

# **A PROJECT ON**

## **Tiffin Delivery and Management System**

SUBMITTED IN

PARTIAL FULFILLMENT OF THE REQUIREMENT

FOR THE COURSE OF DIPLOMA IN ADVANCED COMPUTING FROM CDAC



**SUNBEAM INSTITUTE OF INFORMATION TECHNOLOGY**

Hinjawadi

**SUBMITTED BY:**

Abhinav Kumar Mishra,

Abhinav Sudhir Kumbhare,

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Manisha Yesare

**UNDER THE GUIDENCE OF:**

Mr. Nilesh Pawar

Faculty Member

Sunbeam Institute of Information Technology, Pune

## ACKNOWLEDGEMENT

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A project usually falls short of its expectation unless aided and guided by the right persons at the right time. We avail this opportunity to express our deep sense of gratitude towards Mr. Nitin Kudale (Center Coordinator, SIIT, Pune) and Mr. Yogesh Kolhe (Course Coordinator, SIIT ,Pune) .

We are deeply indebted and grateful to them for their guidance, encouragement and deep concern for our project. Without their critical evaluation and suggestions at every stage of the project, this project could never have reached its present form.

Last but not the least we thank the entire faculty and the staff members of Sunbeam Institute of Information Technology, Pune for their support.

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SIIT Pune

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Sunbeam Institute of Information Technology, PUNE.



**CERTIFICATE**

This is to certify that the project work under the title 'Web Portal for Student and teacher' is done by Abhinav Kumar Mishra, Abhinav Sudhir Kumbhare, Dipak Patil, Manisha Yesare in partial fulfillment of the requirement for award of Diploma in Advanced Computing Course.

**Project Guide**

**Date: 16-07-2024**

**Mr. Yogesh Kolhe**

**Course Co-Coordinator**

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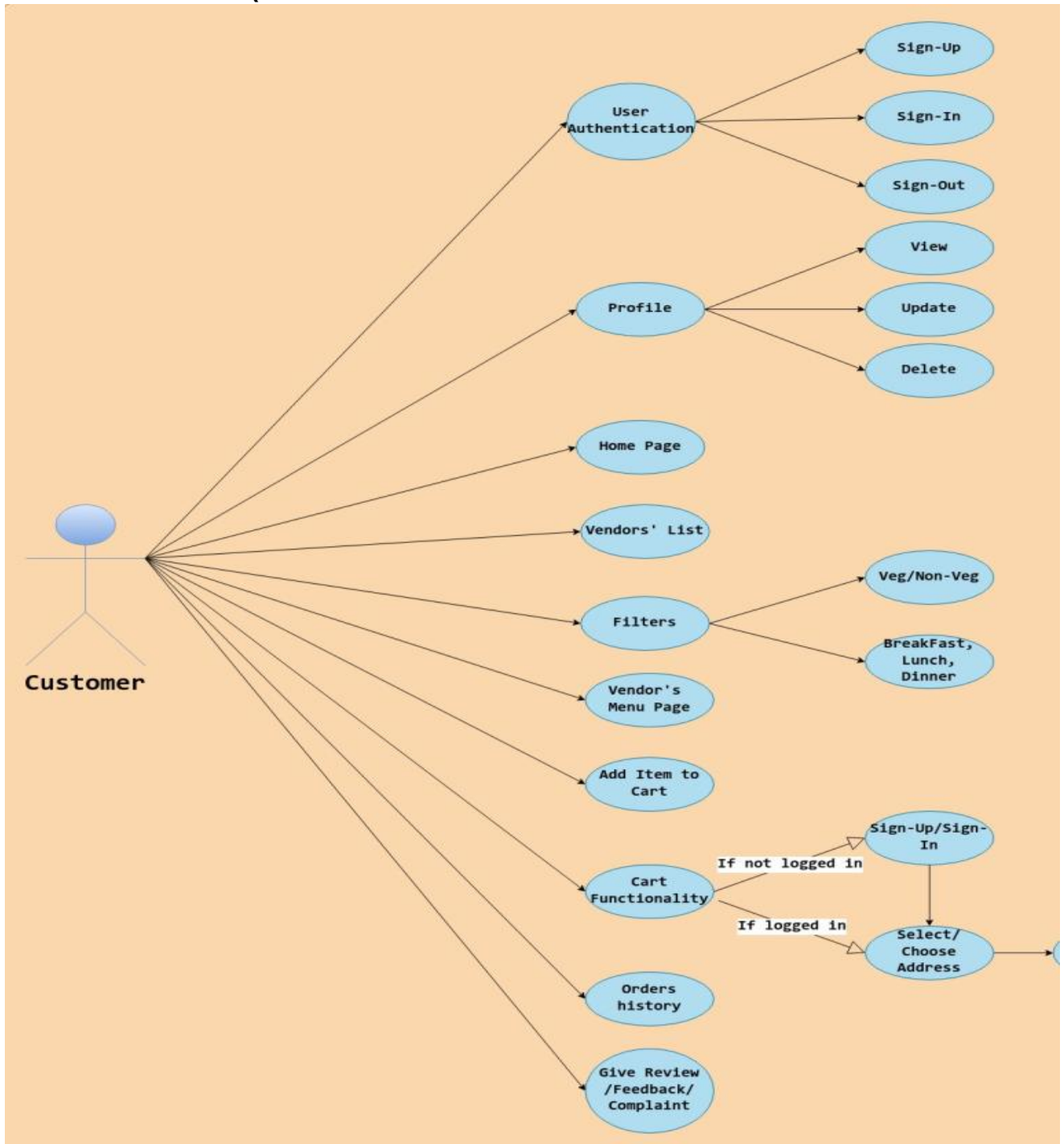
## **1.INTRODUCTION TO PROJECT**

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The **Tiffin Delivery and Management System** is a comprehensive web application designed to facilitate the ordering and management of tiffins from various vendors. The system provides a user-friendly interface for customers, vendors, delivery boys, and admins to interact with the platform, manage orders, and streamline the overall process.

## 2. REQUIREMENTS

### 2.1 FUNCTIONAL REQUIREMENTS



## **2.1 Customer Flow**

### **2.1.1 Home Page**

- **Objective:** Display a list of vendors.
- **Features:**
  - View a list of available vendors with search and filter options.

### **2.1.2 Vendor Selection**

- **Objective:** Select a vendor to view their menu.
- **Features:**
  - Click on a vendor to see their menu items.

### **2.1.3 Menu Items**

- **Objective:** Allow customers to view and manage menu items.
- **Features:**
  - View a list of menu items for the selected vendor.
  - Add items to the cart.
  - Update quantities and remove items from the cart.

### **2.1.4 Cart Interaction**

- **Objective:** Manage cart and checkout process.
- **Features:**
  - **If Logged In:**
    - Navigate to the cart page.
  - **If Not Logged In:**
    - Display a login prompt.
    - If not registered, prompt registration before login.

