



## **School of Computing**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	1
<b>Title of Experiment</b>	To identify the Software Project, Create Business Case, Arrive at a Problem Statement
<b>Name of the candidate</b>	POLISETTI SRI PAVAN
<b>Team Members</b>	YEDUGURI GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	25/01/2023

## **Mark Split Up**

<b>S.No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

**Aim:**

To develop efficient, user-friendly, secure online platform for delivering fresh Agri-foods, locally sourced produce directly to consumers.

**Team Members:**

S. No	Register No	Name	Role
1	RA2111030010267	YEDUGURI GEETHIKA	Lead
2	RA2111030010269	POLISETTI SRI PAVAN	Member

**Project Title: FARM FRESH FOOD****Project Description**

The platform will allow the users to order high-quality, safe, and nutritious food that is sourced directly from the local area. The platform will be user-friendly and easy to navigate, allowing customers to place orders and track delivery in real-time. Customers will be able to access information about the products, including the source, ingredients, and nutritional information, to make informed purchasing decisions. Delivery logistics will be established to ensure that orders are delivered promptly and in good condition. The service will be marketed to target customers, promoting the benefits of locally sourced food and the convenience of online ordering. By providing access to high-quality, locally sourced food, this service will help support local agriculture and promote sustainable food systems. It will also provide a convenient and time-saving solution for customers who are looking for fresh, healthy, and delicious food options.

# ONE PAGE BUSINESS CASE TEMPLATE

DATE	25-01-2023	
SUBMITTED BY	YEDUGURI GEETHIKA (RA2111030010267) POLISETTI SRI PAVAN (RA2111030010269)	
TITLE / ROLE	FARM FRESH FOOD	

## THE PROJECT

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

- The FARM FRESH FOOD Project is an E-Commerce platform for buying and selling fresh farm vegetables and fruits.
- The main goal of the project is to create a platform for farmers, agribusinesses, and consumers to connect and transact directly without intermediaries.

## THE HISTORY

In bullet points, describe the current situation.

- 1990s: Emergence of e-commerce websites and the beginning of online food sales
- Early 2000s: Online grocery shopping becomes more popular, but it is still limited by a small selection of products and slow delivery options
- Late 2000s: With the widespread adoption of smartphones and faster delivery options, online grocery shopping becomes more accessible to consumers
- 2010s: The rise of local food movements and concerns over food security lead to an increase in demand for locally sourced produce and farm-to-table foods
- Late 2010s: Online platforms that connect consumers with local farmers and food producers become more common, allowing consumers to purchase fresh, locally sourced produce online
- 2020s: The COVID-19 pandemic accelerates the growth of online grocery sales and highlights the importance of local food systems, leading to an increase in interest in buying fresh farm foods online.

## LIMITATIONS

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

- Quality concerns: Some consumers may have concerns about the quality and freshness of the produce that they receive through online delivery services, as it can be difficult to evaluate produce before purchase.
- Cost: Online farmer food delivery services can be more expensive than traditional grocery stores, especially when taking into account delivery fees.
- Scheduling issues: Delivery schedules may not be convenient for all consumers, especially those with demanding work schedules.
- Infrastructure limitations: Some areas may have limited infrastructure for delivery, making it difficult for online farmer food delivery services to reach consumers in those areas.

## APPROACH

List what is needed to complete the project.

- Project management tools: Project management tools such as Trello, Asana, or Monday.com can help keep the project on track and ensure that all tasks are completed on time.
- E-commerce platform: An e-commerce platform, such as Shopify, Magento, or WooCommerce, is necessary for building the online ordering system.
- Delivery management software: Delivery management software, such as Postmates Fleet or Delivery Hero, can help manage the delivery process and ensure that orders are delivered on time and in good condition.
- Marketing and advertising tools: Marketing and advertising tools, such as Google Ads, Facebook Ads, or Hootsuite, can help promote the service to the target market and build brand awareness.
- Financial management tools: Financial management tools, such as QuickBooks or Xero, can help manage the financial aspects of the service, including invoicing, billing, and financial reporting.
- Payment processing tools: Payment processing tools, such as PayPal, Stripe, or Square, are necessary for processing customer payments and ensuring secure transactions.

## BENEFITS

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

- Increased access to locally sourced food: By connecting customers with local farmers and food producers, the service can provide access to fresh, high-quality produce that might not otherwise be available through traditional grocery stores.
- Improved food quality and safety: By sourcing produce directly from farmers and food producers, the service can ensure that customers receive high-quality, safe, and nutritious food.
- Convenience and time-saving: Customers can place orders online and have the food delivered directly to their doorstep, saving time and effort compared to visiting multiple grocery stores.
- Support for local agriculture and food producers: By connecting customers with local farmers and food producers, the service can help support local agriculture and promote sustainable food systems. This can also help preserve regional food traditions and contribute to the local economy.

## Result:

Thus, the successful completion of this project could result in increased access to fresh, locally sourced food for consumers, offering a convenient and time-saving solution for customers looking for high-quality, healthy food options while also supporting local agriculture and sustainable food systems by connecting customers with local farmers and food producers.

## **Problem Constraints:**

**Q.** What is the Purpose and Need for the work?

**A.** The purpose and need for this project is to address the growing demand for fresh, locally sourced food and the need for a convenient and efficient way to access it. There is a growing trend towards healthier eating habits and a desire for food that is not only nutritious but also sustainable and locally sourced. However, many people find it challenging to access locally sourced produce through traditional grocery stores.

**Q.** What questions need to be answered?

**A.** The following are some questions to be answered, and we have answered all the question in the above documentation.

1. What is the target market for this service and what are their specific needs and preferences?
2. What are the local food sources available and what types of produce and products can be offered?

**Q.** What key issues should be considered?

**A.** Sourcing and quality control, Delivery logistics, Customer experience, Marketing and promotion, Competition and market trends are the key issues to be considered.

**Q.** What are the Goals and Objectives of the work?

- ✓ To provide customers with access to high-quality, locally sourced food that is safe and nutritious.
- ✓ To offer a convenient and time-saving solution for customers looking for healthy and sustainable food options.
- ✓ To support local agriculture and sustainable food systems by connecting customers with local farmers and food producers.
- ✓ To improve the customer experience by providing a user-friendly platform and offering a wide range of locally sourced food options.

**Q.** Who is the audience?

**A.** Health-conscious individuals who are interested in eating fresh, locally sourced food. Busy people who value convenience and want to avoid trips to the grocery store. Individuals who are interested in supporting local agriculture and sustainable food systems are the audience.

**Q.** What types of usable information and tools are available and practical?

**A.** Market research, Delivery management tools, Logistics and supply chain management software, Food safety and quality control tools, financial management, Marketing and advertising tools, Customer feedback and reviews platforms.

### **Schedule, Resource, and Budget Constraints:**

**Q.** What are the Existing Resources? Are they internal or external?

**A.** Existing resources are Development team, Internal data and systems and these are the internal resources.

**Q.** What is the Feasible Budget?

**A.** The budget for developing a online fresh Agri-food application can vary widely depending on several factors, including the scope of the project, the size and experience of the development team, and the use of internal vs. external resources.

**Q.** What are the time constraints that may dictate delivery of work items?

**A.** Release schedule, Dependencies, Integration with external systems, User testing and feedback, Regulatory compliance are the time constraints that may dictate delivery of work items.

**Q.** What is the availability and quality of existing data?

**A.** There is likely to be a wealth of data available on consumer behavior, market trends, and competitor analysis, which can be sourced from a variety of sources, including government agencies, market research firms, and industry associations. However, the quality and accuracy of this data can vary greatly, so it's important to carefully evaluate the source and methodology of any data used in the project.



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**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	2
<b>Title of Experiment</b>	Identification of Process Methodology and Stakeholder Description
<b>Name of the candidate</b>	P.SRI PAVAN
<b>Team Members</b>	YEDUGURI GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	02/02/2023

## **Mark Split Up**

<b>S.No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

**Aim:**

To identify the appropriate Process Model for the project and prepare Stakeholder and User Description for Farm Fresh Food Project

**Team Members:**

Sl No	Register No	Name	Role
1	RA2111030010267	YEDUGURI GEETHIKA	Team lead
2	RA2111030010269	P.SRI PAVAN	Member

**Project Title: FARM FRESH FOOD****Selection of Methodology: RAD (rapid application development) METHODOLOGY**

- The RAD (Rapid Application Development) model is a software development methodology that emphasizes rapid prototyping and iterative development. The RAD model was introduced in the 1980s as a response to the perceived shortcomings of traditional, sequential software development methodologies, such as the Waterfall model.
- In the RAD model, the development process is divided into smaller, iterative cycles or phases. These cycles typically include requirements gathering, design, construction, and testing. However, unlike traditional software development methodologies, each of these phases is completed in a much shorter timeframe, typically a few weeks or less. The RAD model is also characterized by a strong emphasis on collaboration and communication between developers and stakeholders.

RAD prioritizes speed, so the development team can quickly deliver a working prototype of the system to the customer for review. RAD relies on visual modeling tools and reusable software components, which can help reduce the development time. RAD has well-defined and time-boxed development cycles, which can help keep the project on track and ensure that the customer's requirements are met within the specified timeframe. Whereas, Agile emphasizes collaboration between developers and customers, which can help ensure that the final product meets the customer's needs and requirements. Agile allows for frequent feedback and adjustments to the requirements, so the development team can respond quickly to any changes. Agile delivers working software in short cycles (sprints), which can provide a sense of progress and help keep the project on track.



Ultimately, our choice regarding the methodology is RAD on the basis of the specific requirements and constraints of the Farm foods delivery project. The RAD approach is suitable for the Farm foods delivery project if the project needs to be delivered quickly and if user feedback is important in shaping the final product.

Incorporate information to below table regarding stakeholders of the project [Make use of below examples]

<b>Stakeholder Name</b>	<b>Activity/ Area /Phase</b>	<b>Interest</b>	<b>Influence</b>	<b>Priority</b>
Project manager	Manager is responsible for overseeing the day-to-day operations of an online store, ensuring that the website is functional, products are stocked, and customer service is top-notch. Here are some of the specific roles and responsibilities of a manager in e-commerce:	High	High	1
Frontend developers	Build and maintain the client-side of web applications, which includes the user interface, user experience, and interactions. Frontend developers work closely with designers to turn design concepts into working web pages and ensure that the user experience is smooth, efficient, and engaging.	Medium	High	2
Backend developer	Build and maintain the server-side of web applications, which includes the server, database, and application logic. The backend developer is responsible for writing the code that runs on the server, communicates with the client-side, and manages the data.	High	High	1

Designer	Designer is responsible for creating and maintaining the visual aspects of an online store, including the website design, branding, and product visuals.	High	Low	2
Programmer	Programmer is responsible for developing and maintaining the technical aspects of an online store, including the website functionality, payment processing systems, and inventory management systems.	High	High	1
Customer	These are the most important stakeholders in e-commerce. They are the ones who purchase products or services from the e-commerce website.	high	High	1

### **RESULT:**

Thus, the Project Methodology was identified and the stakeholders were describe



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<b>Experiment No</b>	3
<b>Title of Experiment</b>	System, Functional and Non-Functional Requirements of the Project
<b>Name of the candidate</b>	POLISETTI SRI PAVAN
<b>Team Members</b>	Y.GEETHIKA(RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	09/02/2023

## **Mark Split Up**

<b>S.No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**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.	RA2111030010267	Y.GEETHIKA	LEAD
2.	RA2111030010269	POLISETTY SRI PAVAN	MEMBER

**Project Title:** FARM FRESH FOOD

**System Requirements:****Desktop/Laptop Browser**

**Requirements:** Internet Explorer 11

or higher

Microsoft

Edge Google

Chrome

Mozilla

Firefox Safari

11 or higher

**Mobile Browser Requirements:**

Safari Mobile (iOS 11 or higher)

Google Chrome (Android 4.4 or  
higher)

Samsung Internet (Android 5.0 or  
higher) Opera Mini (Android 4.1 or  
higher)

**Network Connectivity:** Internet speed minimum of 500kb/s.

### **Functional Requirements:**

- ❖ Create user credentials to login to the system.
- ❖ Inventory Management: May need to track inventory of crops.
- ❖ Order Management: Many need to manage customer orders, including order placement, shipping, billing.
- ❖ Quality Management: May need to manage quality control measures such as checking for food safety, managing product expiration dates.
- ❖ Payment Processing: May need to process payments securely and efficiently.
- ❖ Customer relationship and management.
- ❖ Reporting and Analytics.

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

- ❖ Usability: Software system should be user-friendly and easy to use, especially for farmers who may not have extensive computer skills.
- ❖ Performance: Designed to handle a large amount of data.
- ❖ Security: Should be secure, particularly when processing customer data, payment information and personal information.
- ❖ Scalability: Should be able to accommodate growth, particularly as the farm expands and adds new products.
- ❖ Reliability: Should be reliable and available at all times.
- ❖ Accessibility: Should be accessible to users with disabilities, particularly if it is used by customers who may have vision or hearing impairments.
- ❖ Maintainability: Should be easy to maintain and update
- ❖ Data privacy: Should protect the privacy of user data, particularly in terms of collecting, processing, storing and sharing customer information.

### **Result:**

Thus the requirements were identified and accordingly described.



