

Project Report

On

“Tik Tok Cafe”

Submitted in partial fulfillment for the award of

Diploma in Advance Computing (DAC)

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INDEX

TITLE	Page No.
1) Introduction	1
2) Project Scope.....	2
3) Purpose of Documents.....	3
4) Product Perspective.....	3
5) Feasibility study.....	3
i. Technical feasibility	
ii. Operational feasibility	
6) User Characteristics.....	4
i. Hardware	
ii. Software	
a. Frontend	
b.Backend	
c.Database	
iii. Platform web development	
a. J2EE	
b. JSP	
c. Servlet	
d. MySQL	
7) System Features.....	7
i. Home Page	
ii. User Registration	
iii. User Log in	
iv. Book table	
v. Menu Card	
vi. User Feedback	
vii. Mark Presently	
viii. Take Orders	
ix. Bill Generation	
x. Staff Order	
xi. Admin Login	
xii. Admin Dashboard	
xiii. Add Employee	
xiv. Employee List	
xv. Generate Salary	
xvi. Reports	
xvii. Feedbacks	
8) Proposed Management system	11
i. Advantage of Proposed Management System	
9) External Interface Requirement.....	12
i. User Interface	
ii. Hardware Interface	
iii. Software Interface	
iv. Communication Interface	
10) Other Non-Functional Requirements.....	13
i. Performance Requirements	

ii. Security Requirements	
iii. Software Quality Attributes	
11) Analysis Models.....	15
i. E-R Diagram.....	
ii. Data Flow Diagram.....	
iii. System Development Life Cycle	
Diagram.....	
12) Future Scope.....	19
13) CONCLUSION	19
14) Reference.....	20

INTRODUCTION

Tik Tok Cafe is a web application. This system is developed to automate day to day activity of the cafe. This Tik Tok Cafe system can be used by the staff manager , owner and also customer. With this system managing orders and billing will become easier and systematic to replace traditional system where all still using paper. The main aim of developing this system is to help the cafe management to manage the cafe easily and quickly.

I am designing the E Cafe system to automate the different processes like getting orders , Managing Employee & generating Reports according to the working of system and Menu Card for coffee shop and several other tasks. Performing all these tasks manually becomes too complex and time consuming.

□ **PROJECT SCOPE**

Functional Features for System Analysis:

Menu and Food Management: This includes deciding on the café's menu, sourcing ingredients, ensuring food quality and safety, and managing any special dietary requirements.

Staff Management: This involves hiring and training staff members, assigning and scheduling work shifts, and creating a positive work environment.

Customer Service: Ensuring excellent customer service is crucial. This includes greeting customers, taking orders, serving food and drinks, addressing customer concerns, and maintaining a friendly and welcoming atmosphere.

Facility Maintenance: Overseeing the cleanliness and functionality of the café, arranging repairs or maintenance activities, and ensuring a safe and comfortable environment for customers and staff.

□ **PURPOSE OF DOCUMENT**

Tik Tok Café management document is to provide clear and concise information about how to effectively run and manage a café that is themed around the popular social media platform, Tik Tok. It aims to help project managers and team members understand the various aspects and tasks involved in operating the café.

□ **PRODUCT PERSPECTIVE**

Tik Tok Café management is to streamline and automate processes, saving time and effort for café staff. It allows them to easily take customer orders, manage inventory, track sales, and monitor the overall performance of the café.

With this system, café owners can effortlessly create menus and update them regularly, ensuring customers are always provided with accurate and up-to-date information. It also enables staff to quickly process and fulfill customer orders, reducing waiting times and enhancing customer satisfaction.

□ **FEASIBILITY STUDY**

A feasibility study is like a planning tool that helps us determine whether a project, like opening a Tik Tok Café, is possible and profitable. In simple words, it helps us figure out if it's a good idea or not.

Before developing and implementing a system we have sure that our system is feasible in the following ways:

1. TECHNICAL FEASIBILITY
2. OPERATIONAL FEASIBILITY

➤ **TECHNICAL FEASIBILITY:**

In the type of feasibility study, Tik Tok Café management involves evaluating whether it is possible to implement a system for managing the café using technology. This study assesses if the necessary technology is available and whether it can support the various functions required for café management.

We want to determine if it is possible to use a management system for Tik Tok Café that is efficient and effective. This system should help with various aspects of running the café, such as taking orders, managing inventory, tracking sales, and scheduling staff.

The technical feasibility study will help determine if the proposed management system for Tik Tok Café is practical, suitable, and affordable.

➤ **OPERATIONAL FEASIBILITY**

An operational feasibility study of Tik Tok Café management is an analysis conducted to determine if the café's operations are viable and practical for successful implementation. It involves evaluating various aspects like resources, staffing, technology, processes, and customer demand. The study aims to assess whether the café can efficiently operate and meet its objectives. It also identifies any potential challenges or risks that may arise and suggests possible solutions. The findings of the study help decision-makers determine the feasibility of managing a Tik Tok Café and ensure its smooth functioning.

□ **USER CHARACTERISTICS**

Tik Tok Café Management is a user-friendly software that helps café owners efficiently manage their operations and increase productivity. It offers a comprehensive range of features including table reservations, order management, inventory tracking, staff scheduling, and customer relationship management. With its intuitive interface and real-time data, café owners can make informed decisions to streamline operations and provide an exceptional dining experience for their customers.