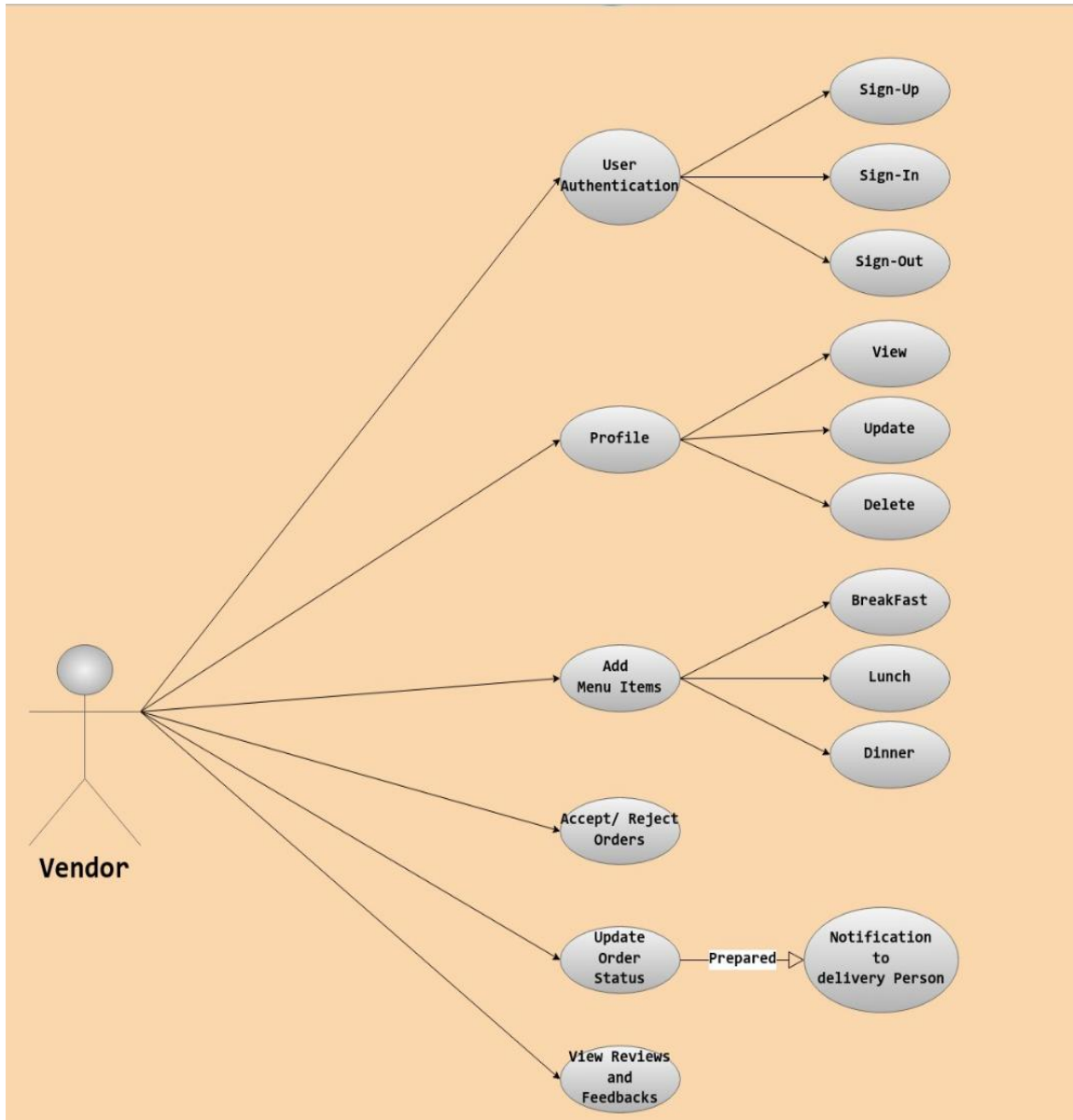
### **2.1.5 Cart Page**

- **Objective:** Finalize the purchase process.
- **Features:**
  - View cart items.
  - Choose a delivery address.
  - Place the order.
  - If no delivery address is selected, prompt the user to choose one.
  - Redirect to the home page after placing the order.



#### **2.1.6 Profile Page**

- **Objective:** Manage user profile and view order history.
- **Features:**
  - **If Not Logged In:**
    - Display a sign-in prompt.
  - **If Logged In:**
    - View and update profile details.
    - View order history and addresses.
    - Submit reviews for orders.
    - Logout.



## 2.2 Vendor Flow

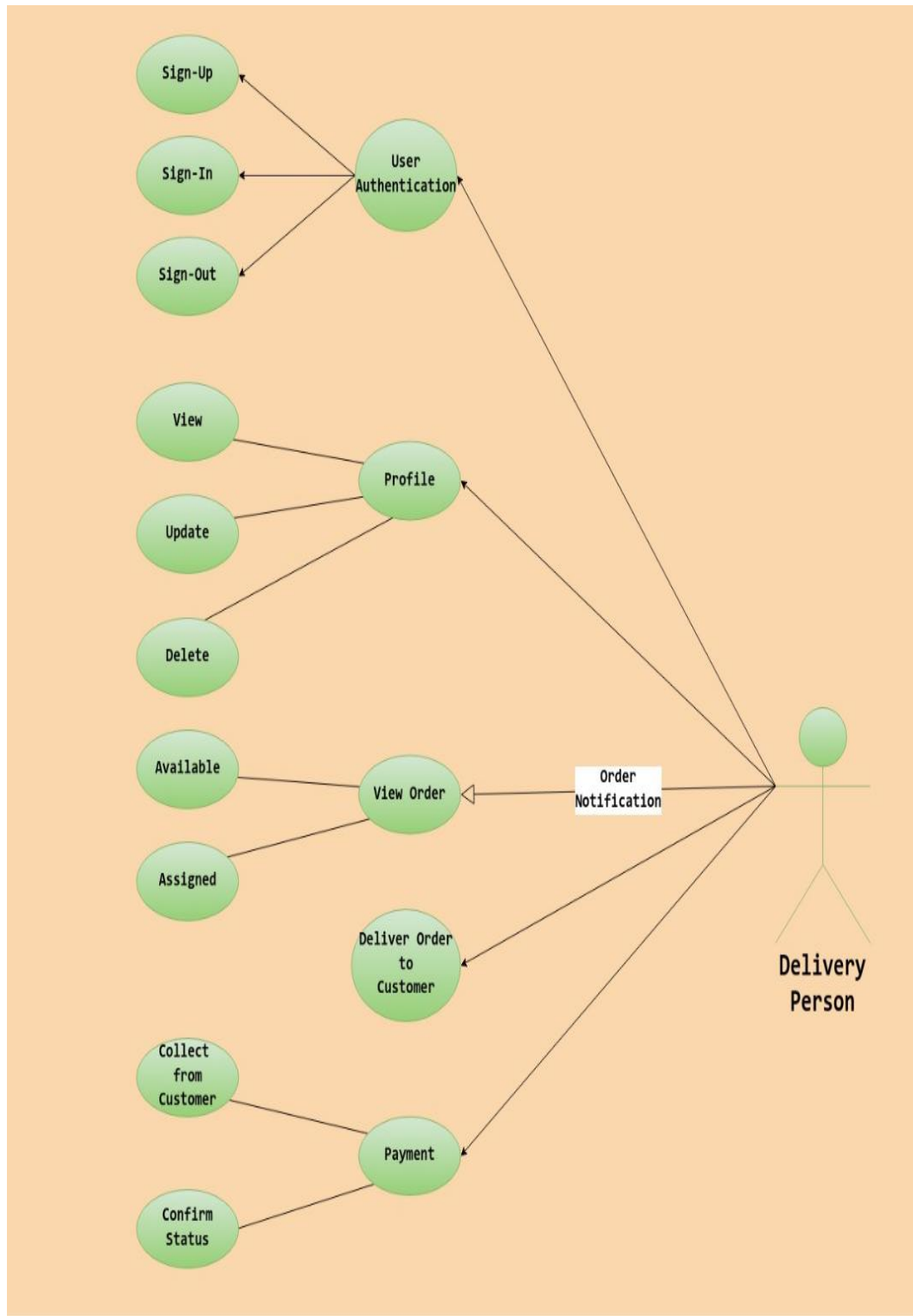
### 2.2.1 Home Page

- **Objective:** Allow vendors to manage their accounts.
- **Features:**
  - Sign up and sign in to access vendor functionalities.

### **2.2.2 Vendor Home Page**

- **Objective:** Manage menu items and view orders.
- **Features:**
  - Add menu items in breakfast, lunch, and dinner categories.
  - View placed and delivered orders.
  - Update or delete menu items.
  - Logout.