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**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	4
<b>Title of Experiment</b>	Prepare Project Plan based on scope, Calculate Project effort based on resources and Job roles and responsibilities
<b>Name of the candidate</b>	POLISETTI SRI PAVAN
<b>Team Members</b>	Y.GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	16/02/2023

### **Mark Split Up**

<b>S.No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**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:**

S No	Register No	Name	Role
1	RA2111030010267	Geethika	Lead
2	RA2111030010269	P Sri Pavan	Member

**Requirements:****1.Project Management Plan:**

Focus Area	Details
<b>Integration Management</b>	The model used for this project is <b>RAD Model</b> . The project will be divided into 3 parts: first member will develop the front end and back end portions of the website. The second member will be designing the website layout and the documentation.
<b>Scope Management</b>	<b>Stakeholders:</b> Project lead, developer, project members <b>Project Objectives:</b> To build a E-commerce website to enable the users can order any items online . <b>Schedule Objectives:</b> Project is scheduled to be completed in two months <b>Constraints:</b> Lack of experience, Budget
<b>Quality Management</b>	The website will be tested for glitches and loading time . And the search algorithm will be optimized so that the search results will be displayed in best possible manner.
<b>Resource Management</b>	People: Project team will undertake the task of planning, building and documentation of the project. The developer team will build the front end and back end portions of the project Physical: A good database with necessary facilities will be required to store data.
<b>Stakeholder</b>	The stakeholders are the developers ourselves and t members of the SRM campus.
<b>Communication Management</b>	In website, customers as well as the shopkeepers can communicate using the inbuilt chat .
<b>Risk Management</b>	Potential technical risks will be discussed in every meeting and managed accordingly and will provide security to prevent unauthorised access.

## 1)Risk management:

<b>RISK</b>	<b>Likelihood</b>	<b>Impact</b>	<b>Mitigation</b>
<b>Delayed Project Delivery Due to Technical Issues</b>	Medium	High	Regular system and infrastructure audits, proactive identification of technical issues and their resolution, contingency planning
<b>Security Breach or Data Theft</b>	Medium	High	Implementation of robust security measures such as firewalls, encryption, and access controls, regular security audits and updates,  regular employee training on security best practices
<b>Inadequate User Adoption High</b>	HIGH	Medium	Effective marketing and user outreach strategies, regular user feedback and analysis, continuous improvement of user experience
<b>Regulatory and Compliance Issues</b>	Low	High	Regular compliance audits and updates, staying up-to-date with regulatory requirements, maintaining transparency and accountability
<b>Budget Overruns</b>	Medium	High	Effective cost estimation and monitoring, proactive risk management, contingency planning, ongoing cost optimization
<b>Vendor Dependence</b>	Low	Medium	Diversifying vendor partnerships, effective vendor management and communication, ongoing evaluation and review of vendor performance

## 2)Resource Management:

<b>Resource</b>	<b>Responsibilities</b>	<b>Allocation</b>
<b>Project Manager</b>	Oversees the project, creates project plan and timeline, manages budget and resources, ensures project meets goals and objectives Full-time	Full-time
<b>Business Analyst</b>	Analyzes business requirements, defines functional and non-functional requirements, creates use cases and user stories, supports testing and quality assurance	Full-time



<b>UX/UI Designer</b>	Designs user interface and user experience, creates wireframes and prototypes, conducts user testing and feedback analysis	Full-time
<b>Front-end Developer</b>	Develops the front-end of the web application, implements user interfacedesign, ensures cross-browser compatibility, supports testing and quality assurance	Full-time
<b>Back-end Developer</b>	Develops the back-end of the web application, creates database schema and API endpoints, ensures scalability and performance, supports testing and quality assurance	Full-time
<b>Quality Assurance Engineer</b>	Develops test plans and test cases, executes manual and automated testing, identifies and reports defects,supports continuous integration and delivery	Full-time
<b>Technical Writer</b>	Creates technical documentation, usermanuals, and help files, ensures accuracy and completeness of documentation	Part time
<b>Marketing Specialist</b>	Develops marketing strategy and campaigns, conducts market researchand analysis, creates content and advertising materials, manages social media accounts	Part-time
<b>Customer Support</b>	RepresentativeProvides customer support via email, phone, and chat,resolves issues and complaints, maintains customer satisfaction	Part time

### 3) Quality Management:

<b>Quality Management Component</b>	<b>Description</b>
Project Objective	Clearly defined goals and objectives of the project, including any specific quality-relatedobjectives
Quality Standards	Standards and guidelines for quality management that will be followed throughout the project, such as ISO 9001 or Six Sigma
Quality Planning	Developing a plan to achieve the quality objectives, including identifying the processes,procedures, and resources necessary
Quality Control	Monitoring and controlling processes and outputs to ensure they meet quality standardsand addressing any issues that arise
Quality Assurance	Evaluating overall project performance to ensure that quality objectives are being met andidentifying areas for improvement

Risk Management	Identifying and assessing potential risks that could affect the quality of the project and developing strategies to mitigate or manage them
Training and Development	Providing necessary training and development to team members to ensure they have the knowledge and skills to perform their roles effectively and efficiently
Continuous Improvement	Continuously evaluating and improving processes to enhance quality and increase efficiency

## 2) Estimation

### 2.1. Effort and Cost Estimation :

Project category	Tasks	Effort(in hours)	HOURLY RATE(in INR)	Cost (in INR)
<b>Planning</b>	Project scope and objectives	40	1500	60000
	Requirement analysis	30	2500	75000
	Stakeholder meeting	20	2000	40000
<b>Design and development</b>	development	500	3000	1500000
	Database design	80	2500	200000
<b>Testing and debugging</b>	Identify and fix bugs and issues	120	2000	240000
	Functional and usability testing	80	2000	160000
	Performance testing and optimization	60	2000	120000
<b>Development and launch</b>	deployment	40	1500	60000
	launch	80	2000	160000
		TOTAL		24,71,000

### 2.2. Infrastructure / Resource Cost :

Requirements	Quantity	Cost per quantity	Cost per item
<b>Web hosting</b>	1	20000	20000
<b>Content management system</b>	1	50000	50000

<b>Web design</b>	1	1,00,000	1,00,000
<b>Database</b>	1	20,000	20,000
<b>Security</b>	1	10,000	10,000
<b>Maintenance</b>	1	20,000	20,000
<b>Backup recovery</b>	1	10,000	10,000
<b>total</b>	7		2,30,000

### 2.3.Maintenance And Support:

<b>Resource</b>	<b>Description</b>	<b>Cost per item</b>
<b>Help desk support</b>	Troubleshooting technical problems and providing solution to users	50,000
<b>Bug fixes</b>	Identifying and correcting any errors or issues	20000
<b>Updates and upgrades</b>	Improvements or enhancements made to the software	150000
<b>server maintenance</b>	Maintaining the servers and ensuring backups	50000
<b>database maintenance</b>	Ensuring the database, accuracy and security	30000
<b>security and updates</b>	Measure and actions taken to ensure the website security	50000
	<b>total</b>	<b>3,50,000</b>

## 3.Project Team Management

### 3.1. Identification Team Members:

<b>Name</b>	<b>Role</b>	<b>Responsibilities</b>
Geethika	Key Business user, Technical lead, Project Manager	Provide clear Business and user Requirements, Project planning and management, risk management.
P.Sri Pavan	Mobile App Developer	Coding, Testing, Debugging, App Deployment , Version control

### 3.2.RESPONSIBILITIES ASSIGNMENT MATRIX:

Role/Task	Project manager	Business Analyst	Mobile App Developer	Backend Developer	Technical Writer	Customer Support Representative
Project Planning	R	C	I	I	I	I
Business requirements analysis	I	R	I	I	I	I
Mobile App Development	I	I	R	I	I	I
Backend Development	I	I	I	R	I	I
Technical Documentation	I	C	I	I	R	I
Customer Support	I	I	I	I	I	R

A	Accountable
R	Responsible
C	consult
I	inform

#### Reference:

1. <https://www.pmi.org/>
2. <https://www.projectmanagement.com/>
3. <https://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/ti-it/ervcpgpm-dsfvpmpt-eng.html>

#### Result:

Thus, the Project Plan was documented successfully.



**School of Computing**  
**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	5
<b>Title of Experiment</b>	Prepare Work breakdown structure, Timeline chart, Risk identification table
<b>Name of the candidate</b>	POLISETTI SRI PAVAN
<b>Team Members</b>	Y.GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	23/02/2023

**Mark Split Up**

<b>S.No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**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	RA2111030010267	GEETHIKA	Lead
2	RA2111030010269	P.SRI PAVAN	Member

## WORK BREAKDOWN STRUCTURE (WBS) :

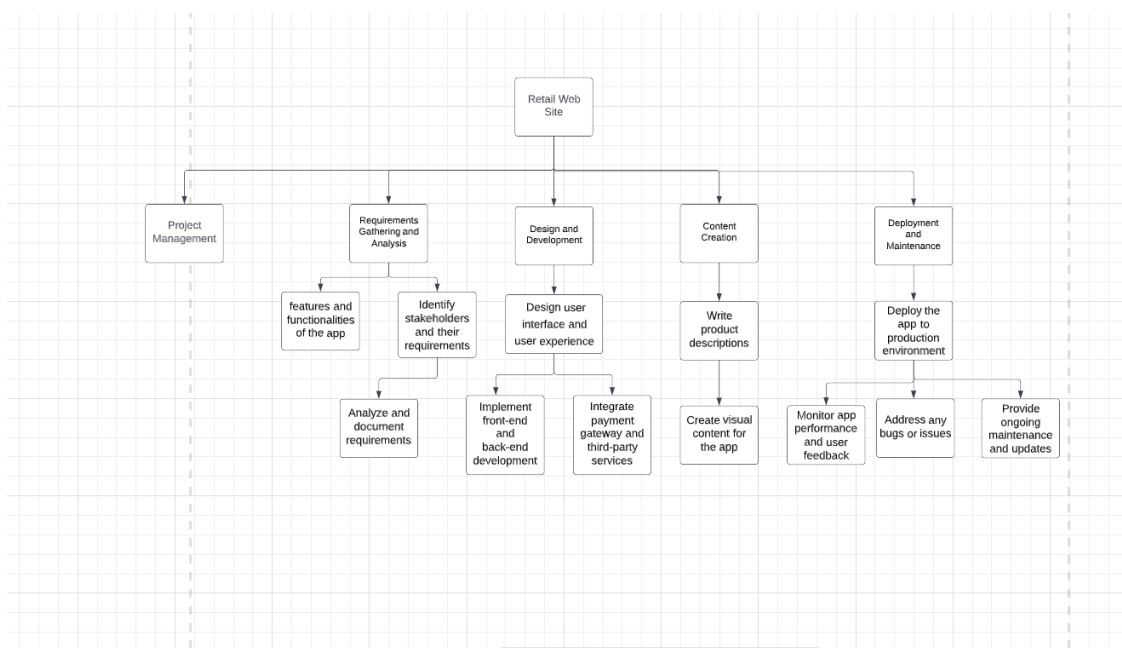


Fig 5.1 Work breakdown structure

### ➤ 1 Project Management :

### ➤ 2 Requirements Gathering and Analysis

2.1 Determine features and functionalities of the app

2.2 Identify stakeholders and their requirements

2.3 Analyze and document requirements

### ➤ 3 Design and Development

3.1 Design user interface and user

experience 3.3

3.2 Implement front-end and back-end development

3.3 Integrate payment gateway and third-party services

## ➤ 4 Content Creation

4.1 Write product descriptions

4.2 Create visual content for the app

4.3 Develop marketing content for social media and email campaigns

## ➤ 5 Deployment and Maintenance

5.1 Deploy the app to production environment

5.2 Monitor app performance and user feedback

5.3 Address any bugs or issues

5.4 Provide ongoing maintenance and updates

### TIMELINE-GANTT CHART:

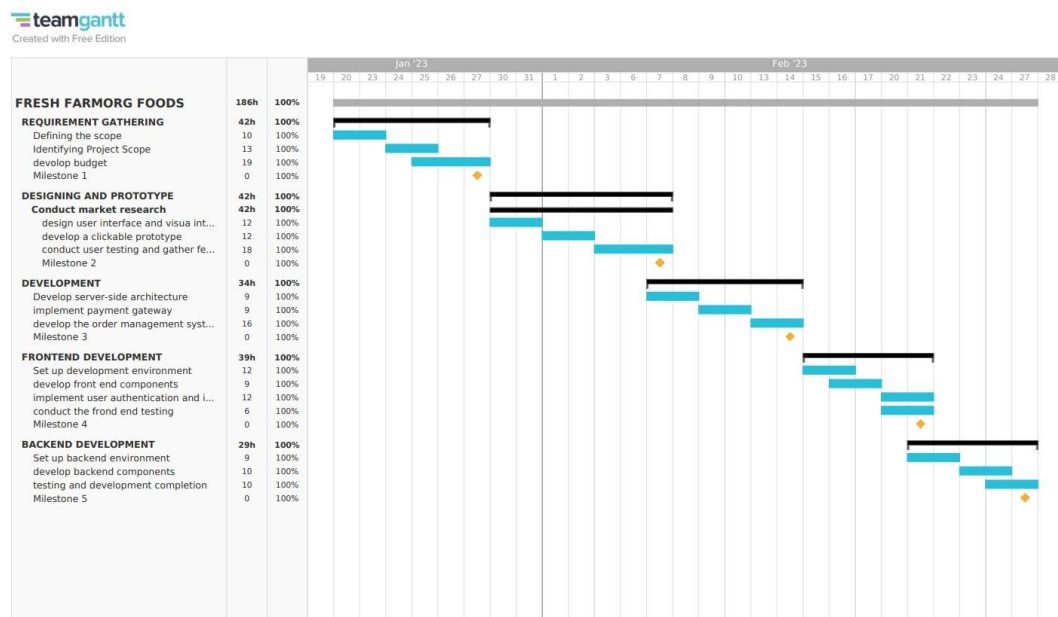


Fig 5.2 Timeline-gantt chart

## RISK ANALYSIS – SWOT :



Fig 5.3 Risk Analysis – Swot

## RMMM:

Response	Strategy	Examples
<b>Avoid</b>	avoidance is a strategy wherethe project team takes action to remove the Risk threat of the risk or protect the impact.	<ul style="list-style-type: none"> <li>• Having regular meetings to mark the progress.</li> <li>• Extending the scheduled time.</li> <li>• Making regular changes according to the problems faced.</li> </ul> <p>○ Reducing/removing scope.</p>
<b>Transfer</b>	Risk transference involves shifting or transferring their threat and impact to a third party. Rather transfer the responsibility and ownership.	<ul style="list-style-type: none"> <li>• Purchasing insurance.</li> <li>• Warranties.</li> <li>• Contract insurance(lumpsum)</li> </ul>



Accept	Risk acceptance means the team acknowledges the risk and its potential impact, but decides not to take any preemptive action to prevent it, it is dealt with only if it Occurs	<ul style="list-style-type: none"> <li>• Contingency reserve budgets</li> <li>• Management schedule float</li> <li>• Event contingency</li> </ul>
Mitigate	Risk mitigation is a strategy where by the project team takes action to reduce the probability of the risk occurring. This does not risk or potential impact, but rather reduces the likelihood of it becoming real.	<ul style="list-style-type: none"> <li>• Reducing the complexity of the project.</li> <li>• Regular Testing.</li> <li>○ Transferring high risk activities to qualified individuals.</li> </ul>

### **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**

<b>Experiment No</b>	6
<b>Title of Experiment</b>	Design a System Architecture, Use Case and Class Diagram
<b>Name of the candidate</b>	POLISETTI SRI PAVAN
<b>Team Members</b>	Y.GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	02/03/2023

## **Mark Split Up**

<b>S.No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

## **Aim**

To Design a System Architecture, Use case and Class Diagram

## **Team Members:**

Sl No	Register No	Name	Role
1	RA2111030010267	Geethika	Lead
2	RA2111030010269	Poliseti Sri pavan	Member

## **SYSTEM ARCHITECTURE FOR FRESH FARMORG FOODS:**

The system architecture for a fresh farm organic food organization would involve a combination of technologies and software applications.