Operating Environment

The operating environment for the project consists of the following hardware and software components:

Hardware:

- RAM: 4GB or more
- Hard Disk: 20GB or More

- Keyboard: Normal
- Mouse: Compatible Mouse

Software:

- Web Browser: Any of Mozilla, Opera, chrome etc.
- Eclipse-IDE (2021-06)
- Operating System: Windows 10 or above.
- Software Development kit: java JDK 1.7 or above.
- Database JDBC Driver: MySQL Connectors

Frontend:-

- HTML: Helps in managing the digital presence of a cafe by creating and maintaining its website, online ordering system, reservation form, and other interactive elements.
- CSS: To customize the appearance and style of their website or app. It can be used to change colors, fonts, layout, and overall design elements to create a cohesive and visually appealing user experience.
- JSP: Used to generate dynamic web pages that display menu items, offers, and other information relevant to the cafe. By integrating JSP with a database, the menu items and other details can be fetched and displayed dynamically.
- Bootstrap: It simplifies the development and maintenance of the website, providing consistent design, responsiveness, and ease of use for customers.

Backend: -

- Java (Servlet): servlets can play a crucial role in managing various aspects of Tik Tok Cafe, from handling user interactions to data management and integration with external services.

Database: -

- MySQL Server

Platform:

Web Development: J2EE, JSP, Servlet, MySQL

J2EE

- J2EE allows for the easy scaling of applications, which means that Tik Tok Cafe can handle increased customer demands and transactions without experiencing performance issues. The J2EE platform has robust security features built-in, which ensures that sensitive customer and business data in Tik Tok Cafe is protected.

JSP

- JSP (JavaServer Pages) can be used in Tik Tok Cafe management for various purposes such as displaying dynamic content, handling form submissions, and implementing user authentication.
- JSP can handle form submissions such as online table reservation requests, feedback forms, and order placement. When a user fills out a form on the website, JSP can process the submitted data, validate it, and perform appropriate actions like saving it to a database or sending notifications.
- JSP can be used for implementing user authentication and authorization mechanisms. It allows cafe management to create login and registration pages, verify user credentials, and control access to certain features or information based on user roles.

Servlet

- Servlets provide a server-side framework to handle various functionalities in a Tik Tok Cafe management system, enabling efficient data processing, user interaction, and integration with external services.
- Servlets can handle user registration and login functionality. They can validate user input, store user information in a database, and authenticate users during login.
- Servlets can fetch menu details from a database and display them on the cafe's website or app. They can dynamically generate HTML responses to show the menu items and prices.

MySQL

- MySQL can provide a robust and efficient database management solution for various aspects of Tik Tok Cafe's operations, enabling better organization, data analysis, and decision-making.
- MySQL can be used to store and organize information about the cafe's menu, including item names, descriptions, prices, and ingredients.
- MySQL can be used to store and process customer orders, including details such as order number, items ordered, quantities, and customer information. This can help streamline the order management process and track order history.
- MySQL can store information about staff, such as employee details, schedules, and performance records. It can help in creating and managing work schedules, tracking attendance, and generating payroll reports.

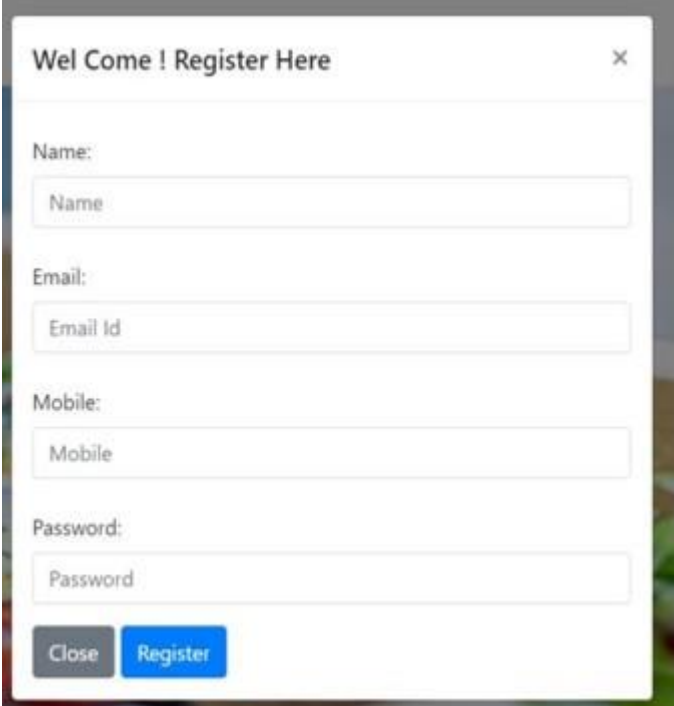
□ SYSTEM FEATURES:

□ Home Page:

TikTok Cafe Home User Admin

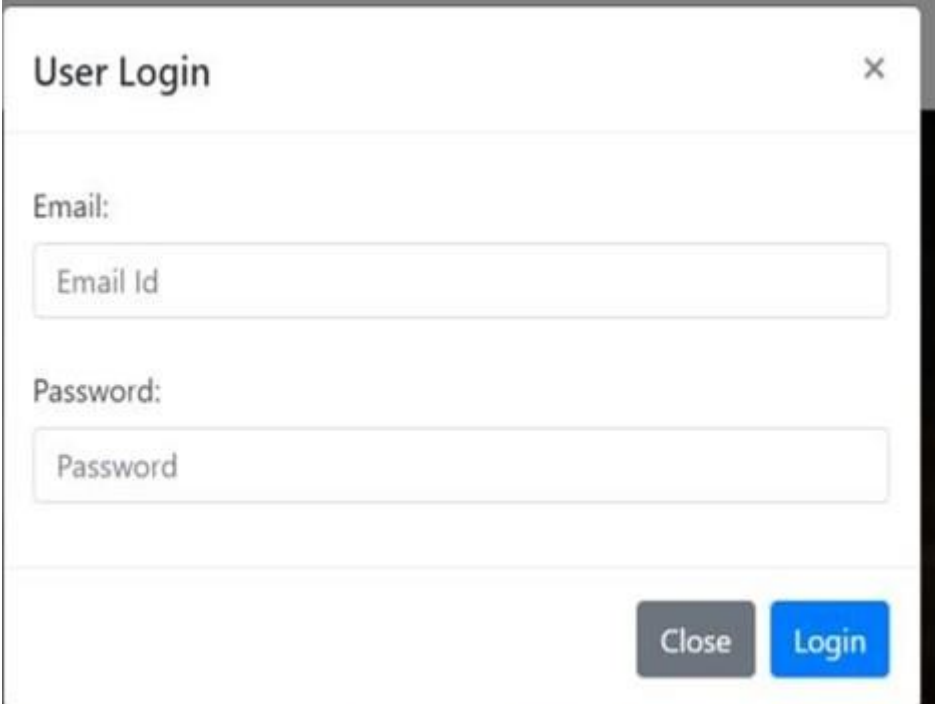


□ User Registration:



A screenshot of a user registration form titled "Wel Come ! Register Here" with a close button (X) in the top right corner. The form contains four input fields: "Name", "Email Id", "Mobile", and "Password". At the bottom, there are two buttons: "Close" (grey) and "Register" (blue).

□ User Login:



A screenshot of a user login form titled "User Login" with a close button (X) in the top right corner. The form contains two input fields: "Email Id" and "Password". At the bottom right, there are two buttons: "Close" (grey) and "Login" (blue).

❑ Book Table:

TikTok Cafe
Menu Card
Book Table
FeedBack
Log Out

Available Tables

1 2 3 4 5 6 7 8 9 10

Book Table

Name

Mobile

Date

Table Numbers

Book

❑ Menu card:

Sandwich's

- Plain veg Sandwich -50/-
- Orlil veg Sandwich -60/-
- Orlil Pahalil veg Sandwich -60/-
- Orlil Garlic veg Sandwich -60/-
- Orlil Chocolate Sandwich -70/-
- Orlil Veg Corn Sandwich -70/-
- Bombay Oril veg Sandwich -80/-
- Orlil Chicken Sandwich -100/-
- Chicken Tandoor Sandwich -100/-
- Chicken Barbiqum Sandwich -100/-

With Extra Cheese - 20/-

Tik Tok Maggi

- Plain Maggi -50/-
- Shejwan Maggi -60/-
- Pasta -60/-

With Extra Cheese - 20/-

Tik Tok Combos

- Burger + Cold Coffee + French Fries -140/-
- Sandwich + Cold Coffee + French Fries -140/-
- Mix Veg Pizza + Cold Coffee + French Fries -180/-

With Extra Cheese - 20/-

Burger's

- Veg Burger -80/-
- Veg Garlic Burger -80/-
- Veg Spinach Corn Burger -80/-
- Veg Tandoor Burger -70/-
- Veg Barbiqum Burger -80/-
- Veg Punjabi Burger -80/-
- Veg Paneer Burger -100/-
- Chicken Burger -80/-
- Chicken Tandoor Burger -80/-
- Chicken Barbiqum Burger -100/-
- Chicken Super Burger -100/-
- Chicken Super Tandoor Burger -130/-
- Chicken Super Barbiqum Burger -130/-

With Extra Cheese - 20/-

Pizza

	Small / Large
Plain Cheese Pizza	80 / 130
Mix Veg Pizza	100 / 150
Veg Corn Pizza	100 / 150
Veg Paneer Cheese Pizza	100 / 150
Tik tok Special Pizza	120 / 170
Pizza With Extra Cheese	120 / 180
Chicken Pizza	140 / 200
Chicken Barbiqum Pizza	160 / 230
Chicken Tandoor Pizza	170 / 230

Coffee's

- Thik Cold Coffee -40/-
- Thik Cold Coffee With Crush -55/-
- Thik Cold Coffee With Ice-Cream -60/-

Moka

- Moka -50/-
- Moka With Crush -60/-
- Moka With Ice-Cream -70/-

Hot Coffee's

- Hot Coffee -20/-
- Black Coffee -20/-
- Green Tea -30/-
- Spiced Hot Coffee -40/-

Special Cad-B

- White Cad-B -70/-
- Oril Cad-B -80/-
- Kil Kat Cad-B -80/-
- Tik Tok Special Cad-B -100/-

Tik Tok Shakes

- Vanilla Shake -60/-
- Strawberry Shake -60/-
- Pista Shake -60/-
- ButterScotch Shake -60/-
- Oril Shake -70/-
- Chocolate Shake -70/-
- Kil Kat Shake -70/-

Ice Cream

- Vanilla -30/-
- ButterScotch -30/-
- Chocolate -30/-
- Tik Tok Special Ice Cream -100/-

Tik Tok Snacks

- French Fries -80/-
- Cheese Corn Nagets (7 Pieces) -80/-
- Chicken Popcorn -90/-
- Chicken Nuggets -70/-
- Chicken Wings -100/-
- Chicken Breadstrips -140/-
- Fish Fingers -90/-
- CrabClaw -150/-

Tik Tok Rolls

- Veg Roll -50/-
- Veg Tandoor Roll -70/-
- Veg Spicy Roll -80/-
- Chicken Roll -80/-
- Chicken Tandoor Roll -100/-
- Chicken Spicy Roll -100/-

With Extra Cheese - 20/-

❑ User Feedback:

TikTok Cafe
Menu Card
Book Table
FeedBack
Log Out

Your Feedback

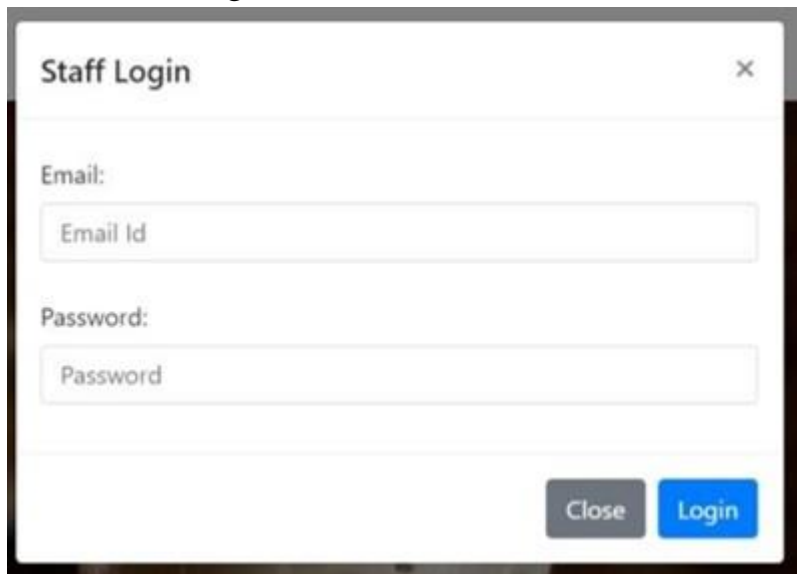
Name

How was the food ?