## *Tiffin Delivery and Management System*



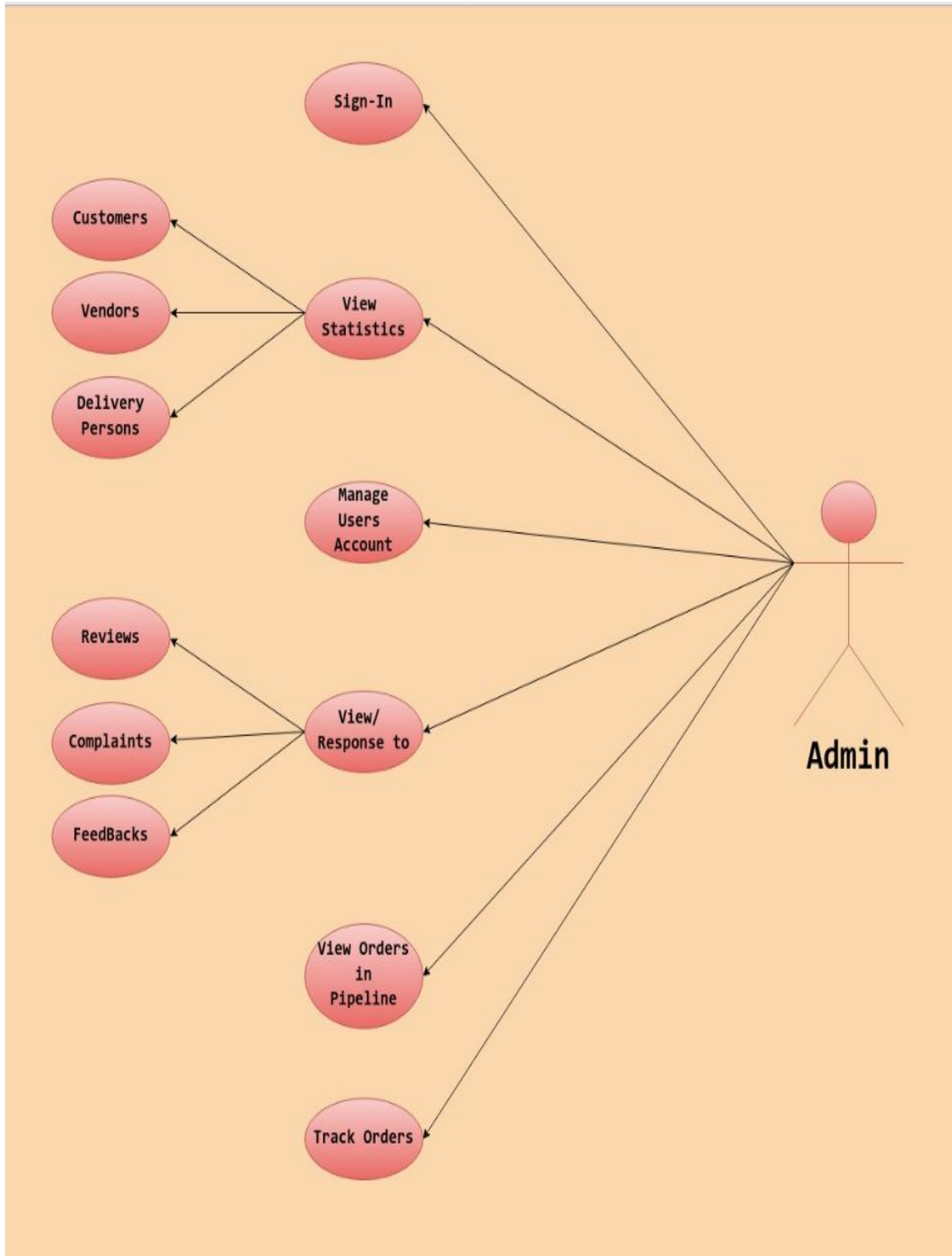
## **2.3 Delivery Boy Flow**

### **2.3.1 Home Page**

- **Objective:** Manage delivery boy account.
- **Features:**
  - **Sign up and sign in functionalities.**

### **2.3.2 Delivery Boy Home Page**

- **Objective:** Manage assigned and delivered orders.
- **Features:**
  - View and assign placed orders.
  - Mark Placed Order as Delivered after delivering the order.
  - View delivered orders.
  - Logout.



## **2.4 Admin Flow**

### **2.4.1 Home Page**

- **Objective:** Admin access to system functionalities.
- **Features:**
  - Sign in to access admin functionalities.

### **2.4.2 Admin Home Page**

- **Objective:** Oversee and manage system operations.
- **Features:**
  - View counts of customers, vendors, and delivery boys.
  - View lists of customers, vendors, and delivery boys.
  - View orders and customer reviews/feedback.

## **3. Non-Functional Requirements**

### **3.1 Interface**

- User interfaces must be intuitive and user-friendly.  
Detailed designs are provided in Appendix B.

### **3.2 Performance**

- **Number of Concurrent Users:** The system should handle at least 1000 transactions/inquiries per second.
- **System Resilience:** The application should be resilient to temporary server failures.

### **3.3 Constraints**

- The system should maintain performance standards of handling 1000 transactions/inquiries per second.

### **3.4 Other Requirements**

#### **3.4.1 Hardware Interfaces**

**Requirements:** Intel Core i5 or higher (or AMD equivalent), 8 GB RAM, 512 GB SSD or larger.

- 

#### **3.4.2 Software Interfaces**

- **Operating Systems:** MS Windows 13, Ubuntu 22.04.
- **Database:** MySQL.
- **Server:** Embedded Tomcat.
- **Browsers:** Compatible with modern web browsers.

### **4. System Design**

#### **4.1 Architecture**

- **Front-End:** Developed using React.js and Redux for state management.
- **Back-End:** Built with Spring Boot for server-side logic.
- **Database:** MySQL for storing user data, orders, and other system information.
- **Server:** Embedded Tomcat for hosting the application.



**4. DESIGN****4.1 Database Design**

The following table structures depict the database design.

**Table 1: Users**

Key Type/Constraint	Column Name	Data Type	Length	Allow Null (1=Yes; 0=No)
3	id	BIGINT	-	0
0	created_time	DATE	-	1
0	is_deleted	BIT(1)	-	1
0	updated_time	DATE	-	1
0	business_name	VARCHAR	20	1
0	first_name	VARCHAR	20	1
0	last_name	VARCHAR	20	1
0	email	VARCHAR	40	0
0	password	VARCHAR	100	0
0	role	ENUM	-	0
0	user_image	LOB	-	1

**Table 2: Reviews**

Key Type/Constraint	Column Name	Data Type	Length	Allow Null (1=Yes; 0=No)
3	id	BIGINT	-	0
0	created_time	DATE	-	1
0	is_deleted	BIT(1)	-	1
0	updated_time	DATE	-	1
0	comment	VARCHAR	255	1

## *Tiffin Delivery and Management System*

Key Type/Constraint	Column Name	Data Type	Length	Allow Null (1=Yes; 0=No)
0	rating	DOUBLE	-	1
1	customer_id	BIGINT	-	0
1	order_id	BIGINT	-	0
1	vendor_id	BIGINT	-	0

**Table 3: Orders**

Key Type/Constraint	Column Name	Data Type	Length	Allow Null (1=Yes; 0=No)
3	id	BIGINT	-	0
0	created_time	DATE	-	1
0	is_deleted	BIT(1)	-	1
0	updated_time	DATE	-	1
0	adr_line1	VARCHAR	255	1
0	adr_line2	VARCHAR	255	1
0	city	VARCHAR	10	1
0	contactperson	VARCHAR	20	1
0	country	VARCHAR	10	1
0	is_primary	BIT(1)	-	1
1	customer_id	BIGINT	-	0
1	delivery_boy_id	BIGINT	-	1
1	vendor_id	BIGINT	-	0

**Table 4: User Addresses**

Key Type/Constraint	Column Name	Data Type	Length	Allow Null (1=Yes; 0=No)
3	id	BIGINT	-	0
0	adr_line1	VARCHAR	255	1
0	adr_line2	VARCHAR	255	1
0	city	VARCHAR	10	1
0	contactperson	VARCHAR	20	1
0	country	VARCHAR	10	1
0	is_primary	BIT(1)	-	1
1	user_id	BIGINT	-	0

**Table 5: Delivery Boys**

Key Type/Constraint	Column Name	Data Type	Length	Allow Null (1=Yes; 0=No)
3	id	BIGINT	-	0
0	created_time	DATE	-	1
0	is_deleted	BIT(1)	-	1
0	updated_time	DATE	-	1
0	current_pincode	VARCHAR	6	1
0	status	ENUM	-	1
1	delivery_id	BIGINT	-	0

## *Tiffin Delivery and Management System*

**Table 6: Menus**

Key Type/Constraint	Column Name	Data Type	Length	Allow Null (1=Yes; 0=No)
3	id	BIGINT	-	0
0	created_time	DATE	-	1
0	is_deleted	BIT(1)	-	1
0	updated_time	DATE	-	1
0	category	ENUM	-	1
0	description	VARCHAR	255	1
0	menu_image	LONGBLOB	-	1
0	name	VARCHAR	30	1
0	price	DOUBLE	-	0
0	quantity	INT	-	0
1	vendor_id	BIGINT	-	0

**Table 7: Order Details**

Key Type/Constraint	Column Name	Data Type	Length	Allow Null (1=Yes; 0=No)
3	id	BIGINT	-	0
0	created_time	DATE	-	1
0	is_deleted	BIT(1)	-	1
0	updated_time	DATE	-	1
0	quantity	INT	-	0
0	menu_item_id	BIGINT	-	0
0	amount	DOUBLE	-	0
1	order_id	BIGINT	-	0

**Table 8: Payments**

Key Type/Constraint	Column Name	Data Type	Length	Allow Null (1=Yes; 0=No)
3	id	BIGINT	-	0
0	created_time	DATE	-	1
0	is_deleted	BIT(1)	-	1
0	updated_time	DATE	-	1
0	payment_method	ENUM	-	0
0	transaction_id	VARCHAR	20	1
0	amount	DOUBLE	-	0
1	order_id	BIGINT	-	0

**E-R Diagram, Dataflow diagram and Class Diagram:**

Go to Appendix A

**5. CODING STANDARDS IMPLEMENTED**

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**Naming and Capitalization**

Below summarizes the naming recommendations for identifiers in Pascal casing is used mainly (i.e. capitalize first letter of each word) with camel casing (capitalize each word except for the first one) being used in certain circumstances.

Identifier	Case	Examples	Additional Notes
Class	Pascal	User, Order, UserController	Class names should be based on "objects" or "real things" and should generally be <b>nouns</b> . No '_' signs allowed. Do not use type prefixes like 'C' for class.

## *Tiffin Delivery and Management System*

Method	Camel	SignUp, SignIn, addReviews	Methods should use <b>verbs</b> or verb phrases.
Parameter	Camel	firstName, lastName, email, password	Use descriptive parameter names. Parameter names should be descriptive enough that the name of the parameter and its type can be used to determine its meaning in most scenarios.
Interface	Pascal with "I" prefix	UserRepository, OrderRepository, MenuRepository	Do not use the '_' sign
Annotation	Pascal	SpringBootApplication	Use @ at start of annotation
DTOs	Camel	ApiResponseDTO, SignUpReqDTO, OrderDetailsResDTO	Use to transfer data between the processes
Exception Class	Pascal with "Exception" suffix	ResourceNotFoundException	

### Comments

- Comment each type, each non-public type member, and each region declaration.