### **1.E-commerce Platform:**

The e-commerce platform is the main interface for customers to browse and purchase products online. Examples of e-commerce platforms used by fresh farm organic food companies include Shopify, WooCommerce, and Magento.

### **2.Inventory Management System:**

The inventory management system helps track the availability of products and ensures that there is enough inventory to fulfill customer orders. Examples of inventory management systems used by fresh farm organic food companies include Zoho Inventory, TradeGecko, and DEAR Inventory.

### **3.Logistics and Delivery System:**

The logistics and delivery system helps manage the shipping and delivery of products to customers. Examples of logistics and delivery systems used by fresh farm organic food companies include Dunzo, and FedEx, etc

### **4.Data Analytics and Reporting:**

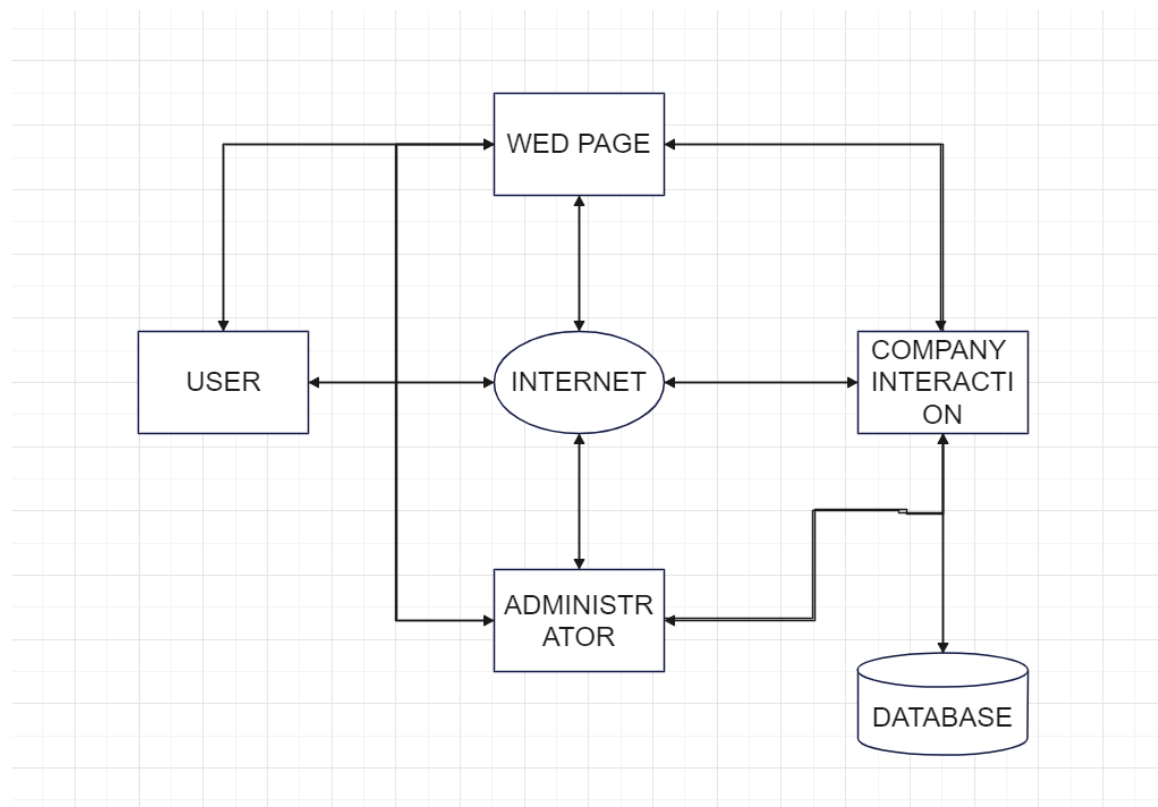
The data analytics and reporting system provides insights into customer behavior,

sales trends, and inventory levels. Examples of data analytics and reporting systems used by fresh farm organic food companies include Google Analytics, Mixpanel, and Tableau.

### **5. Cloud Infrastructure:**

All of these components are hosted on cloud infrastructure, allowing for scalability and flexibility. Examples of cloud infrastructure providers used by fresh farm organic food companies include Amazon Web Services (AWS), Microsoft Azure, and GoogleCloud Platform.

### **SYSTEM ARCHITECTURE:**



**Fig 6.1 System Architecture**

## USE CASE DIAGRAM:

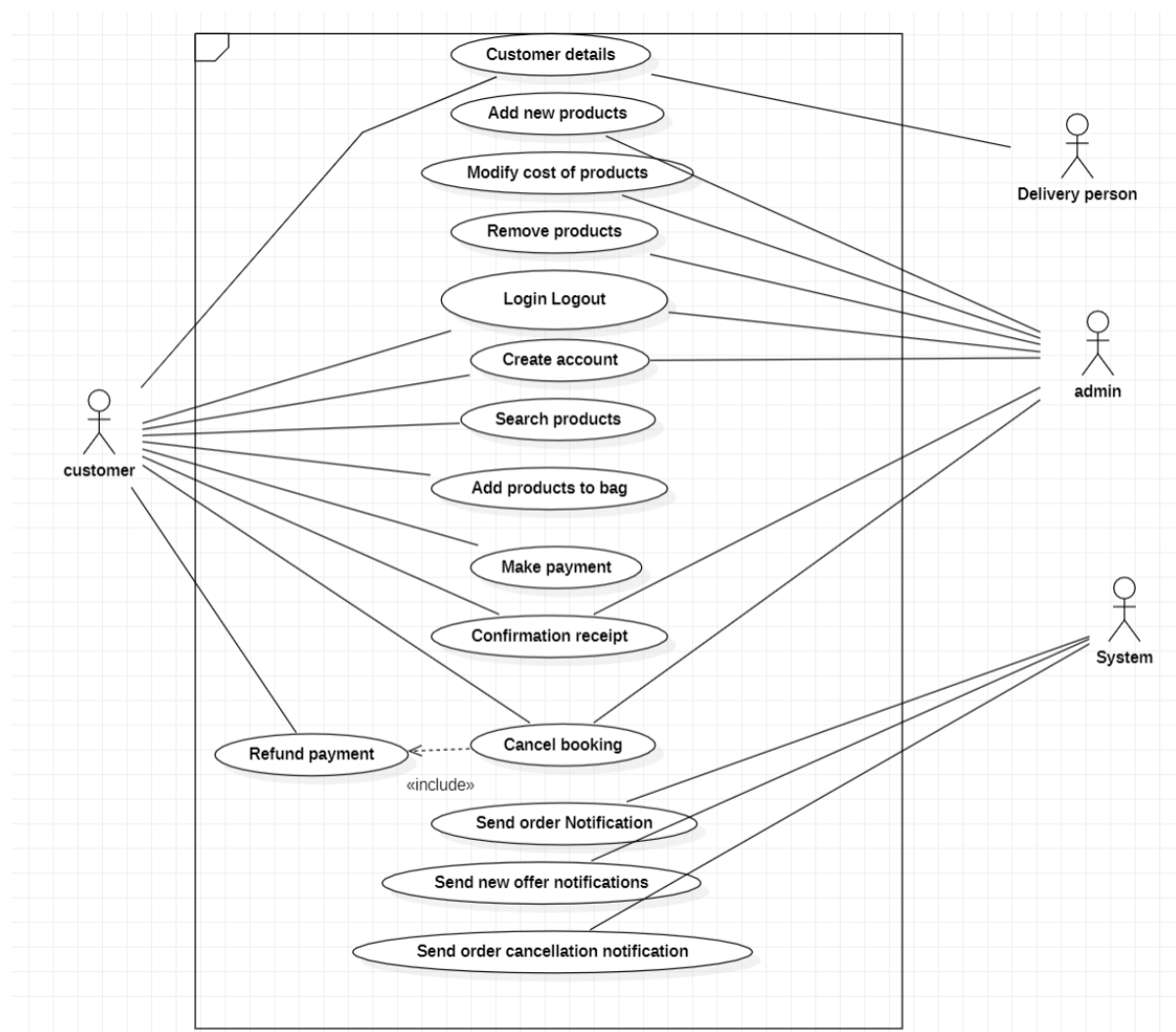


Fig 6.2 Use Case Diagram

## CLASS DIAGRAM:

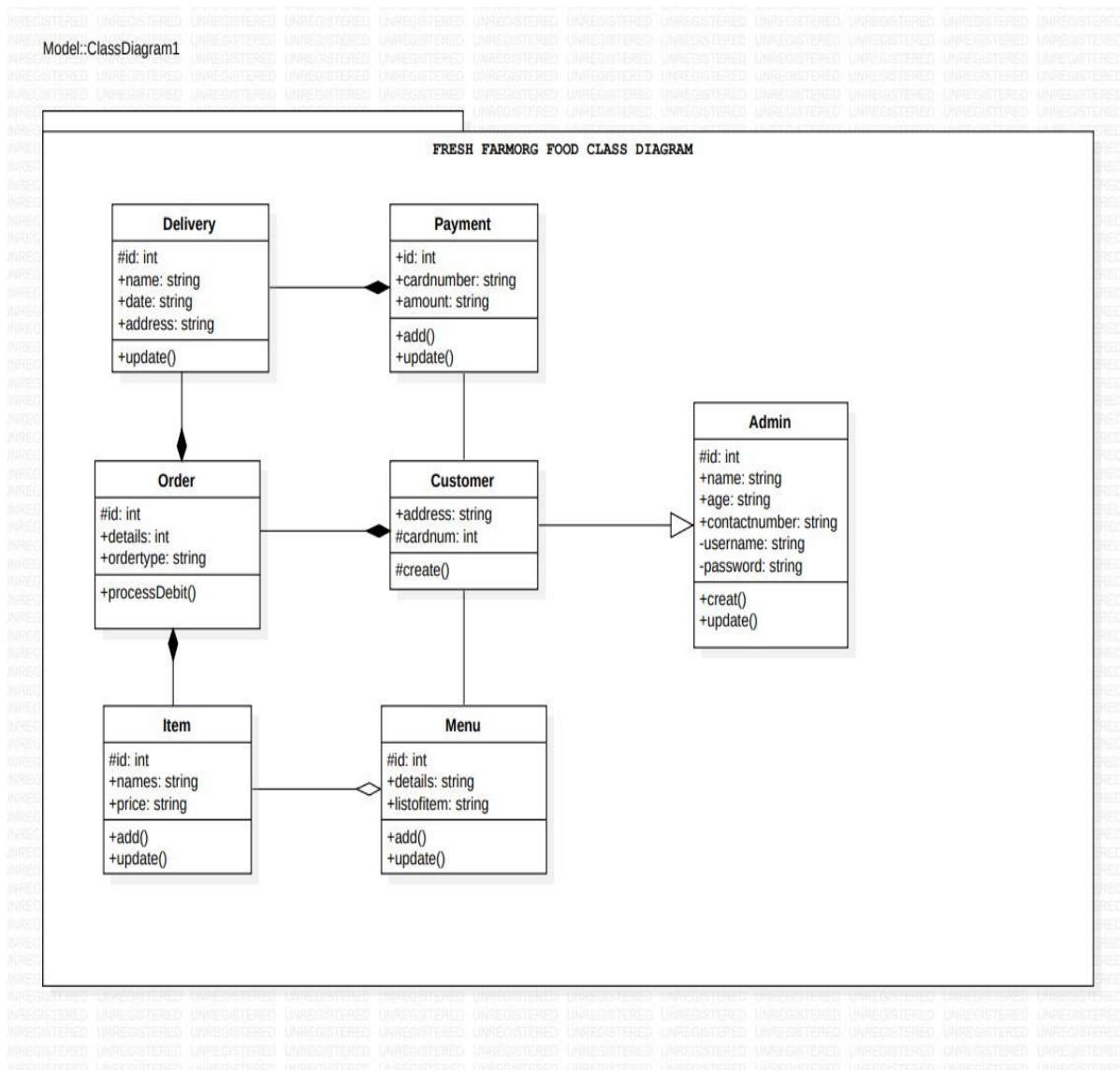


Fig 6.3 Class Diagram

## Result:

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



**School of Computing**  
**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	7
<b>Title of Experiment</b>	Design a Entity relationship diagram
<b>Name of the candidate</b>	POLISETTI SRI PAVAN
<b>Team Members</b>	Y.GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	10/03/2023

**Mark Split Up**

<b>S. No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

## Aim

To create the Entity Relationship Diagram

## Team Members:

S No	Register No	Name	Role
1	RA2111030010268	Y.GEETHIKA	LEAD
2	RA2111030010269	P.SRI PAVAN	Member

<ER Diagram >

Result:

Thus, the entity relationship diagram was created successfully.