Save

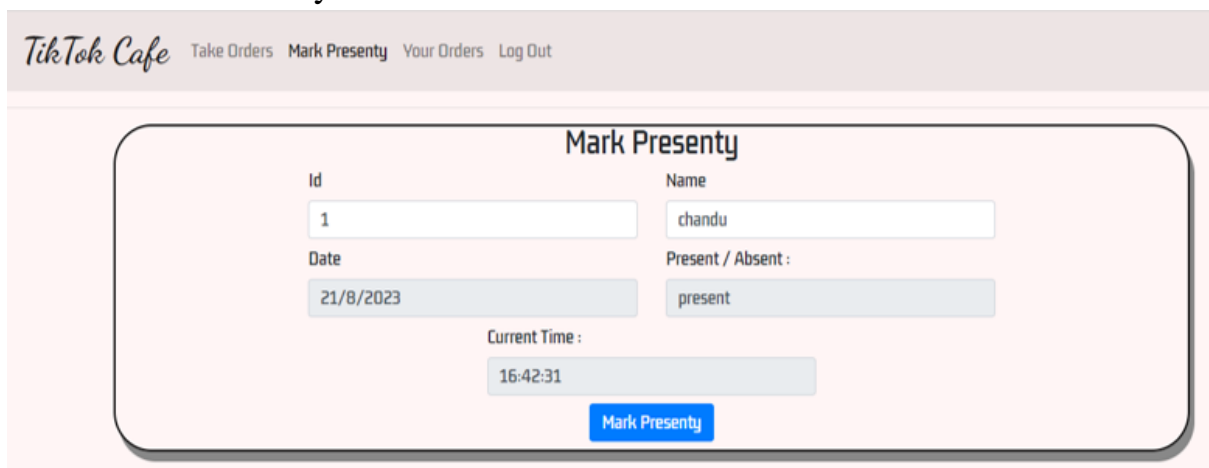
Thank You satyajit
Visit again

☐ Staff Login:



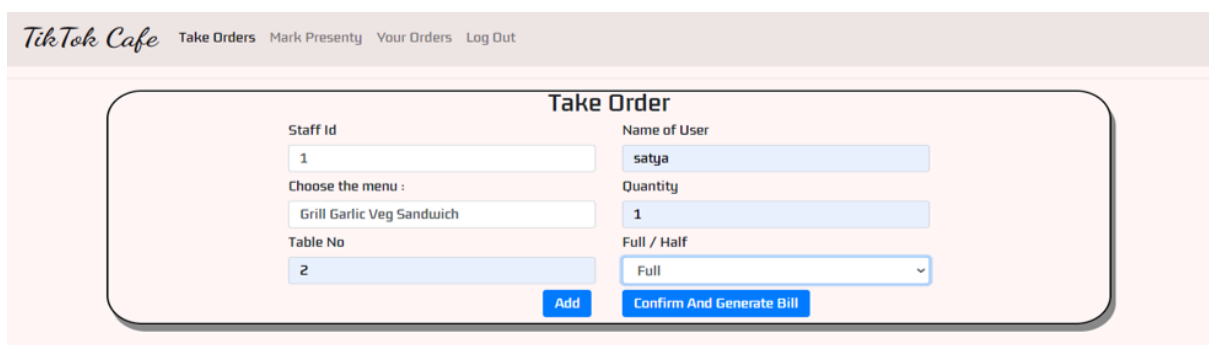
A screenshot of a 'Staff Login' dialog box. It has a title bar with 'Staff Login' and a close button. The form contains two input fields: 'Email:' with a placeholder 'Email Id' and 'Password:' with a placeholder 'Password'. At the bottom right, there are two buttons: 'Close' and 'Login'.

☐ Mark Presently:



A screenshot of the 'Mark Presently' form within the 'TikTok Cafe' application. The header bar shows 'TikTok Cafe' and navigation links: 'Take Orders', 'Mark Presently', 'Your Orders', and 'Log Out'. The form itself is titled 'Mark Presently' and contains several input fields: 'Id' (value: 1), 'Name' (value: chandu), 'Date' (value: 21/8/2023), and 'Present / Absent :' (value: present). There is also a 'Current Time :' field showing '16:42:31'. At the bottom right of the form is a blue button labeled 'Mark Presently'.

☐ Take order:



A screenshot of the 'Take Order' form within the 'TikTok Cafe' application. The header bar is the same as the previous form. The form is titled 'Take Order' and contains input fields for 'Staff Id' (value: 1), 'Name of User' (value: satya), 'Choose the menu :' (value: Grill Garlic Veg Sandwich), 'Quantity' (value: 1), 'Table No' (value: 2), and 'Full / Half' (value: Full). At the bottom right, there are two buttons: 'Add' and 'Confirm And Generate Bill'.