## *Tiffin Delivery and Management System*

- Use end-line comments only on variable declaration lines.  
End-line comments are comments that follow code on a single line.
- Separate comments from comment delimiters (apostrophe) or // with one space.
- Begin the comment text with an uppercase letter.
- End the comment with a period.
- Explain the code; do not repeat it.

### **6. TEST REPORT**

Another group called Linux did the testing and the report of the testing is given hereunder.

#### **GENERAL TESTING:**

SR-NO	TEST CASE	EXPECTED RESULT	ACTUAL RESULT	ERROR MESSAGE
1	SignUp Page	Signup successfully message	OK	Nothing
2	SignIn Page	Pop-up will come	Ok	Please enter username and password again .
3	HomePage	Vendor List fetched from db	Ok	Failed to fetched vendor list
4	Menu List page	Gives all menu item for selected vendor	Ok	Nothing
5	Cart Page	Give a list of added item in the cart	Ok	Please log in first

## *Tiffin Delivery and Management System*

6	Customer Order history	Order history list render successfully	Ok	Failed to fetched orders
7	Add Menu Item	Menu added successfully	Ok	Nothing
8	See placed orders by vendor	Placed order list view	Ok	No orders is placed
9	Generate Token after first login	Token generated successfully	Ok	Failed to generate token
10	View all users list by admin	Seeing the list of all users	Ok	Nothing
11	Placing Order by customer	Order placed successfully and redirect to home page	Ok	Nothing
12	Logout	It will logout from user profile.	Ok	Nothing
	<b>STATIC TESTING</b>			
<b>SR-N0</b>	<b>Deviation</b>	<b>Program</b>		
1	Commenting not followed	All Web Application		

### 6. PROJECT MANAGEMENT RELATED STATISTICS

DATE	WORK PERFORMED	SLC PHASE	Additional Notes
April 11, 2024	Project Allotment and User Requirements Gathering	Feasibility Study	Our team met the client Mr. Nitin Kudale (CEO, SIIT Pune) to know his requirements.
April 17, 2024	Initial SRS Document Validation and Team Structure Decided	Requirement Analysis (Elicitation)	The initial SRS was presented to the client to understand his requirements better.
April 30,	Designing the use-	Requirement	Database Design completed.

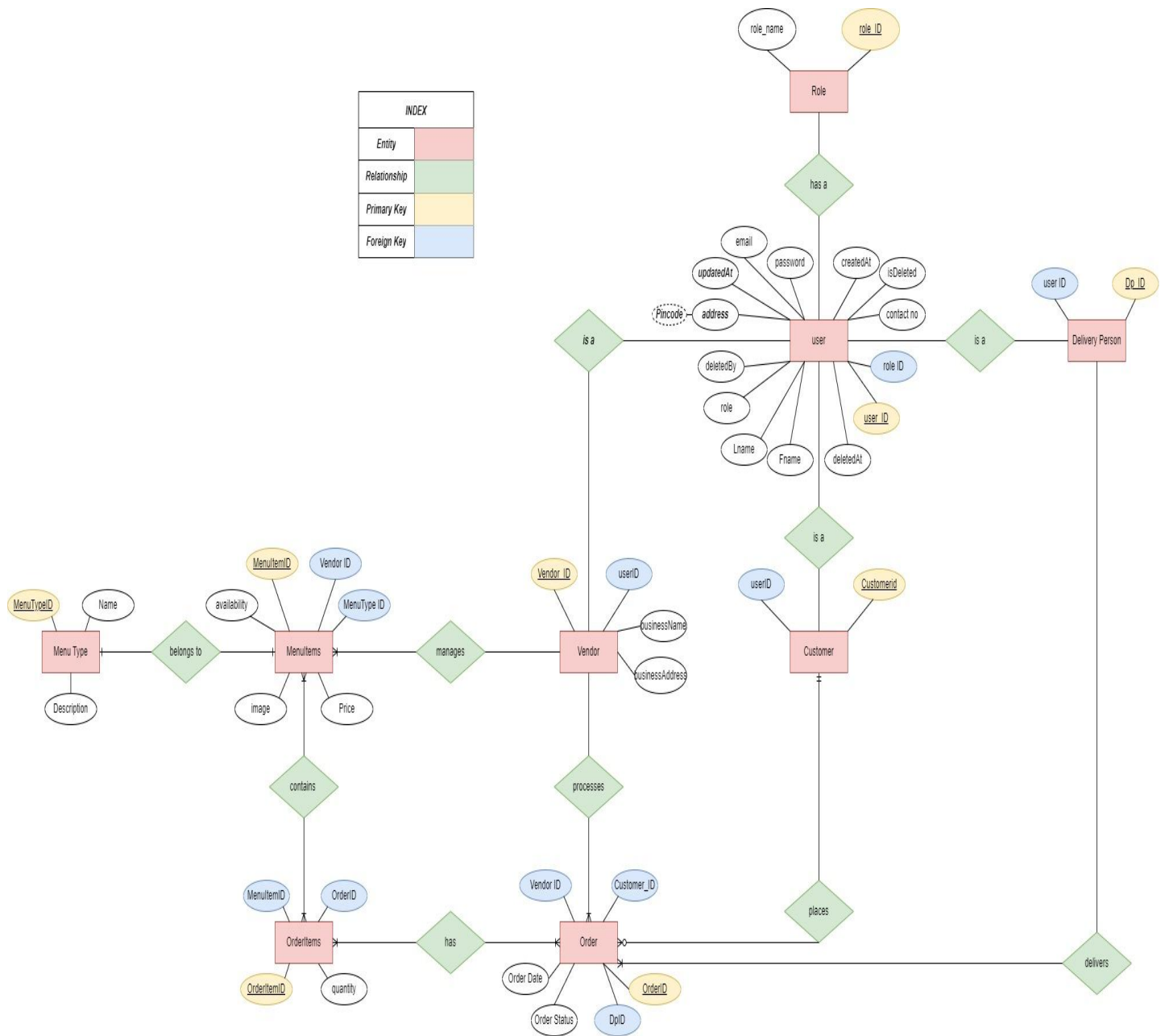


## *Tiffin Delivery and Management System*

DATE	WORK PERFORMED	SLC PHASE	Additional Notes
2024	cases, Class Diagram, Collaboration Diagram, E-R Diagram, and User Interfaces	Analysis & Design Phase	
May 5, 2024	Business Logic Component Design Started	Design Phase	----- -
June 16, 2024	Coding Phase Started	Coding Phase	70% of Class Library implemented.
June 17, 2024	Implementation of Web Application and Window Application Started	Coding Phase	Class Library Development going on.
June 18, 2024	Off	Off	Off
June 19, 2024	Implementation of Web Application and Window Application Continued	Coding Phase and Unit Testing	Class Library Modified as per the need.
June 21, 2024	Implementation of Web Application and Window Application Continued	Coding Phase and Unit Testing	----- -
August 10, 2024	After Ensuring Proper Functioning the Required Validations were Implemented	Coding Phase and Unit Testing	Module Integration was done by the Project Manager
August 12, 2024	The Project was Tested by the respective Team Leaders and the Project Manager	Testing Phase (Module Testing)	----- -
August 13, 2024	The Project was Submitted to Other Project Leader of Other Project Group For Testing	Testing Phase (Acceptance Testing)	The Project of Other Team was Taken up by the Team for Testing
August 14, 2024	The Errors Found were Removed	Debugging	The Project was complete for submission
August 16, 2024	Final Submission of Project	----- ----- --	----- ----- -