## \*/ ER Diagram, Notation and Example

### What is ER Diagram?

- ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.
- ER Diagrams contain different symbols that use rectangles to represent entities, ovals to define attributes and diamond shapes to represent relationships.
- At first look, an ER diagram looks very similar to the flowchart. However, ER Diagram includes many specialized symbols, and its meanings make this model unique. The purpose of ER Diagram is to represent the entity framework infrastructure.

### What is ER Model?

- ER Model stands for Entity Relationship Model is a high-level conceptual data model diagram. ER model helps to systematically analyze data requirements to produce a well- designed database.
- ER Model represents real-world entities and the relationships between them. Creating an ER Model in DBMS is considered as a best practice before implementing your database.
- ER Modeling helps you to analyze data requirements systematically to produce a well- designed database. So, it is considered a best practice to complete ER modeling before implementing your database.

### Why use ER Diagrams?

Here, are prime reasons for using the ER Diagram

- Helps you to define terms related to entity relationship modeling
- Provide a preview of how all your tables should connect, what fields are going to be on each table



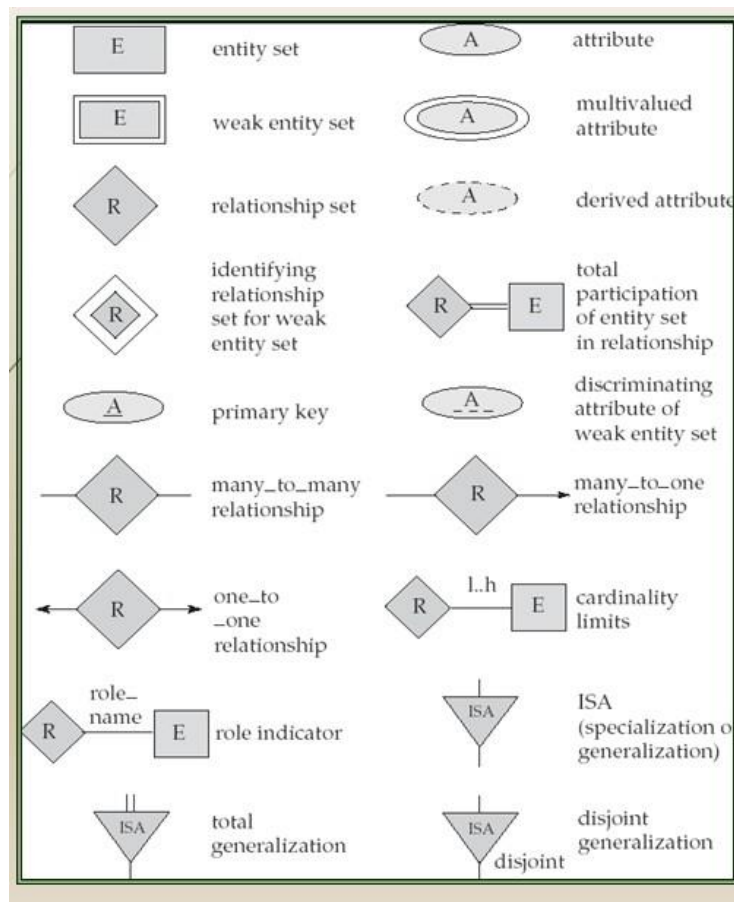
- Helps to describe entities, attributes, relationships
- ER diagrams are translatable into relational tables which allows you to build databases quickly
- ER diagrams can be used by database designers as a blueprint for implementing data in specific software applications
- The database designer gains a better understanding of the information to be contained in the database with the help of ERP diagram
- ERD Diagram allows you to communicate with the logical structure of the database to users

### Components of the ER Diagram

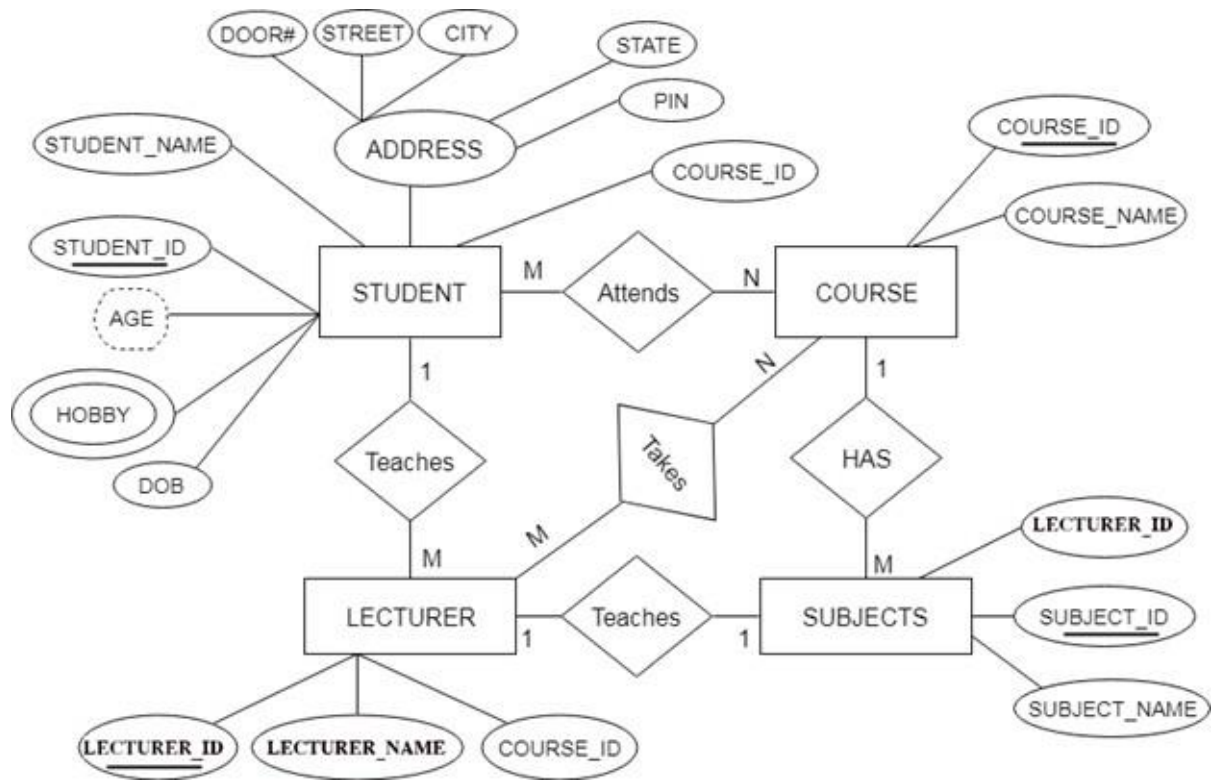
This model is based on three basic concepts: Entities, Attributes, Relationships

### ER Diagram – Notations

- Rectangles represent entity sets.
- Diamonds represent relationship sets.
- Lines link attributes to entity sets and entity sets to relationship sets.
- Ellipses represent attributes
- Double ellipses represent multivalued attributes.
- Dashed ellipses denote derived attributes.
- Underline indicates primary key attributes



## ER Diagram of University Database



## ADDITIONAL NOTES

- A database can be modeled as a collection of entities, relationship among entities.
- An entity is an object that exists and is distinguishable from other objects. Example: specific person, company, event, plant
- Entities have attributes.  
Example: people have names and addresses
- An entity set is a set of entities of the same type that share the same properties. Example: set of all persons, companies, trees, holidays
- Express the number of entities to which another entity can be associated via a relationship set.
- Most useful in describing binary relationship sets.
- We express cardinality constraints by drawing either a directed line ( $\rightarrow$ ), signifying “one,” or an undirected line ( $\text{—}$ ), signifying “many,” between the relationship set and the entity set.
- An entity is represented by a set of attributes, that is descriptive properties possessed by all members of an entity set.  
Example: customer = (customer-id, customer-name, customer-street, customer-city) loan = (loan-number, amount)
- Domain – the set of permitted values for each attribute
- Attribute types:
  1. Simple and composite attributes.
  2. Single-valued and multi-valued attributes

E.g. multivalued attribute: phone-numbers

3. Derived attributes-Can be computed from other attributes

E.g. age, given date of birth

### **Cardinality**

- For a binary relationship set the mapping cardinality must be one of the following types:

1. One to one

A customer is associated with at most one loan via the relationship borrower. A loan is associated with at most one customer via borrower

2. One to many

A loan is associated with at most one customer via borrower, a customer is associated with several (including 0) loans via borrower

3. Many to one

A loan is associated with several (including 0) customers via borrower, a customer is associated with at most one loan via borrower

4. Many to many

A loan is associated with several (including 0) customers via borrower, a customer is associated with several loans (including 0) via borrower

### **Weak Entity Set**

- An entity set that does not have a primary key is referred to as a weak entity set and represented by double outlined box in E-R diagram.

Example : Consider the entity set payment which got three attributes : payment\_number, payment\_date and payment\_amount. Payment numbers are sequential starting from 1 generally separately for each loan. Although each payment entity is distinct, payments for different loans may share the same payment number. Thus this entity set does not have a primary key.

### **Discriminator**

- The discriminator (or partial key) of a weak entity set is the set of attributes that distinguishes among all the entities of a weak entity set

Example: discriminator of weak entity set payment is the attribute payment\_number since for each loan a payment number uniquely identifies one single payment for that loan.

### **Specialization-Generalization-ISA**

- E-R model provides means of representing these distinctive entity groupings

- Process of designating subgroupings within an entity set is called specialization depicted by triangle component labelled ISA ("is a")

- Bottom up design process in which multiple entity sets are synthesized into higher level entity set - Generalization

- ISA relationship may also be referred to as superclass-subclass relationship

- Higher and lower level entity sets are designated by the terms superclass and subclass.

- Specialization and generalization are simple inversions of each other; they are represented in an E-R diagram in the same way.

### **Total & Partial Participation**

- Total participation (indicated by double line): every entity in the entity set participates in at least one relationship in the relationship set

E.g. participation of loan in borrower is total, every loan must have a customer associated to it via borrower

- Partial participation: some entities may not participate in any relationship in the relationship set

Example: participation of customer in borrower is partial

### Cardinality limits

- Cardinality limits can also express participation constraints
- Minimum and maximum cardinality is expressed as l..h where l is the minimum and h is the maximum cardinality
- Minimum value of 1 indicates total participation of entity set in relationship set
- Maximum value of 1 indicates entity participates in atmost one relationship set.
- Maximum value of \* indicates no limit

### Role indicator

- Entity sets of a relationship need not be distinct
- The labels “manager” and “worker” are called roles; they specify how employee entities interact via the works-for relationship set.
- Roles are indicated in E-R diagrams by labeling the lines that connect diamonds to rectangles.
- Role labels are optional, and are used to clarify semantics of the relationship

### Disjoint Generalization

- Disjointness constraint requires that an entity belong to more than one lower level entity set. Example: account entity can satisfy only one condition for account\_type attribute ; entity can either be savings or chequing account but not both.

## ENTITY RELATIONSHIP DIAGRAM (E-R DIAGRAM):

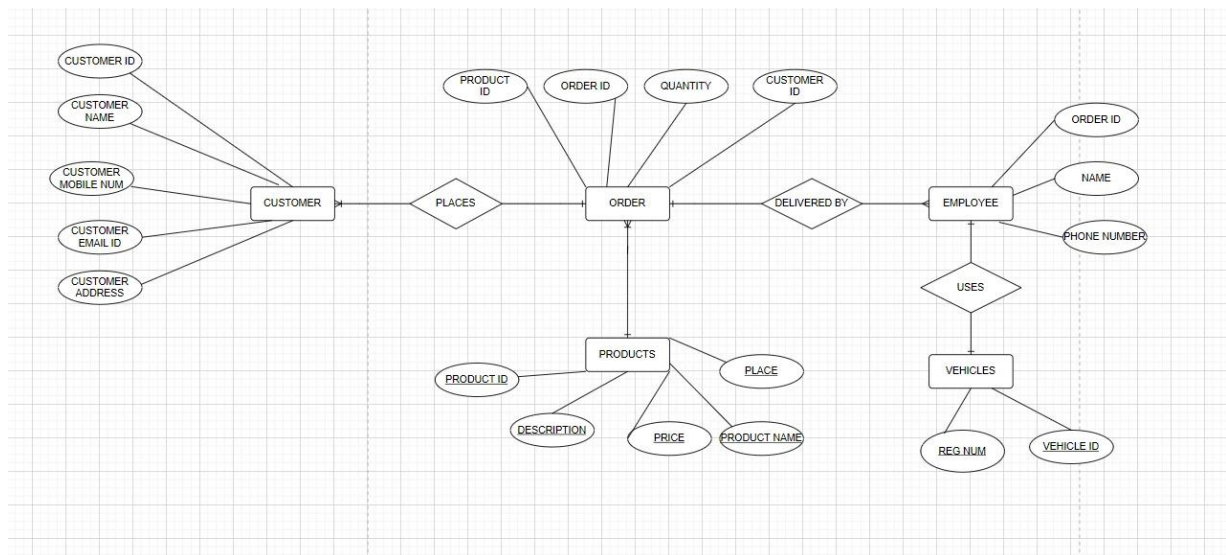


Fig 7.1 Entity Relationship Diagram (E-R Diagram]

**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**

<b>Experiment No</b>	8
<b>Title of Experiment</b>	Develop a Data Flow Diagram (Process-Up to Level 1)
<b>Name of the candidate</b>	P. SRI PAVAN
<b>Team Members</b>	Y.GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	17/03/2023