□ Bill Generation:

TikTok Cafe Take Orders Mark Presenty Your Orders Log Out

Generate Bill

Item Added Successfully

Staff Id	Quantity	Item	Table No	Item Price	Size	Total Bill
2	1	Grill Garlic Veg Sandwich	2	50	Full	50

Final Bill Generate

□ Staff order:

TikTok Cafe Dashboard Add Employee Employees Salaries Reports FeedBacks Log Out

Total Users
3

Total Orders
4

Total Employees
4

Today's Orders

Order Id	Customer	Order	Status
1	soham	Grill Pahadi Veg Sandwich	In Process
2	satya	Grill Garlic Veg Sandwich	In Process
3	stayshil patil	Grill Garlic Veg Sandwich	In Process
4	sonu	Grill Garlic Veg Sandwich	In Process

□ PROPOSED MAGEMENT SYSTEM

- * The proposed system provides user friendly interface and also provides powerful and efficient database management system. The aim of proposed system is to developed a system of improved facilities.
- * The existing system work is done manually thus hampering its accuracy and effectiveness. The proposed system can overcome the limitations of existing system. The system provides security and reduce the manual work.
- * The existing system has several disadvantages and many more difficulties to work. The proposed system tries to eliminate or reduce these difficulties up to some extent. The proposed system will help the staff to reduce the workload and mental conflict. Through this system it is possible to print various reports and bills easily and in less time.

➤ **ADVANTAGE OF PROPOSED MANAGEMENT SYSTEM**

- * Security of data.
- * Ensures data accuracy.
- * Minimum time needed for various processes.
- * Better service.
- * User friendly UI.

☐ **External Interface Requirements**

☐ **User Interfaces:**

In the user interface of a Tik Tok cafe management system, users can easily navigate through different features and functionalities. They can access menus, place orders, process payments, track orders, manage reservations, view promotions, and interact with customer support. The user interface is designed to be intuitive and visually appealing, enhancing the overall user experience.

☐ **Hardware Interfaces**

▪ **Server side:**

- ☐ The web application will be hosted on a web server listening on the standard web port.

▪ **Client side:**

- ☐ **Monitor Screen:** The software will display information on the user's monitor screen.
- ☐ **Mouse:** The software will interact with mouse movement and button clicks. The mouse will enable data input, command button activation, and menu option selection
- ☐ **Keyboard:** The software will interact with keyboard keystrokes, allowing users to input data and interact with the system.

☐ **Software Interfaces**

Server side:

- ☐ **Web Server:** The server will handle incoming client requests, manage communication, and route data to the appropriate components.
- ☐ **Database:** The central database will store users, hotel and reservation data and communicate with the server to provide required information.

Client side

The client's operating system should support modern web browsers.

☐ **Communications Interfaces:**

The HTTP or HTTPS protocols will be used to facilitate communication between the client and server.

☐ **Other Non-functional Requirements**

☐ **Performance Requirements:**

The Tik Tok café Management System's performance requirements ensure a smooth and efficient user experience, considering speed, responsiveness, and scalability:

- **Response Time:** The system should respond to user actions in less time to ensure quick interaction.
- **Scalability:** The system should handle increased user load during peak times without significant performance degradation.
- **Resource Efficiency:** Optimize resource usage to ensure efficient operation and reduce system load.

☐ **Safety Requirements:**

Safety requirements focus on system reliability and user-friendly interfaces to prevent errors and disruptions:

- **Reliability:** The system should maintain at least 99% uptime to ensure users can access and use the service reliably.
- **User Interface:** Design an intuitive and clear user interface to minimize user errors and enhance user satisfaction.

□ **Security Requirements**

Security is paramount to protect user data and system integrity:

- **Data Encryption:** Sensitive user information should be encrypted both during transmission and storage to prevent unauthorized access.
- **Authentication and Authorization:** Implement secure authentication and role-based authorization to ensure only authorized users access the system and its functionalities.
- **Access Control:** Set up fine-grained access control to restrict user actions and data access based on roles and permissions.