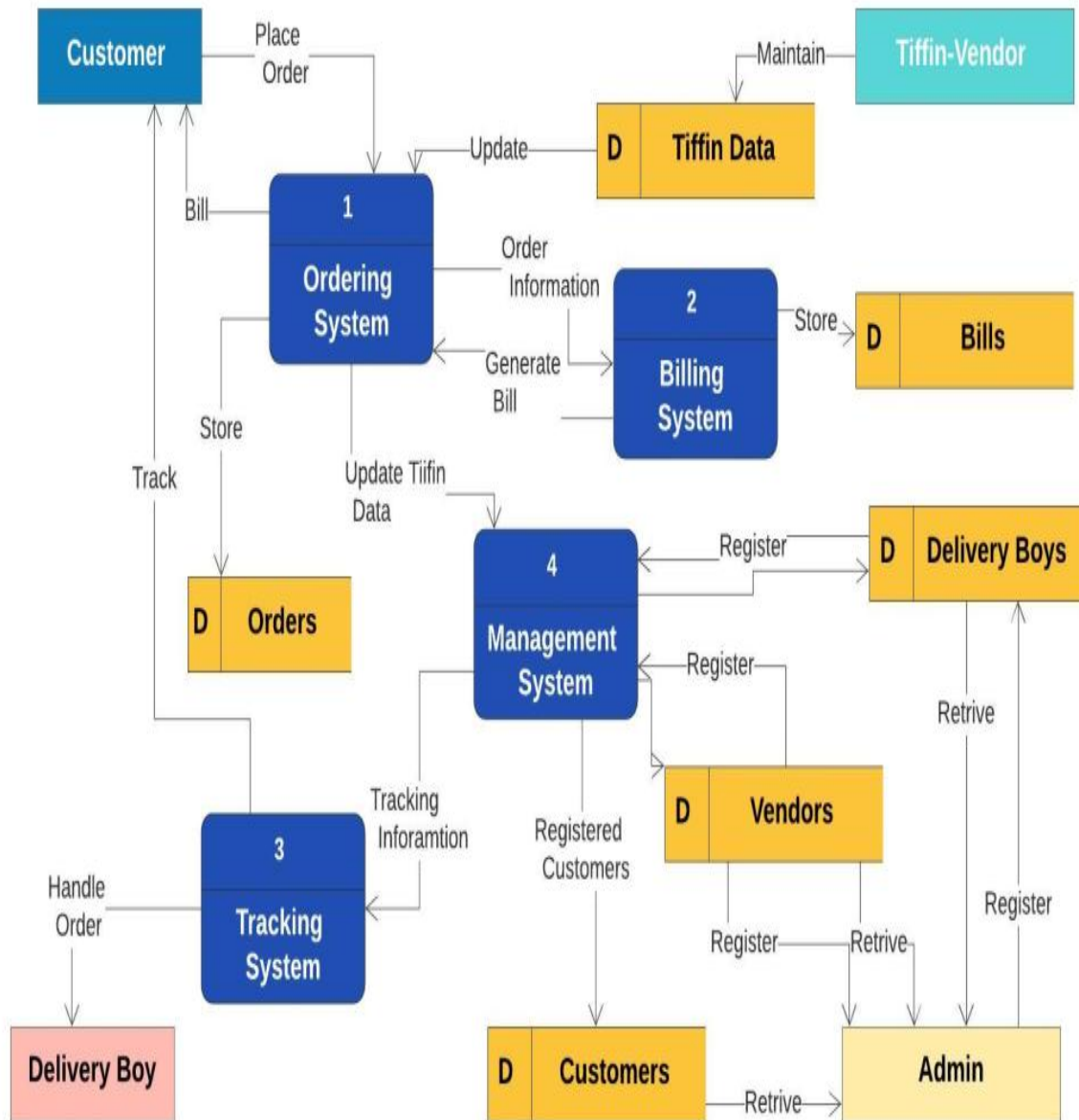
**Appendix A**  
**Entity Relationship Diagram**