**Mark Split Up**

<b>S. No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

## Aim

To develop the data flow diagram up to level 1 for the FRESH FARM FOOD

## Team Members:

S No	Register No	Name	Role
1	RA2111030010268	Y. GEETHIKA	LEAD
2	RA2111030010269	P. SRI PAVAN	Member

## DATA FLOW DIAGRAM LEVEL 0:

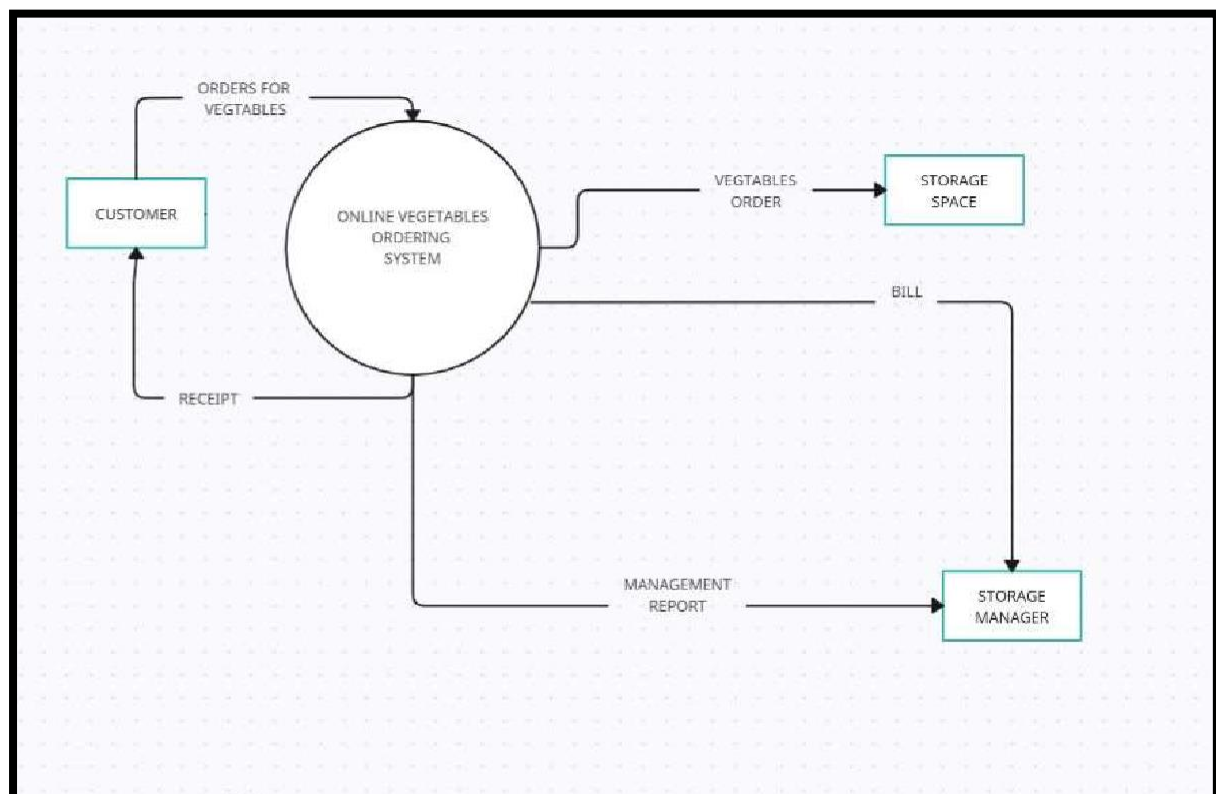


Fig 8.1 Data Flow Diagram Level 0

## Explanation of the above level 0 data flow diagram:

The system has five main components: Customer, Website, Order Processing, Payment Processing, and Shipping.

The Customer component interacts with the Website component, which handles all user interactions such as browsing products, adding them to cart, and checkout process.

The Order Processing component verifies the order information and calculates the total cost of the order.

The Payment Processing component processes the payment information provided by the customer and confirms payment has been made successfully.

The Shipping component processes the order and dispatches the product to the customer's specified address.

Finally, the Customer Confirmation component sends a confirmation message to the customer after their order has been processed and shipped.

## DATA FLOW DIAGRAM LEVEL1:

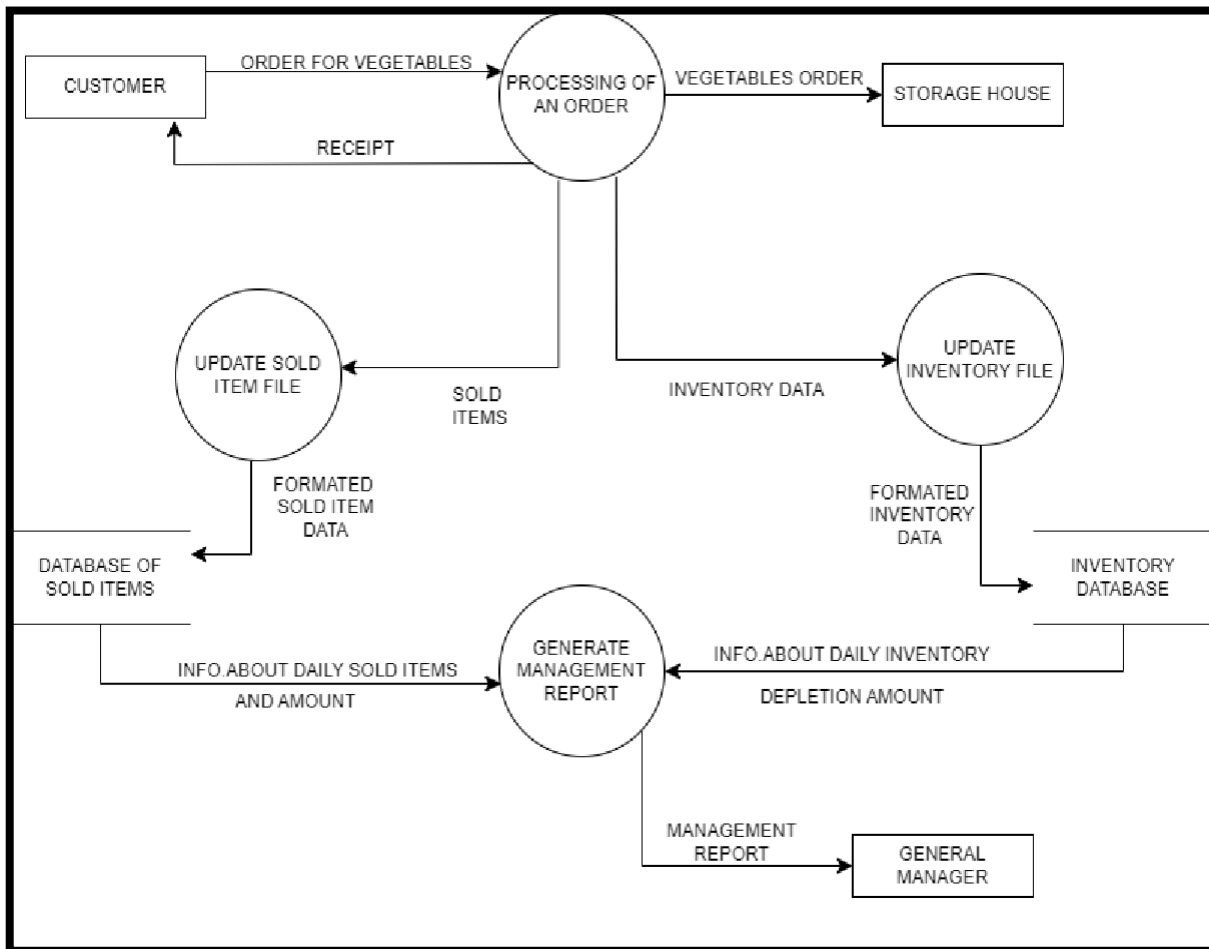


Fig 8.2 Data Flow Diagram Level1

### Explanation of the above level 1 data flow diagram:

The Order Processing component has four sub-components: Add to Cart, Remove Item, Update Cart, and Clear Cart.

The Add to Cart sub-component adds a selected item to the customer's cart.

The Remove Item sub-component removes a specific item from the customer's cart. The Update Cart sub-component updates the quantity of items in the customer's cart. The Clear Cart sub-component removes all items from the customer's cart.

The Process Order and Check Availability of Product sub-component verifies the order information, checks the availability of the product, calculates the total cost of the order, and ensures the customer's order is valid.

The Generate Order Confirmation sub-component generates a confirmation message to the customer after their order has been process

### Result:

Thus, the data flow diagrams have been created for the FRESH FARM FOOD.



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**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	9
<b>Title of Experiment</b>	Design a Sequence and Collaboration Diagram
<b>Name of the candidate</b>	P.SRI PAVAN
<b>Team Members</b>	Y. GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	27/03/2023

**Mark Split Up**

<b>S. No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**



## Aim

To create the sequence and collaboration diagram for the security solutions limited.

## Team Members:

S No	Register No	Name	Role
1	RA2111030010268	Y.GEETHIKA	LEAD
2	RA2111030010269	P.SRI PAVAN	Member