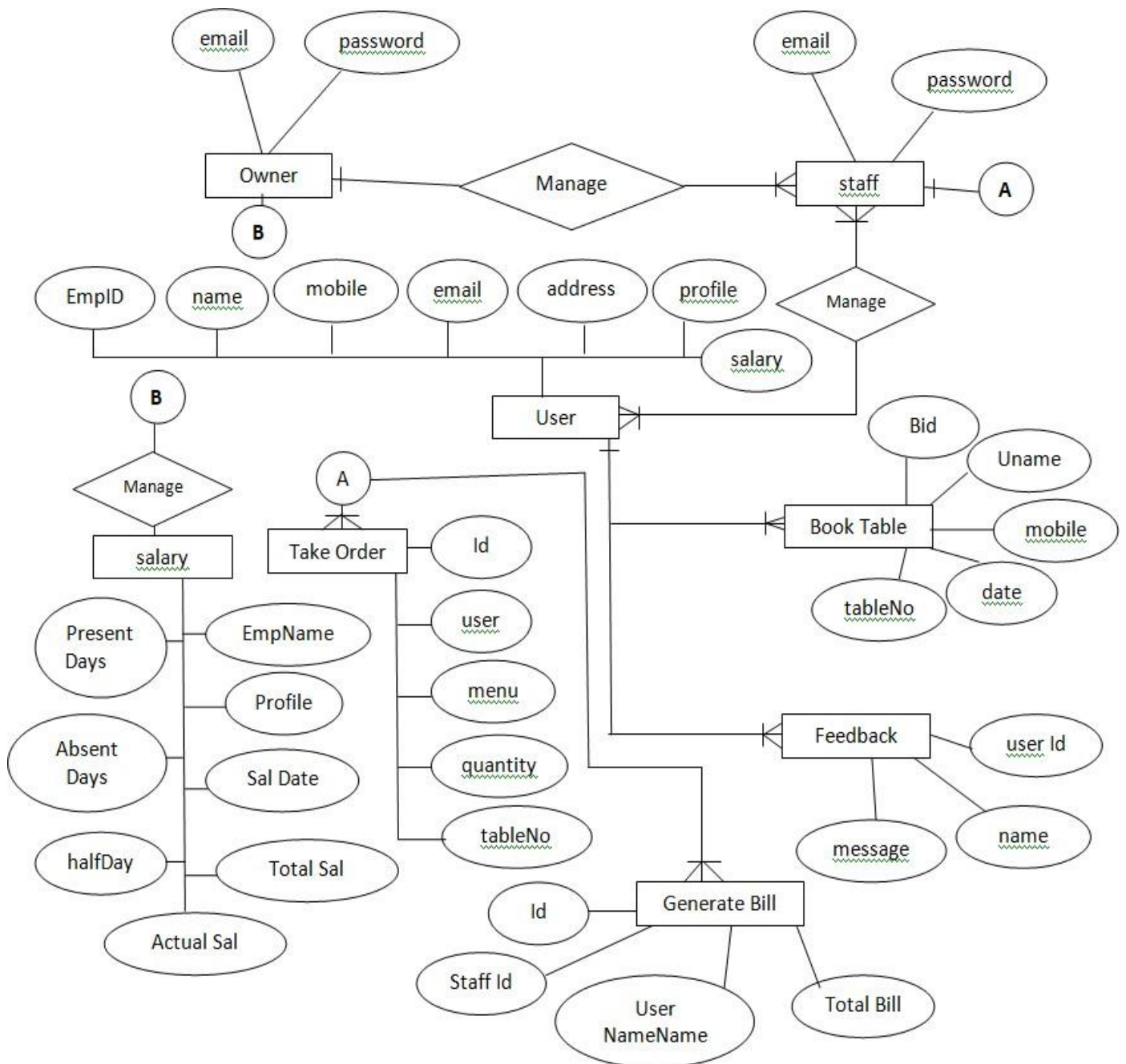
□ **Software Quality Attributes:**

The Software quality attributes ensure usability, reliability, and maintainability:

- **Usability:** The user interface should be intuitive and easy to navigate, promoting a positive user experience.
- **Reliability:** The system should accurately process reservations, avoiding errors and inconsistencies.
- **Maintainability:** Develop clean and well-documented code to facilitate easy maintenance and future updates
- **Performance:** The system should perform efficiently and respond quickly to user requests, allowing for fast and seamless assignment submissions and reviews.
- **Scalability:** The system should be scalable, allowing for an increasing number of users and assignments as the demand grows.
- **Security:** The system should have strong security features, protecting sensitive information and ensuring the privacy and confidentiality of user data.

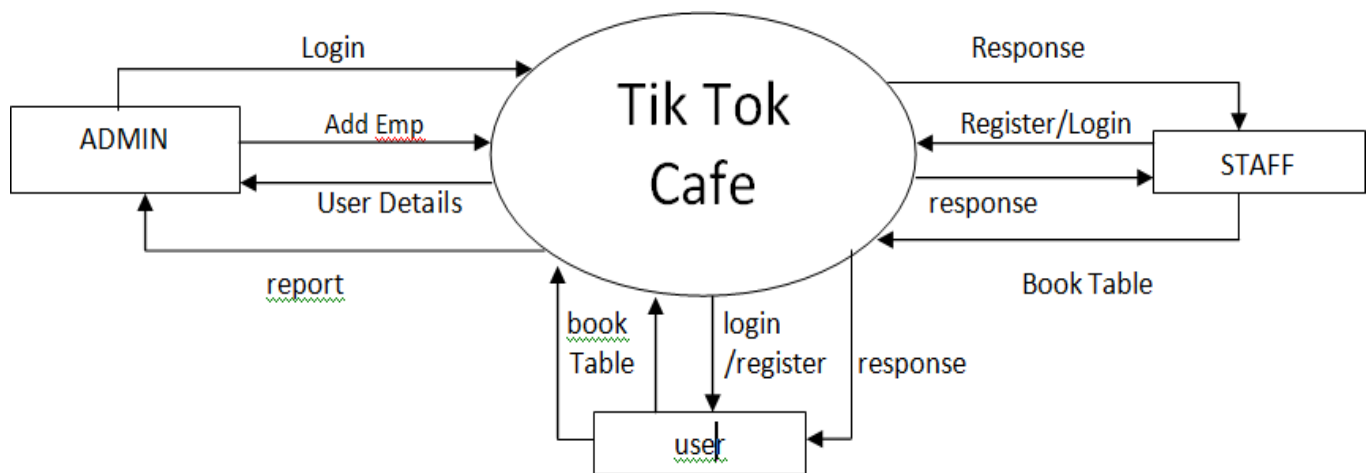
□ ANALYSIS MODELS:

i. E-R DIAGRAM :