# Tiffin Delivery and Management System



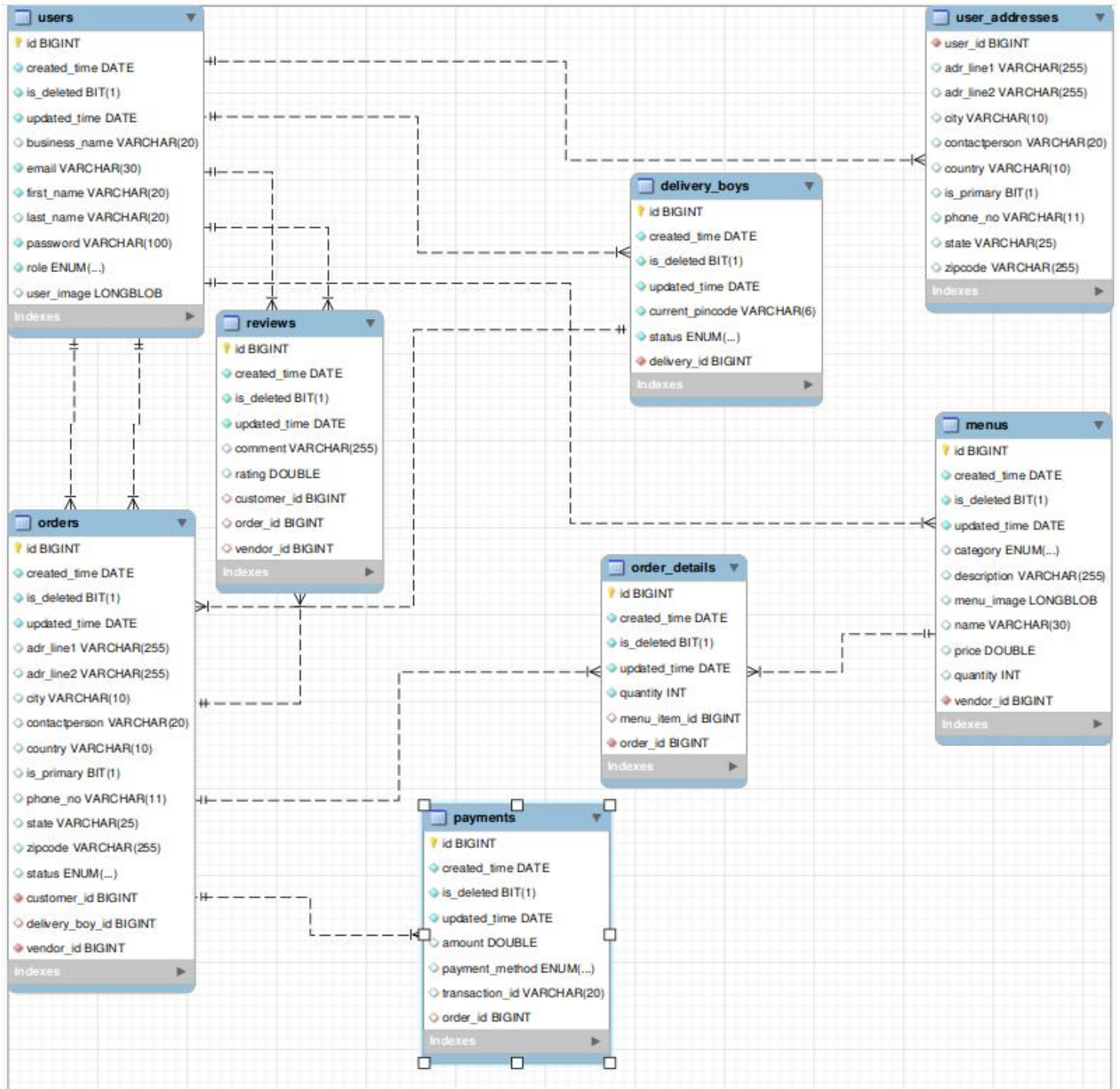
**Data Flow Diagram:**

## *Tiffin Delivery and Management System*



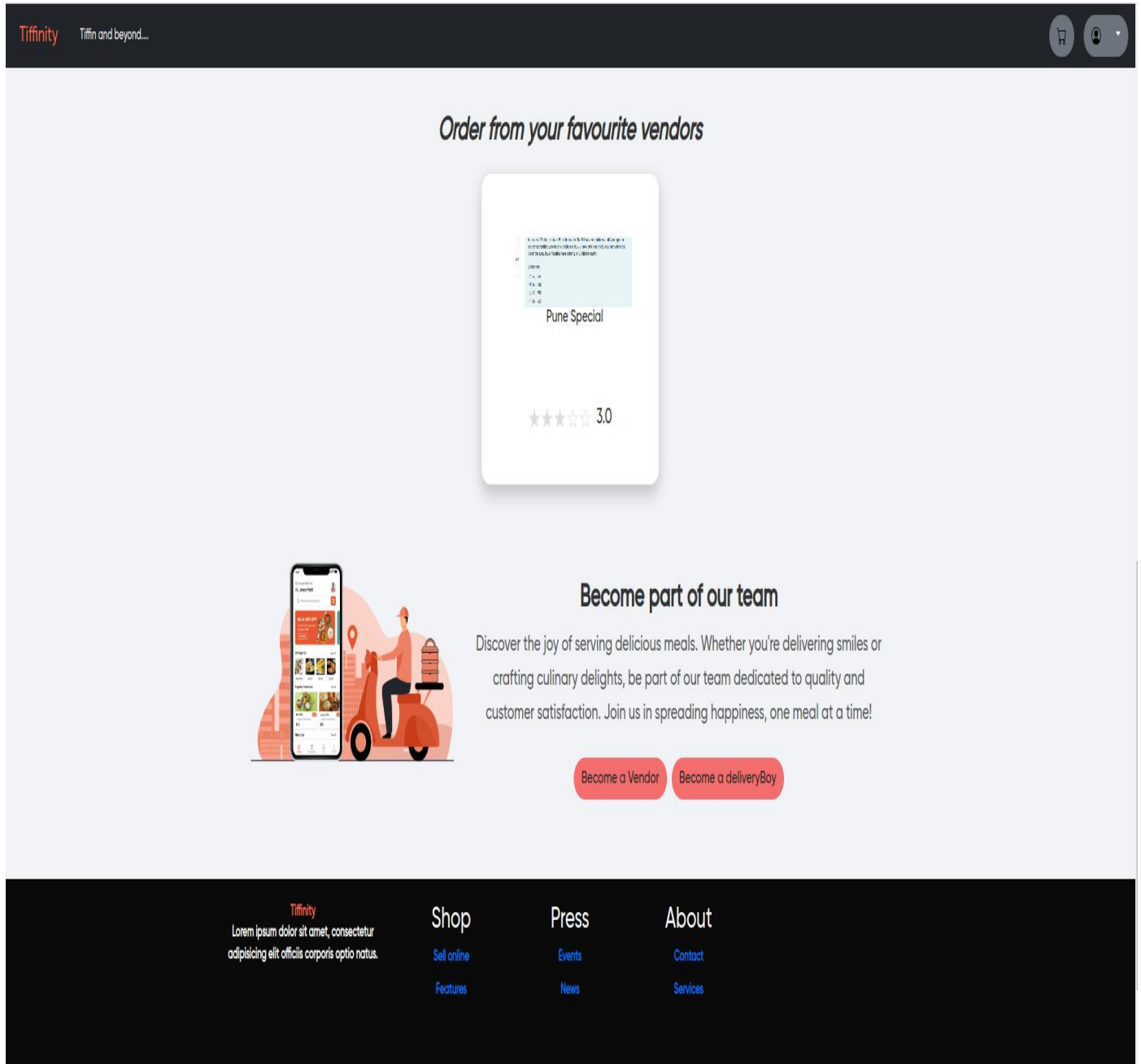
**Class Diagram**

## *Tiffin Delivery and Management System*

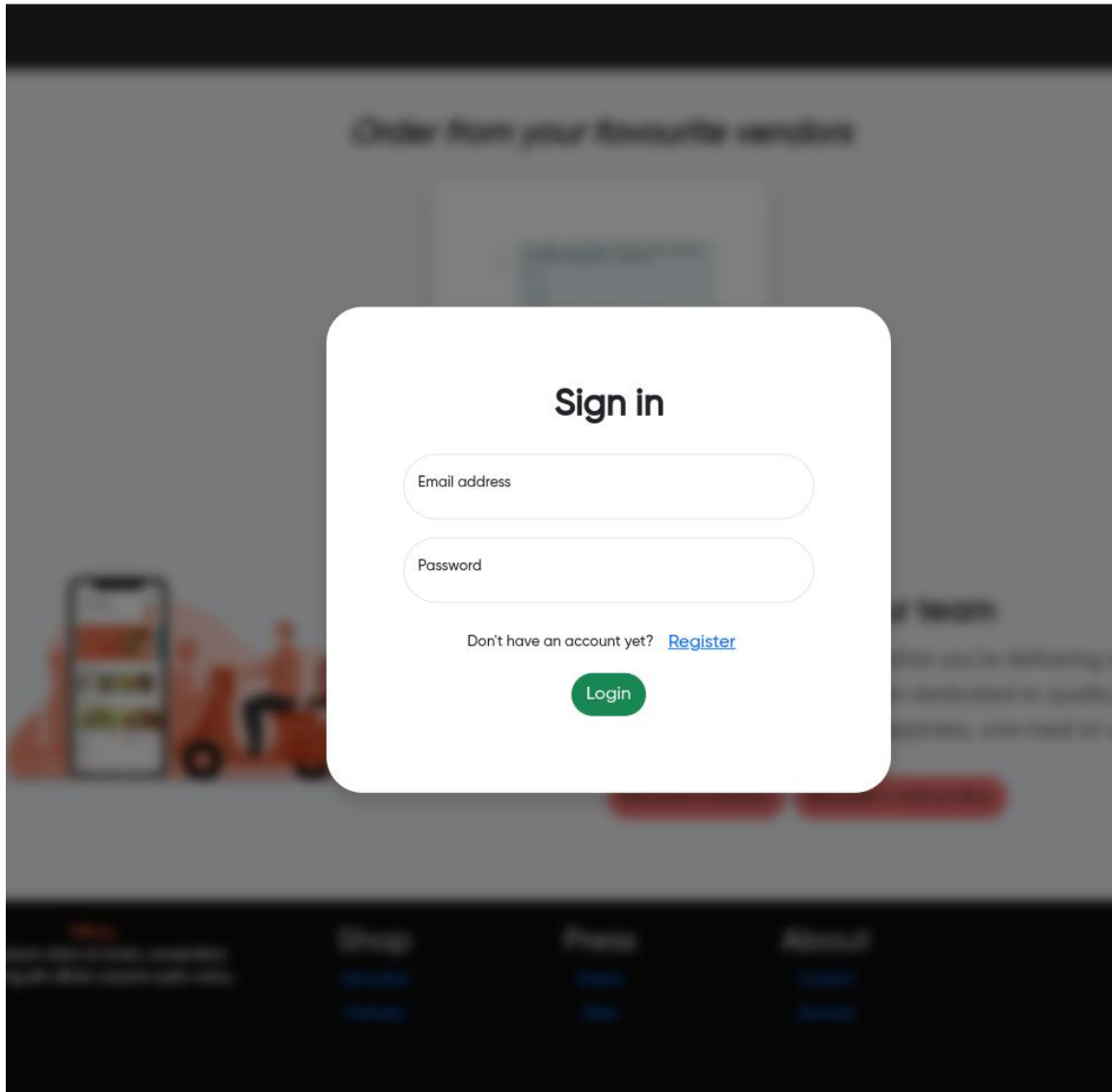


### **Appendix B** **Homepage:**

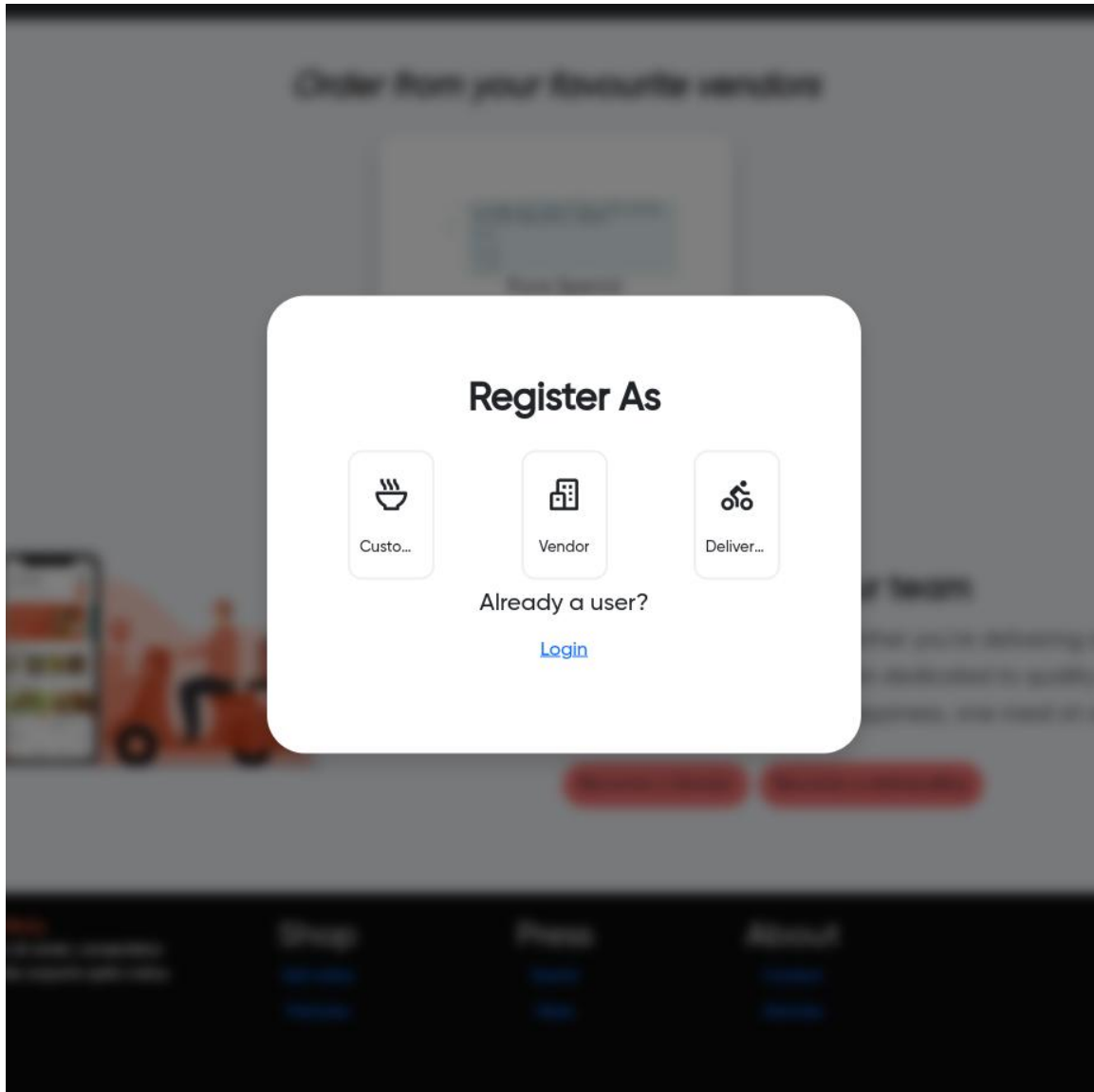
# Tiffin Delivery and Management System



**LoginPopup:**

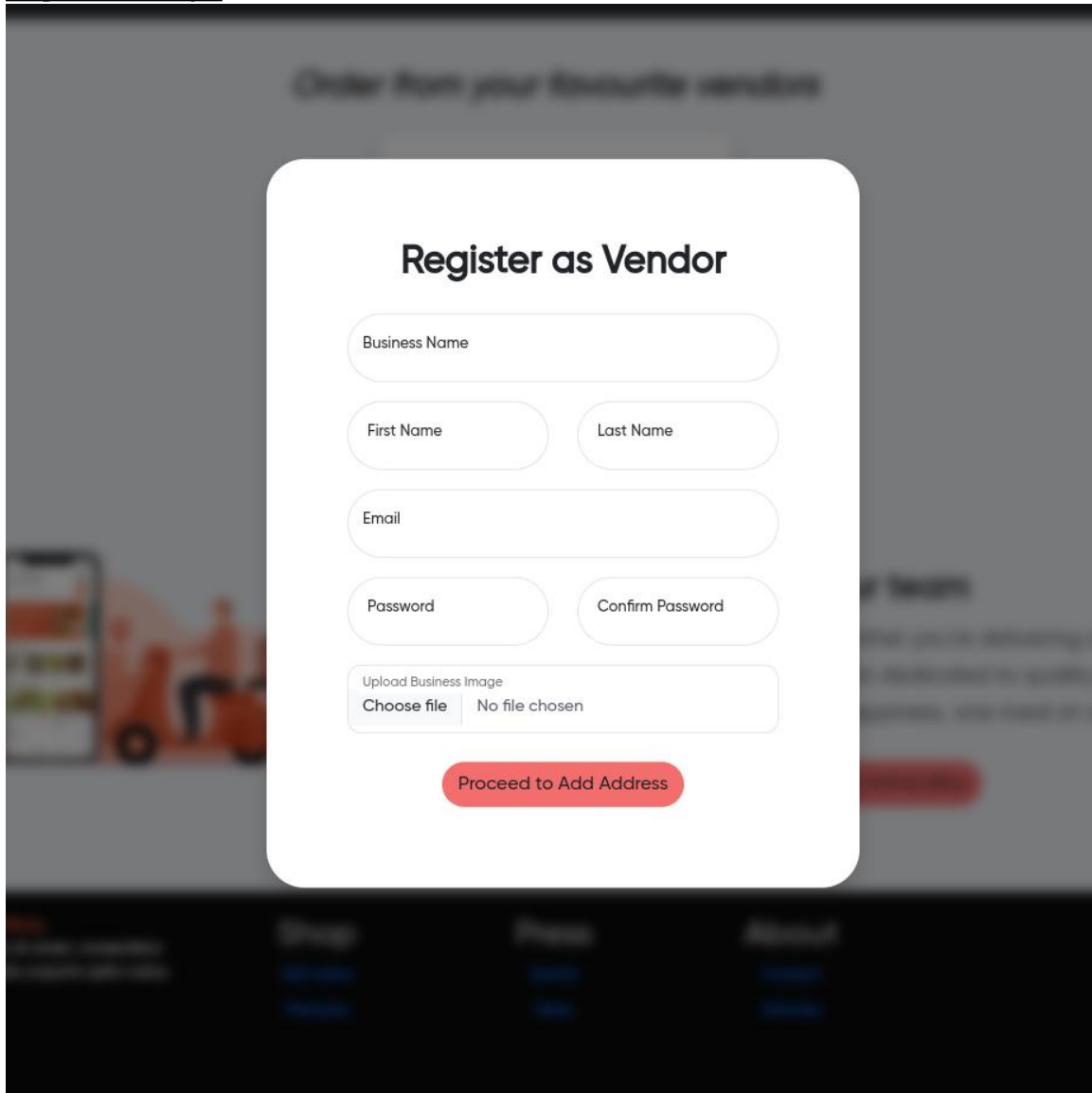


**SignUpPopup:**





**Register Pop:**

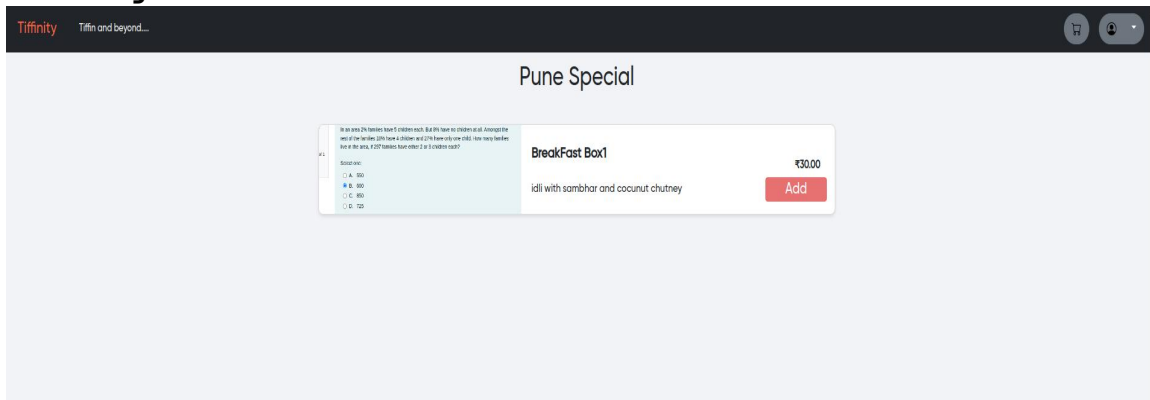