## SEQUENCE DIAGRAM:

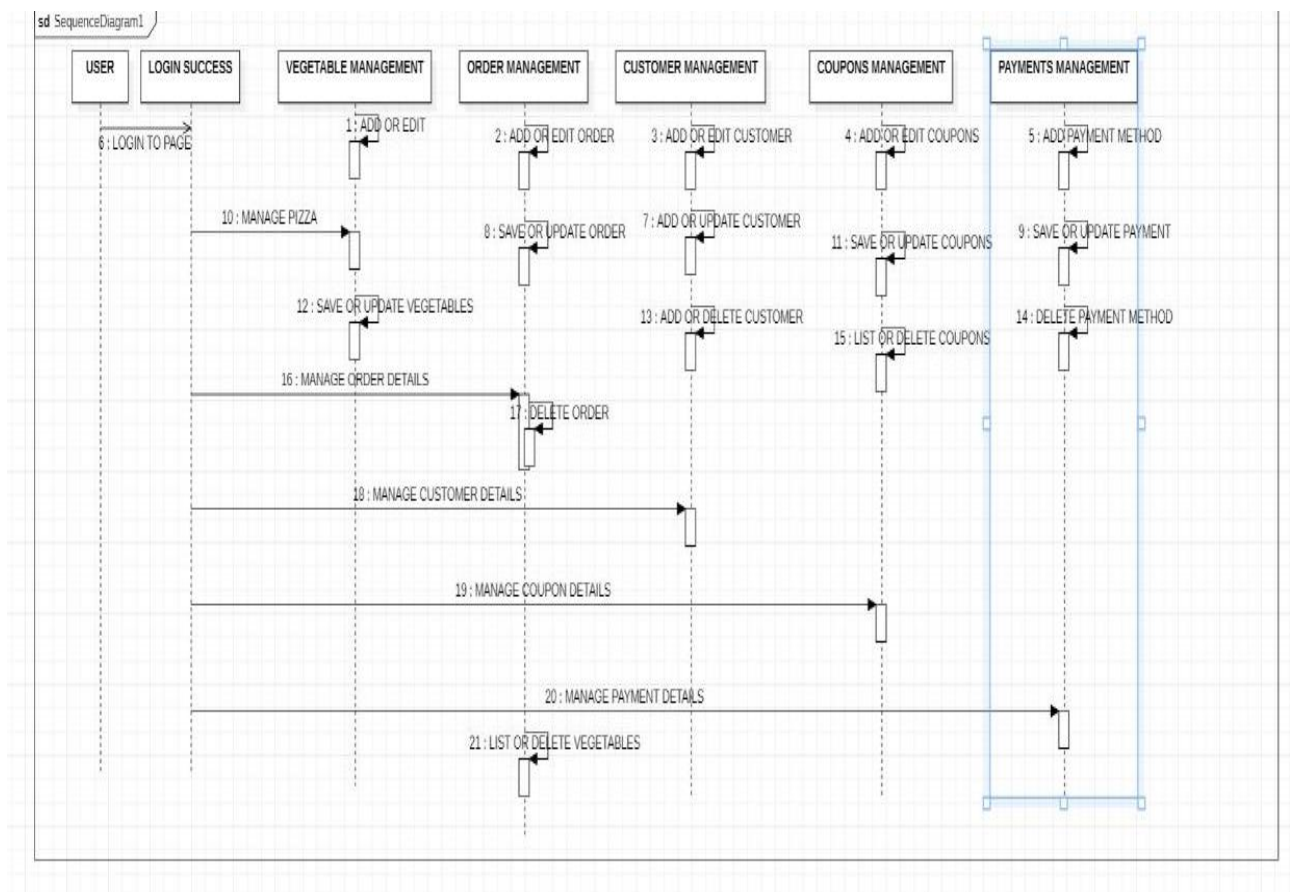


Fig 9.1 Sequence Diagram

## COLLABORATION DIAGRAM:

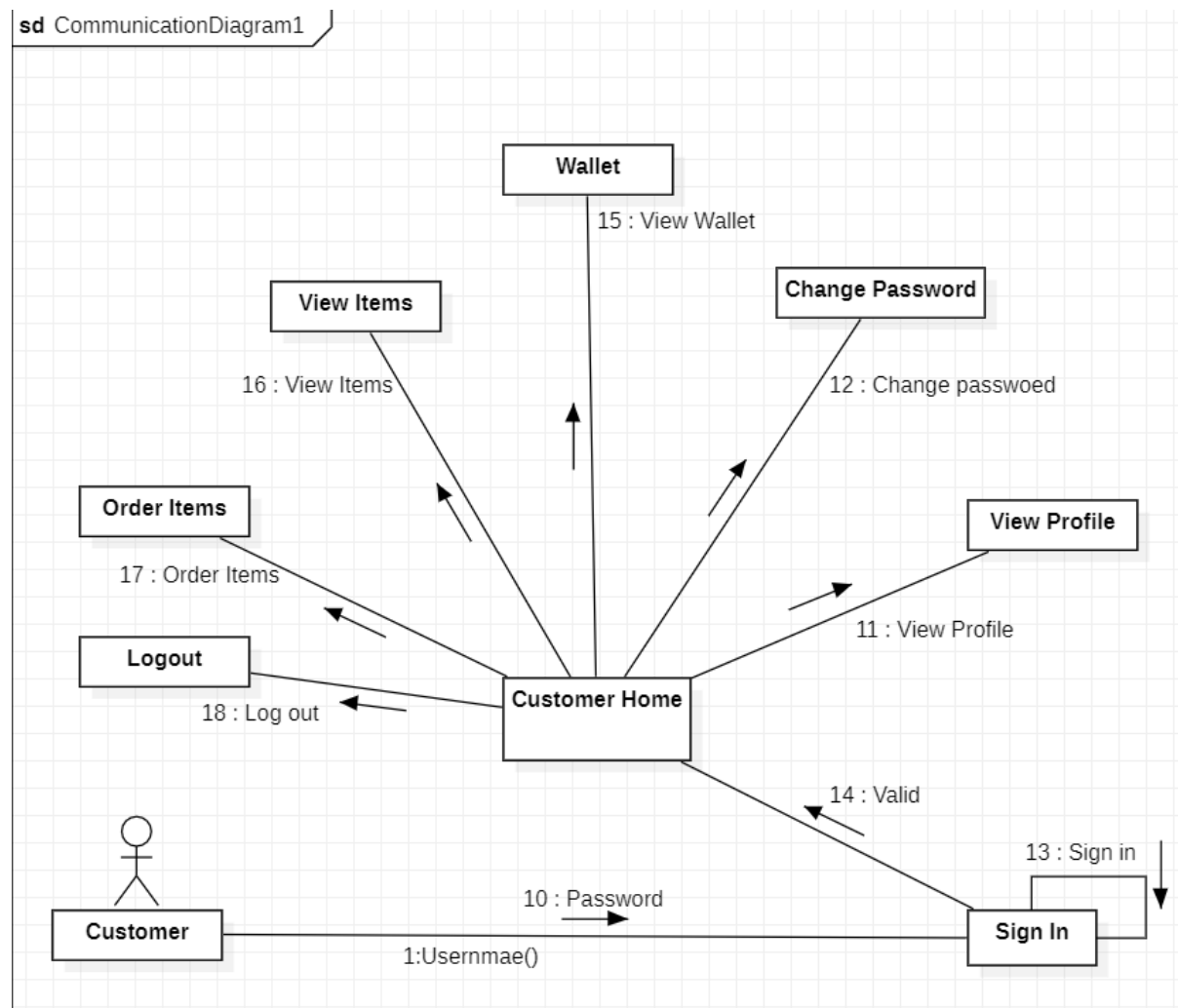


Fig 9.2 Collaboration Diagram

## Result:

Thus, the sequence and collaboration diagrams were created for the Security solutions limited.



**School of Computing**  
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**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	10
<b>Title of Experiment</b>	Develop a Testing Framework/User Interface
<b>Name of the candidate</b>	POLISETTI SRI PAVAN
<b>Team Members</b>	Y.GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	11/04/2023

**Mark Split Up**

<b>S. No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

## **Aim**

To develop the testing framework and UI framework for the **Farm Fresh FOOD**

## **Team Members:**

<b>S No</b>	<b>Register No</b>	<b>Name</b>	<b>Role</b>
<b>1</b>	<b>RA2111030010267</b>	<b>GEETHIKA</b>	<b>Rep/Member</b>
<b>2</b>	<b>RA2111030010269</b>	<b>P.SRI PAVAN</b>	<b>Member</b>

## **Scope:**

The scope of testing the software applications for the Farm Fresh Food project is to ensure that the system functions correctly and meets the requirements of the users and stakeholders. The testing framework will cover all aspects of the system, including the functionality, performance, usability, and security aspects. The user interface will be designed to provide a user-friendly and intuitive experience for the users and ensure the usability of the system. This includes testing the system's ability to handle different types of menus, process payments, and generate reports.

## **Objective:**

The main objective of developing a testing framework/user interface for the Farm Fresh Food project is to ensure that the system is of high quality, reliable, and user-friendly. Specifically, the objectives are:

1. To ensure that the system functions correctly and meets the requirements of the users and stakeholders.
2. To identify and fix any defects or issues in the system before it is deployed to production.
3. To ensure that the system performs well under various scenarios and user loads.
4. To ensure that the system is secure and protected against unauthorized access and attacks.
5. To design and implement a user-friendly and intuitive interface that meets the needs of the users and stakeholders.

## **Approach:**

The approach for developing a testing framework/user interface for the Farm Fresh Food project will involve the following steps:

1. Requirements gathering: Identify the requirements for the testing framework and user interface based on the functional and non-functional requirements of the system.
2. Design and development: Create a design for the testing framework and user interface, including the test cases, test suites, and user interface elements. Develop the testing framework and user interface using appropriate tools and technologies.
3. Testing and validation: Conduct testing on the system using the testing framework and validate the user interface to ensure it meets the requirements of the users and stakeholders.
4. Deployment and maintenance: Deploy the testing framework and user interface in a testing environment, monitor the performance and usability of the system, and maintain the testing framework and user interface to ensure their sustainability and effectiveness.

## Types of Testing, Methodology, Tools:

### Black Box Testing:

The Black Box Test is a test that only considers the external behavior of the system and the internal workings of the software are not taken into account. A tester provides input and observes the output generated by the system under test. Black box testing can be applied to three main types of tests: functional, non-functional, and regression testing.

1. **Functional testing:** This type of testing is done to ensure that the system meets the functional requirements specified in the project scope. It includes testing the system's features, user interfaces, and workflows to ensure that they perform as expected.
2. **Non-functional testing:** Non-functional testing is performed to test the characteristics of a software system, such as its performance, reliability, security, usability, compatibility, and scalability.
3. **Regression testing:** This type of testing is done to ensure that changes to the system do not introduce new defects or issues. It includes testing the system's existing features and functionality after changes are made to the system.

### White Box Testing:

White-box testing is a method of software testing that test internal structures or workings of an application, as opposed to its functionality. In white box testing an internal perspective of the system, as well as programming skills, are used to design test cases.

Testers can review the code and verify that it follows the expected design patterns and best practices. They can also perform unit testing to ensure that each individual component of the system works as expected. This type of testing can ensure that the system is well-designed, efficient, and maintainable.

### MODULES:

MODULE 1 consists of the list of products.

MODULE 2 consists of the payment module.

MODULE 2 consists of the filter module.

## Types of Testing, Methodology, Tools:

Category	Methodology	Tools Required
Functional testing	White Box testing	PyUnit
Non-Functional testing	Performance testing	Apache JMeter
	Security testing	Nessus
	Usability testing	User Zoom

### Result:

Thus, the testing framework/user interface framework has been created for the farm fresh food



**School of Computing**  
**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	11
<b>Title of Experiment</b>	Test Cases & Reporting
<b>Name of the candidate</b>	POLISETTI SRI PAVAN
<b>Team Members</b>	Y.GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	19/04/2023

**Mark Split Up**

<b>S. No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

**Aim:**

To develop the test cases manual with manual test case report for the **ONLINE FRESH FARM FOOD DELIVERY SYSTEM.**

**Team Members:**

S No	Register No	Name	Role
1	RA2111030010268	Geethika	Rep
2	RA2111030010269	P.Sri Pavan	Member

**Test Case:****1.Test Scenario:[CATEGORIES FUNCTION]**

Verify that the categories feature of the online FreshFarmFood delivery system displays all available categories correctly.

**Preconditions:** The user has access to the internet and the online FreshFarmFood delivery system website.

**Execution steps:**

- Open the online FreshFarmFood delivery system website/application.
- Navigate to the categories feature.
- Verify that all available categories are displayed correctly.
- Verify that the category images are displayed clearly.
- Verify that the names of the categories are spelled correctly.
- Verify that the categories are properly aligned and formatted.
- Verify that the categories are listed in alphabetical order.
- Verify that the categories are clickable and lead to the correct products.

**Expected Outcome:**

All available categories should be displayed correctly with clear images, correct spelling, proper alignment, alphabetical order, and clickable links that lead to the correct products. **Remarks:**

The categories feature of the online FreshFarmFood delivery system was tested successfully with no issues found

**2.Test Scenario: [SEARCH FUNCTIONALITY]**

Search functionality should work properly for the online FreshFarmFood delivery system.

**Execution Steps:**

- Navigate to the homepage of the online FreshFarmFood delivery system.
- Click on the search bar.
- Type the name of a vegetable that is available on the website.
- Press enter or click on the search button.
- Verify that the search results are displayed.
- Repeat steps 2-5 for different vegetable names.
- Type a vegetable name that is not available on the website.
- Press enter or click on the search button.
- Verify that the search results indicate that the vegetable is not found.

**Expected Outcome:**

The search functionality should work properly.

The search results should display all the available vegetables that match the search criteria. If the vegetable is not available on the website, the search results should indicate that the vegetable is not found.

**Remarks:**

The search functionality for the online FreshFarmFood delivery system works as expected.

**3.Test scenario:[ORDER TRACKING]**

This test case is to ensure that the customers are able to track their orders on the online FreshFarmFood delivery system.

**Pre-conditions:**

The customer has placed an order on the online FreshFarmFood delivery system. The customer has received an order confirmation with a unique order ID. The order status is "processing" or "shipped".

**Test Steps:**

- Navigate to the online FreshFarmFood delivery system's homepage.
- Click on the "Order Tracking" link.
- Enter the unique order ID received in the order confirmation email.
- Click on the "Track Order" button.
- Verify that the current order status is displayed.
- Verify that the estimated delivery date is displayed.
- Verify that the shipping carrier's name and tracking number are displayed.



- Verify that the customer's shipping address is displayed.

**Expected Result:**

The customer should be able to track their order and view the current status, estimated delivery date, shipping carrier's name and tracking number, and the customer's shipping address.

**Actual Result:**

The customer is unable to track their order and view the current status, estimated delivery date, shipping carrier's name and tracking number, and the customer's shipping address. The system displays an error message "Order not found".

**Functional Test Cases:**

Test ID	Test Scenario	Test cases	Execution Steps	Execution Outcomes	Actual Outcome	Status/Remarks
FT-01	User-Registration	Successful Registration	1. Navigation to the registration page. 2. Enter valid details and click on the Register button	User should be successfully registered and redirected to the login page.	User is successfully registered and redirected to the login page	Fail
FT-02	User login	Successful Login	1. Navigation to the Login page. 2. Enter valid Login credentials and click on the Login button.	User should be successfully registered and redirected to the dashboard.	User is successfully registered and redirected to dashboard.	Fail
FT-03	Search Function	Search for Vegetables	1. Navigation to the Search bar. 2. Select the name of the vegetable and click on the search button	Search results to be displayed with the relevant Vegetables.	Search results are displayed with the relevant vegetables.	Pass

FT-04	Add to cart	Add Vegetables to cart	1. Navigate to the vegetable page. 2. Select the desired vegetable and click on the add to the cart button.	The selected vegetables should be added to the cart.	The selected vegetables are added to the cart.	Pass
FT-05	Checkout process	Complete Checkout process	1. Navigation to the checkout page. 2. Enter valid details and click on the place order button.	The order should be successfully placed and the user should receive an order confirmation.	The order is successfully placed and the user receives an order confirmation.	Pass

### **Non-Functional Test Cases:**

Test ID	Test Scenario	Test Cases	Execution Steps	Expected Outcomes	Actual Outcomes	Status/Remarks
NF-01	Usability	Navigation	Navigation through the website using different device and browsers.	Navigation should be smooth and consistent across all devices and areas	Navigation is smooth and consistent	Pass
NF-02	Performance	Response Time	Measure the response time of the website on different devices and browsers.	The website should load within 2-3 seconds	The Website takes more than 3 seconds to load on same devices	Fail-Needs Improvement
NF-03	Security	Login Authentication	Attempt to login using incorrect credentials	-The website should not allow access with incorrect credentials	The website denies access with incorrect credentials	Pass
NF-04	Compatibility	Browser Compatibility	Test Website functionally on different browsers such as chrome Firefox safari.	Website should be compatible with major browsers.	Website is compatible with major browsers.	Pass

NF-05	Reliability	Server Downtime	Simulate server downtime and measure the time it takes for the website to recover	Website should recover within a reasonable time frame	Website recovers quickly from serve downtime	Pass
		Load Testing	Simulate a large number of users accessing the website simultaneously	The website should be able to handle the load without crashing	The website slows down and some features become un-Responsive with a huge traffic	Pass

### **Result:**

Thus, the test case manual and report has been created for the **Online Fresh Farm Food** Delivery System.



**School of Computing**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	12
<b>Title of Experiment</b>	Manual Test Case Reporting
<b>Name of the candidate</b>	POLISETTI SRI PAVAN
<b>Team Members</b>	Y.GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	26/04/2023

**Mark Split Up**

<b>S. No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

**Aim:**

To prepare the manual test case report for the Fresh Farm Foods Application.

**Team Members:**

S No	Register No	Name	Role
1	RA2111030010267	Yeduguri Geethika	Lead
2	RA2111030010269	Polisetti Sri Pavan	Member

**FUNCTIONAL:**

Functional	Test Case Coverage (%)	Status
verify if the farm food application is responsive	100%	Completed
verify if the admin dashboards have all the constraints	100%	Completed
verify if the products are begin displayed in the user dashboard	100%	Completed
verify if the selected page is being directed	100%	Completed
verify if the cart function is working	100%	Completed
verify if the added address function is working or not	100%	Completed
verify if the other functions in cart are working	100%	Completed
verify if all the booking items are being displayed or not	100%	Completed

**NON- FUNCTIONAL:**

Category	Progress Against Plan	Status
Functional Testing	100%	Linking the database
Non-Functional Testing	100%	Completed
Usability	100%	Can be accessed through any browser
Performance	100%	Performs all the given functions
Security	100%	Secured
Responsive	90%	test completed
Compatibility	100%	test completed

**Result:**

Thus, the test case report has been created for the Fresh Farm Foods Application.