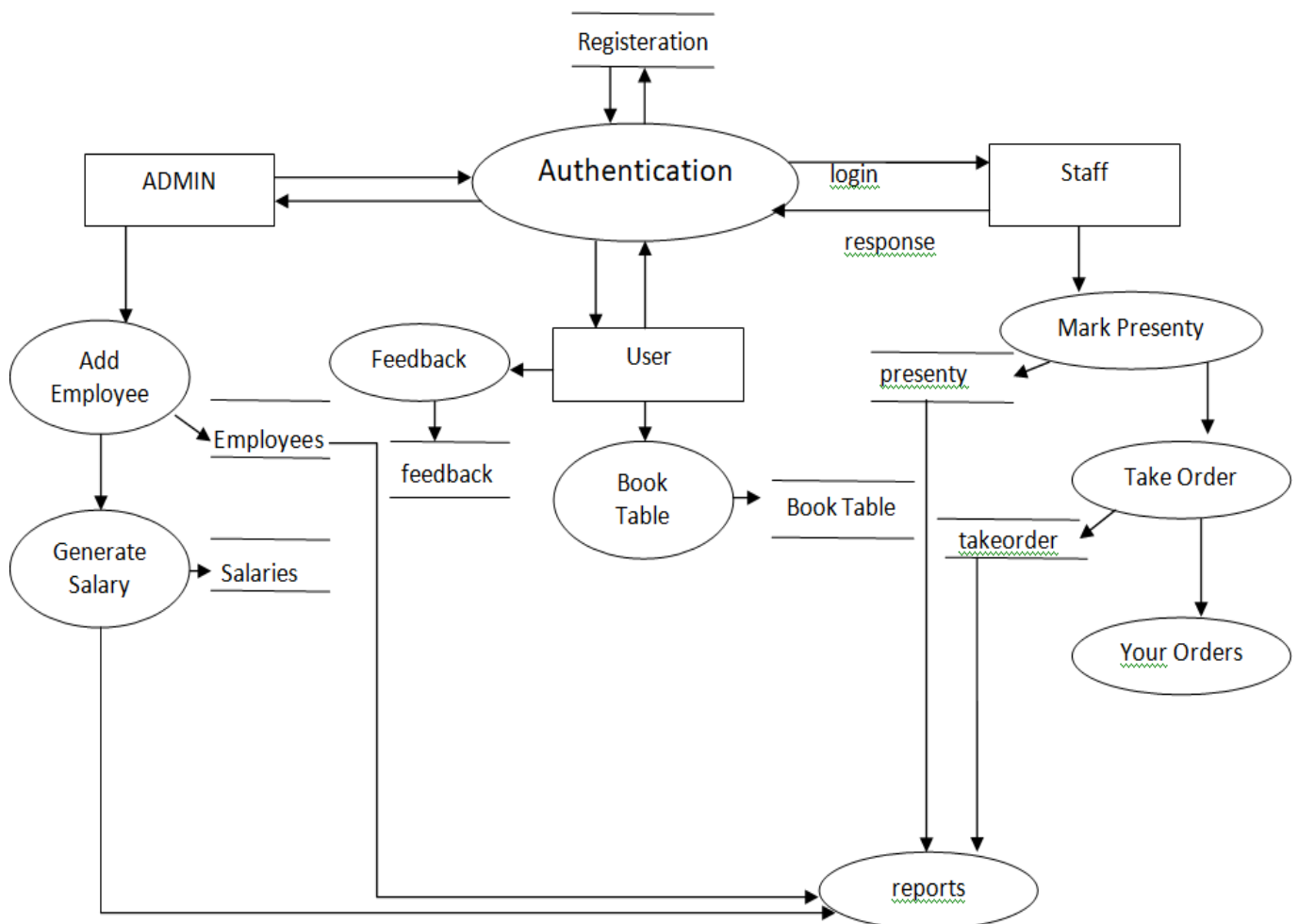


ii. DATA FLOW DAIGRAM

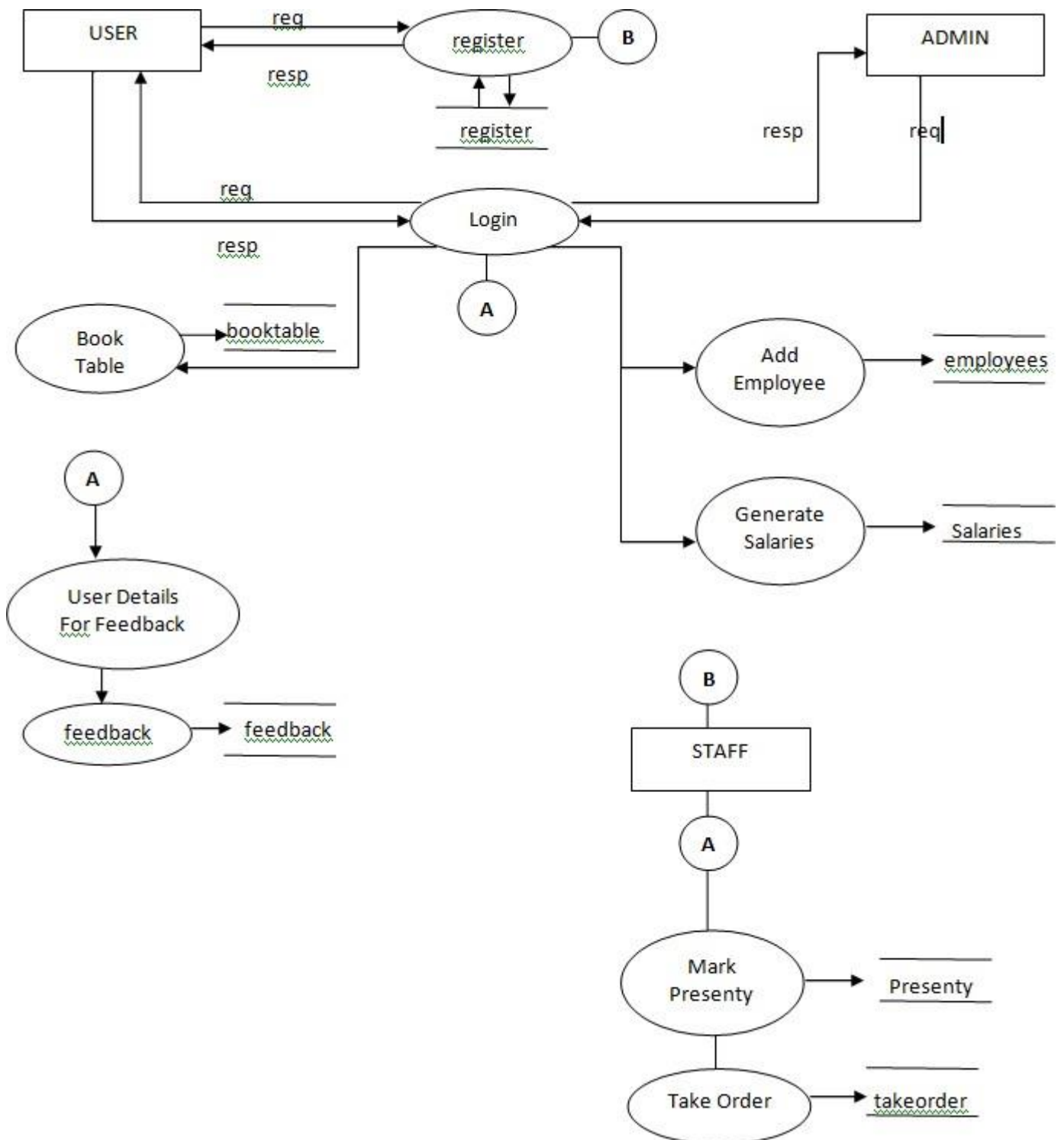
▪ 0th Level Data Flow Daigram:



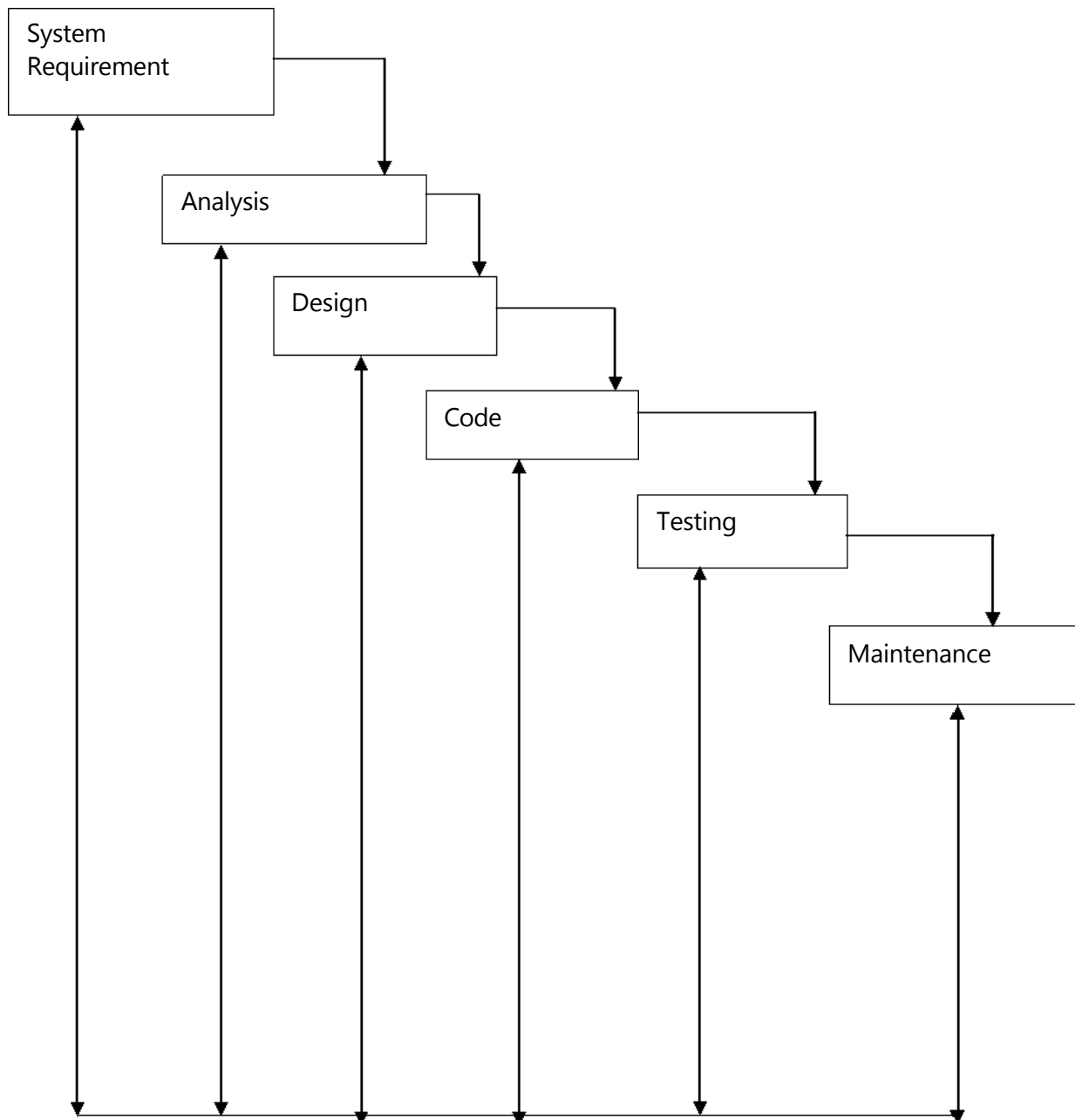
▪ 1st Level Data Flow Daigram:



2nd Level Data Flow Daigram:



**iii. SYSTEM DEVELOPMENT LIFE CYCLE
DAIGRAM:**



□ **FUTURE SCOPE :**

The future scope of a Tik Tok cafe management system involves efficient operations, enhanced customer experience, and increased profitability. It will enable cafe owners to streamline their processes, such as order taking, inventory management, and staff scheduling, thereby saving time and reducing errors. The system can also offer personalized recommendations to customers based on their preferences, improving their overall experience. Furthermore, data analysis and integration with social media platforms can help attract more customers and drive business growth.

□ **CONCLUSION :**

In summary, the E Cafe system developed for Tik Tok Cafe represents a modern approach to managing cafe operations. By automating order processing, employee scheduling, billing, and reporting, it aims to enhance efficiency and customer experience. This shift from manual methods to digital tools enables streamlined processes, better decision-making through data insights, and improved security measures. By embracing user feedback and adapting to evolving needs, the E Cafe system has the potential to become a valuable asset, positioning Tik Tok Cafe as a competitive and customer-centric establishment in the market.

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