The image shows a 'Register as Vendor' pop-up form overlaid on a blurred background. The form is white with rounded corners and contains the following fields and elements:

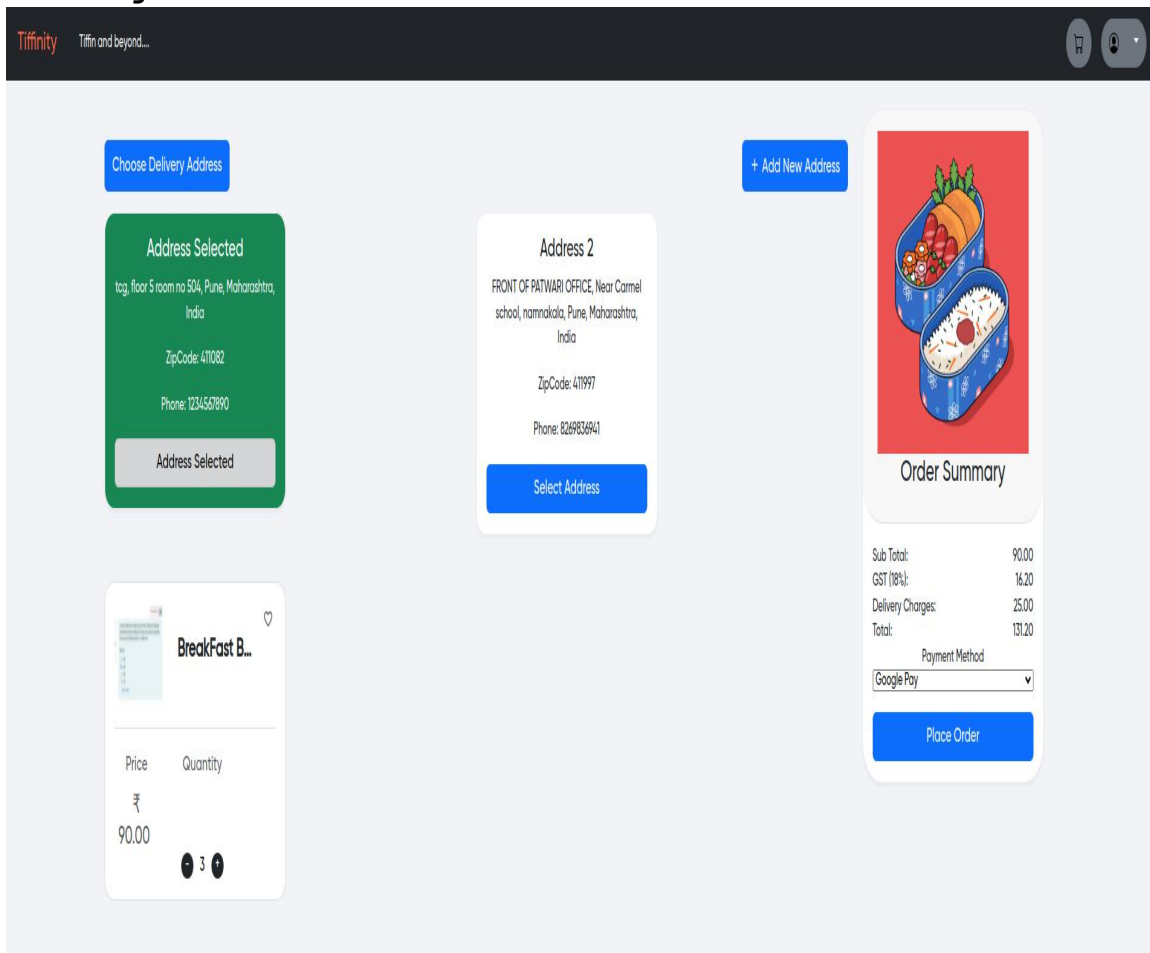
- Title:** Register as Vendor
- Business Name:** A single-line text input field.
- First Name:** A single-line text input field.
- Last Name:** A single-line text input field.
- Email:** A single-line text input field.
- Password:** A single-line text input field.
- Confirm Password:** A single-line text input field.
- Upload Business Image:** A section containing a 'Choose file' button and the text 'No file chosen'.
- Proceed to Add Address:** A red button located at the bottom of the form.