## **School of Computing**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	13
<b>Title of Experiment</b>	To Provide details of Design/Framework/Implementation
<b>Name of the candidate</b>	POLISETTI SRI PAVAN
<b>Team Members</b>	YEDUGURI GEETHIKA (RA2111030010267)
<b>Register Number</b>	RA2111030010269
<b>Date of Experiment</b>	26/04/2023

## **Mark Split Up**

<b>S.No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

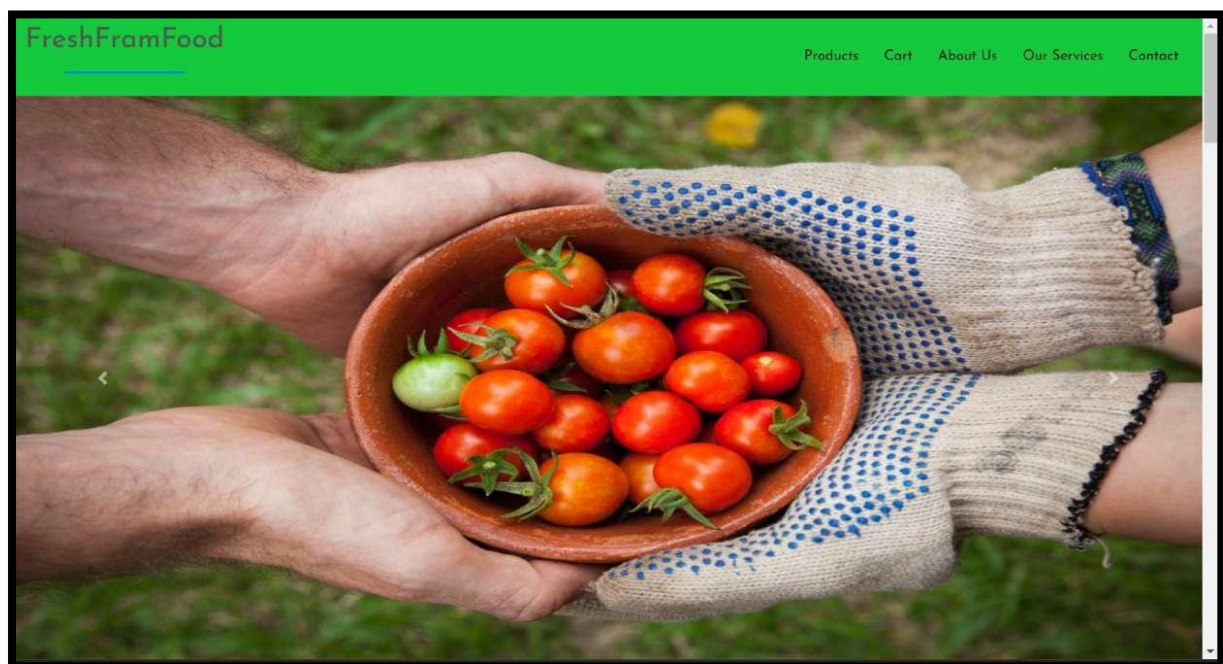
**Staff Signature with date**

**Aim:** To Provide the details of Design /Framework/Implementation

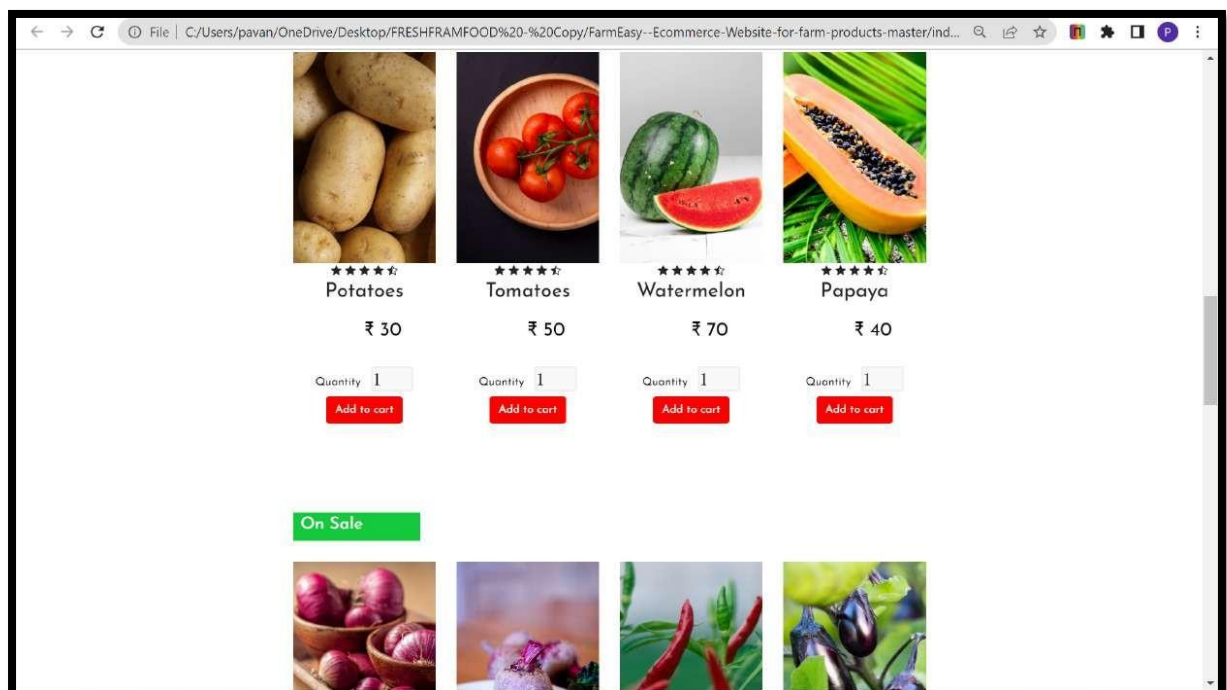
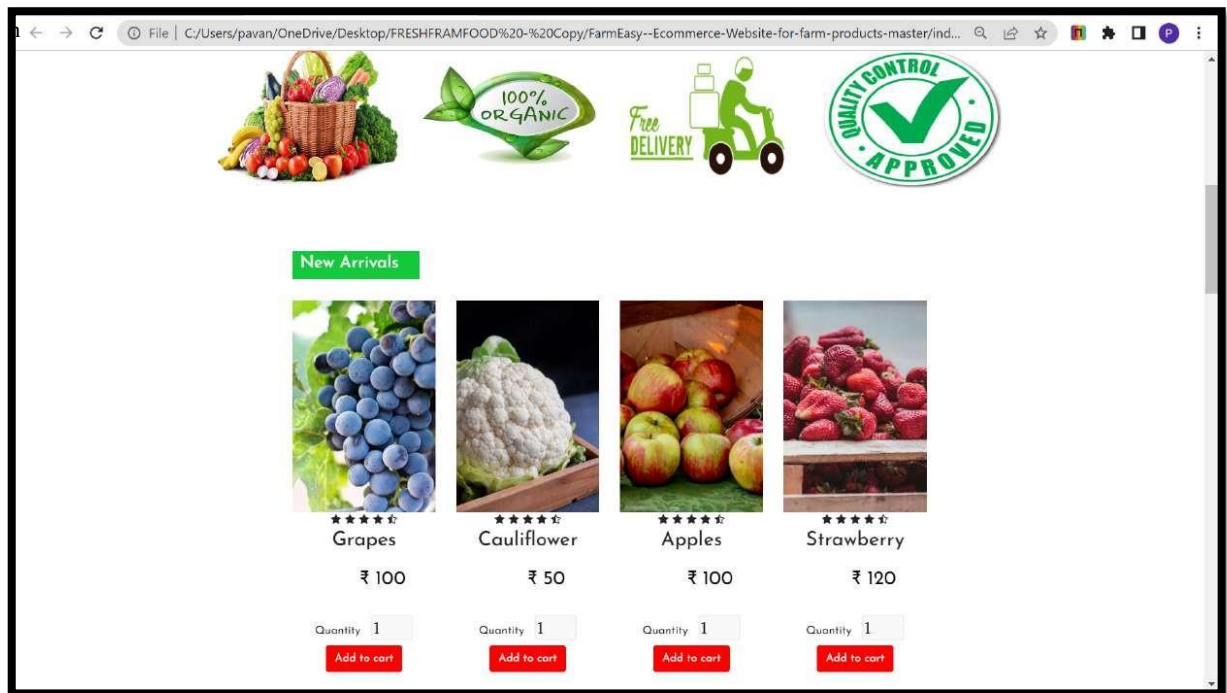
**Team Members:**

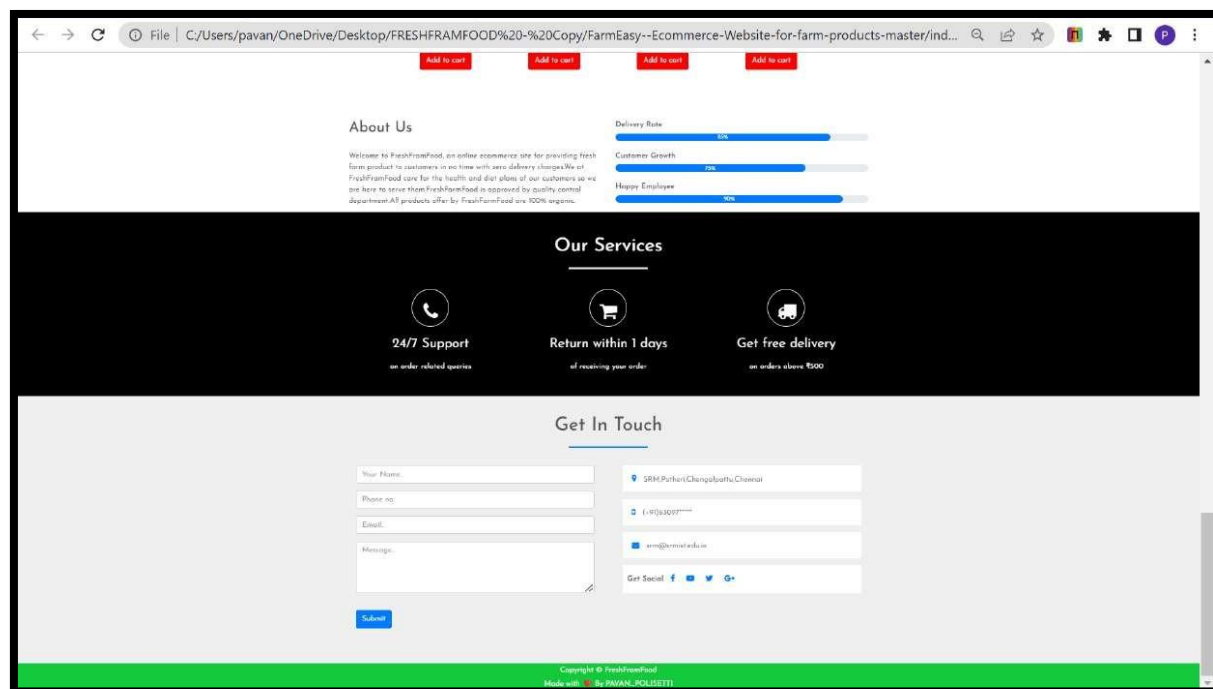
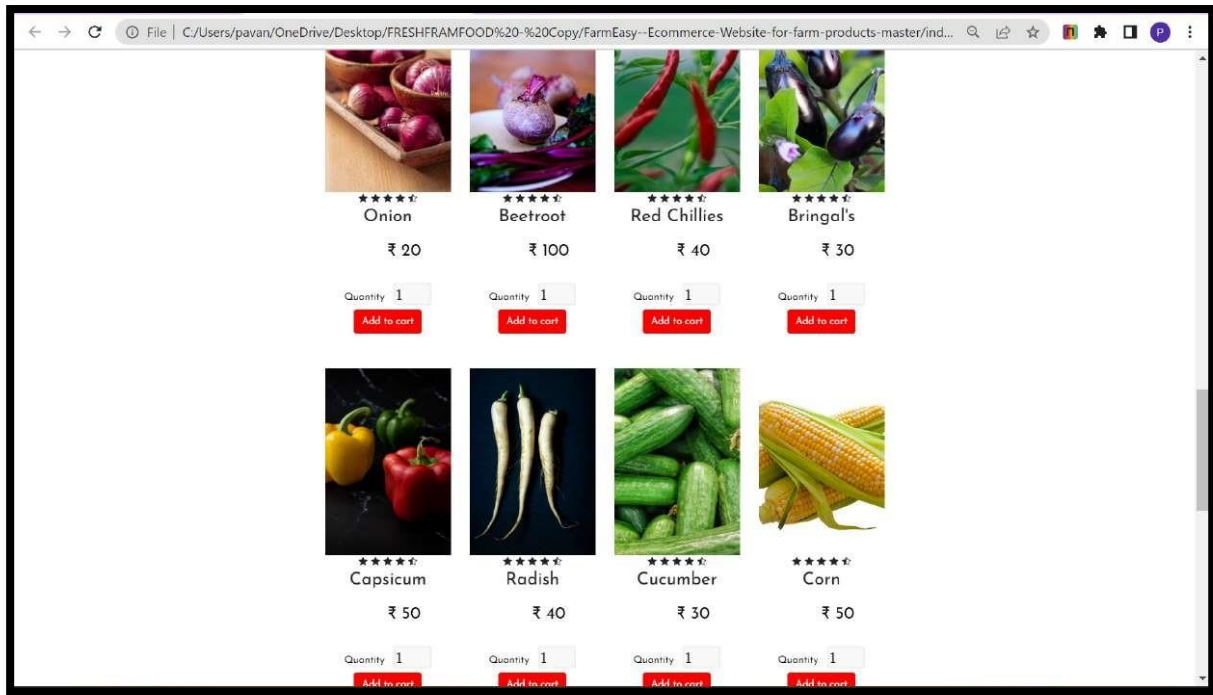
S. No	Register No	Name	Role
1	RA2111030010267	YEDUGURI GEETHIKA	Lead
2	RA2111030010269	POLISETTI SRI PAVAN	Member

