** <u>CONCLUSION</u>: DelightDine plays a pivotal role in the efficient and organized operation of a restaurant. In conclusion, here are some key points about restaurant management systems:

**Streamlined Operations:** Delightdine help streamline various aspects of restaurant operations, including order processing, billing, and customer service. This leads to increased efficiency and reduced errors.

**Data Analytics**: They provide valuable insights through data analytics, helping restaurant owners make informed decisions about menu items, pricing strategies, and marketing campaigns.

**Enhanced Reporting:** These systems generate detailed reports on sales, expenses, and customer trends, aiding in financial management and planning.

**Scalability:** These systems can be scaled to accommodate the needs of small, independent restaurants as well as large, multi-location chains.

In conclusion, a well-implemented restaurant management system can significantly contribute to the success of a restaurants for strategic decision-making. However, selecting the right system and ensuring proper training for staff are essential steps for reaping the full benefits of such a system.