# Tiffin Delivery and Management System

## Menu Page



## Cart Page



## Customer Profile Page

Tiffinity

Tiffin and beyond...

View Profile

Your Orders

Address Book

Welcome Prince to Tiffinity

Your Orders

#	Order ID	Vendor	Menu Item	Quantity	Total Amount	Actions
1	1	Pune Special	BreakFast Box1	1	\$95.80	<div>Review</div>
2	2	Pune Special	BreakFast Box1	2	\$95.80	<div>Review</div>
3	4	Pune Special	BreakFast Box1	2	\$95.80	<div>Review</div>
4	5	Pune Special	BreakFast Box1	2	\$131.20	<div>Review</div>

## Review Modal

Tiffin

Tiffin and beyond....

Welcome Prince to Tiffin

Your Orders

#	Order ID	Vendor	Menu Item	Quantity	Total Amount	Actions
1	1	Pune Special	BreakFast Box1	1	\$95.80	Review
				2	\$95.80	Review
				2	\$95.80	Review
				2	\$131.20	Review

View Profile

Your Orders

Address Book

Submit Review

X

Comment

Enter your comment here

Good

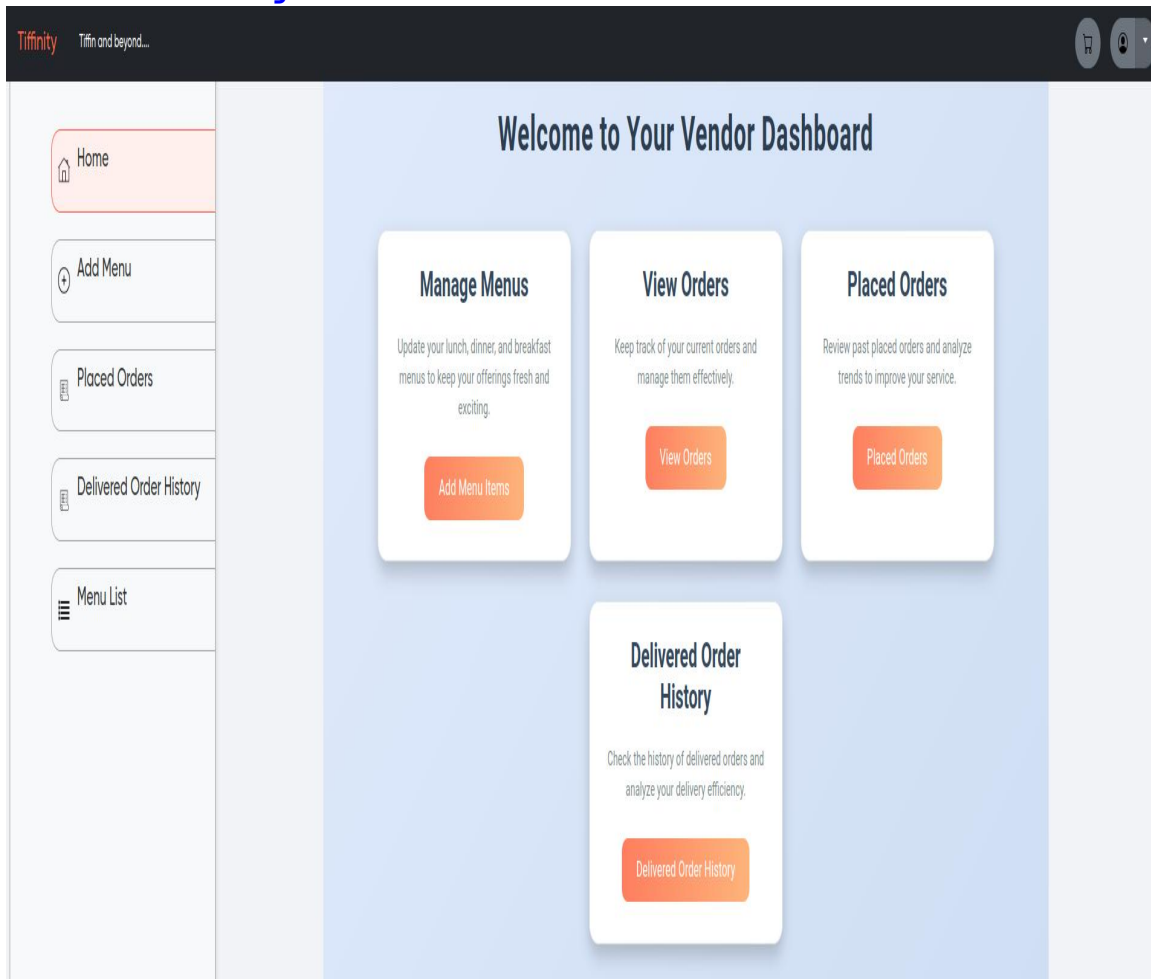
Rating★★★★☆

Close

Submit



# Tiffin Delivery and Management System

## Vendor Home Page



## Vendor Delivered Order History

Tiffinity Tiffin and beyond...



Home


Add Menu

Placed Orders

Delivered Order History

Menu List


Delivered Order History



1 x Breakfast Box1

Prince Mishra  
Delivery By: dl dl  
FRONT OF PATWARI OFFICE, Near  
Carmel school, namnakala  
Pune, Maharashtra, India, 411997  
8269836941

₹30 • DELIVERED



2 x Breakfast Box1

Prince Mishra  
Delivery By: dl dl  
tag, floor 5 room no 504  
Pune, Maharashtra, India, 411082  
1234567890



₹60 • DELIVERED


# Tiffin Delivery and Management System


## Delivery Boy Delivered Ordered History

Tiffinity

Tiffin and beyond...



 Delivery Home Page

 Delivered Order List

Delivered Order History



Order ID	Customer Name	Vendor Name	Earned	Status	Payment Method	Delivery Address
1	Prince Mishra	Pune Special	₹0.80	DELIVERED	GOOGLE_PAY	FRONT OF PATWARI OFFICE, Near Carmel school, namnakala Pune, Maharashtra India, 411997 Phone: 8269836941
2	Prince Mishra	Pune Special	₹1.80	DELIVERED	GOOGLE_PAY	tag, floor 5 room no 504 Pune, Maharashtra India, 411082 Phone: 1234567890
4	Prince Mishra	Pune Special	₹1.80	DELIVERED	GOOGLE_PAY	tag, floor 5 room no 504 Pune, Maharashtra India, 411082 Phone: 1234567890
5	Prince Mishra	Pune Special	₹1.80	DELIVERED	GOOGLE_PAY	tag, floor 5 room no 504 Pune, Maharashtra India, 411082 Phone: 1234567890


# Tiffin Delivery and Management System


## Admin


Tiffinity


Tiffin and beyond....




 Admin Home Page

 Customer List

 Vendor List

 Delivery Boy List

 Order Reviews

All Order Reviews

Sl. No.	Created Time	Updated Time	Comments	Ratings
1	Prince	1	nice food	★★★★☆
2	Prince	2	bekar tha	★☆☆☆☆
3	Prince	4	nice food	★★★★☆
4	Prince	5	nice one	★★★★☆



## 7. REFERENCES

1. **Spring Boot Documentation**  
URL: <https://spring.io/projects/spring-boot>
2. **React.js Documentation**  
URL: <https://reactjs.org/docs/getting-started.html>
3. **Redux Documentation**  
URL: <https://redux.js.org>
4. **Java Programming Language**  
URL: <https://www.oracle.com/java/>
5. **MySQL Workbench Documentation**  
URL: <https://dev.mysql.com/doc/workbench/en/>
6. **Spring Boot with React and Redux**  
URL: <https://www.baeldung.com/spring-boot-react-and-redux>
7. **Java Persistence API (JPA) Documentation**  
URL: <https://www.eclipse.org/eclipselink/documentation/2.7/>
8. **Swagger Documentation for Spring Boot**  
URL: <https://springdoc.org/>
9. **MDN Web Docs**  
URL: <https://developer.mozilla.org/>
10. **React Redux Integration Guide**  
URL: <https://react-redux.js.org/>