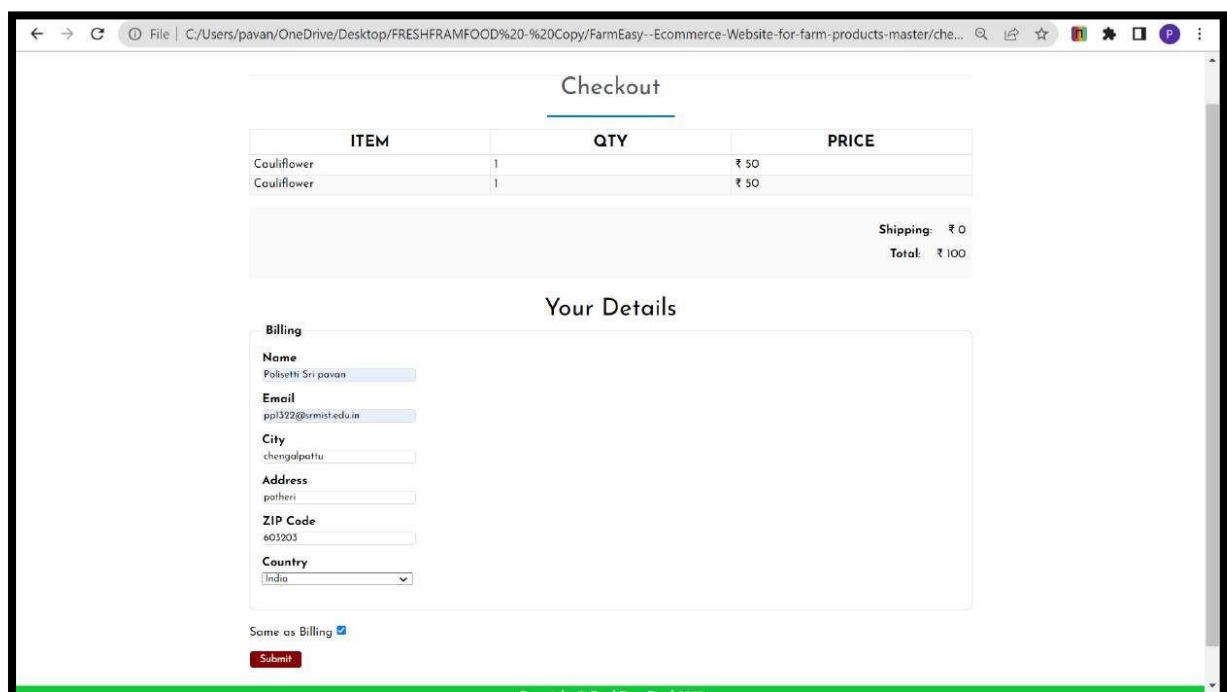
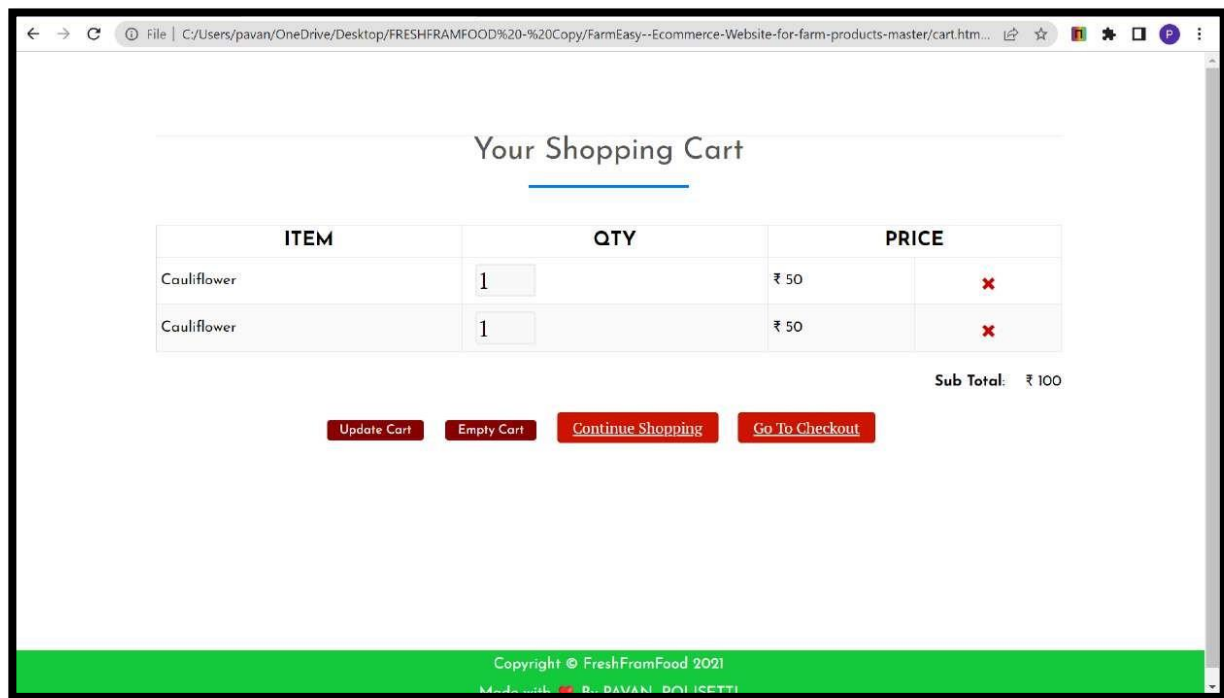
**Project Title:** FARM FRESH FOOD

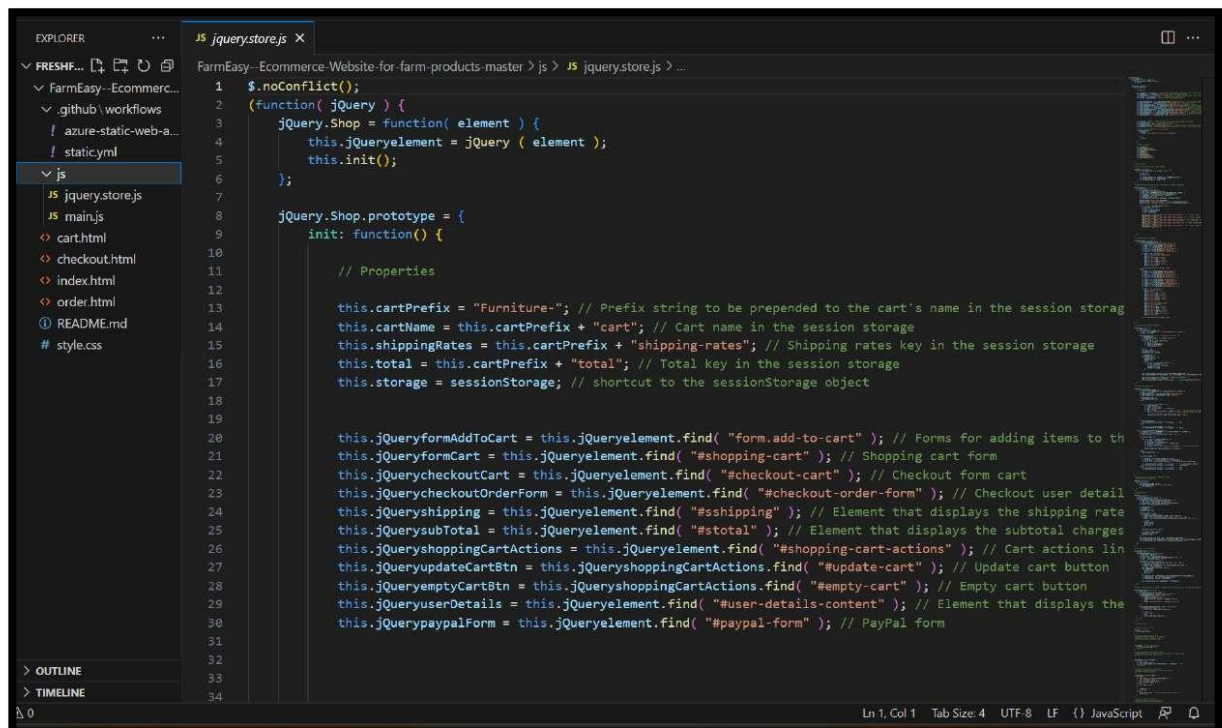
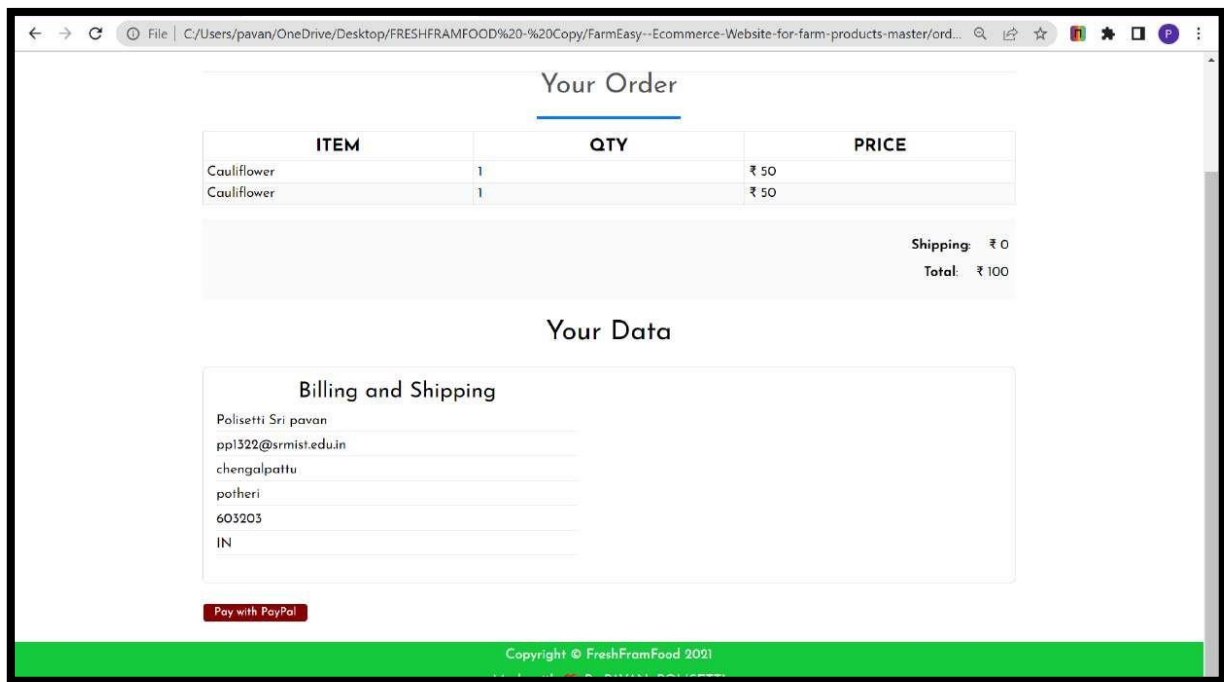












```
1 $(\".slider-one\")
2 .not(\".slick-initialized\")
3 .slick({
4
5     prevArrow: \".site-slider.prev\",
6     nextArrow: \".site-slider.next\",
7     slidesToShow: 5,
8     slidesToScroll: 5,
9     autoplaySpeed: 3000
10 });
11
```

![Screenshot of VS Code showing the cart.html file in the FarmEasy-Ecommerce-Website-for-farm-products-master project. The Explorer sidebar on the left shows the file structure with cart.html selected. The main editor displays the following HTML code: 1 <!DOCTYPE html> 2 <html> 3 <head> 4 <title>Your Shopping Cart</title> 5 <meta charset=\\\](\\\"https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/js/bootstrap.min.js\\\"></script>)



```
33 <p id="sub-total">
34   <strong>Sub Total</strong>: <span id="stotal"></span>
35 </p>
36 <ul id="shopping-cart-actions">
37   <li>
38     <input type="submit" name="update" id="update-cart" class="btn" value="Update Cart" />
39   </li>
40   <li>
41     <input type="submit" name="delete" id="empty-cart" class="btn" value="Empty Cart" />
42   </li>
43   <li>
44     <a href="index.html" class="btn">Continue Shopping</a>
45   </li>
46   <li>
47     <a href="checkout.html" class="btn">Go To Checkout</a>
48   </li>
49 </ul>
50 </form>
51 </div>
52
53
54
55 </div>
56
57 <footer id="site-info">
58   Copyright &copy; FreshFramFood 2021 <br> Made with &#10084;&#65039; By PAVAN_POLISETTI
59 </footer>
60
61 </body>
62 </html>
63
```

```
84 <label for="sname">Name</label>
85 <input type="text" name="sname" id="sname" data-type="string" data-message="This field cannot be
86 </div>
87 <div>
88 <label for="semail">Email</label>
89 <input type="text" name="semail" id="semail" data-type="expression" data-message="Not a valid ema
90 </div>
91 <div>
92 <label for="scity">City</label>
93 <input type="text" name="scity" id="scity" data-type="string" data-message="This field cannot be
94 </div>
95 <div>
96 <label for="saddress">Address</label>
97 <input type="text" name="saddress" id="saddress" data-type="string" data-message="This field cann
98 </div>
99 <div>
100 <label for="szip">ZIP Code</label>
101 <input type="text" name="szip" id="szip" data-type="string" data-message="This field cannot be em
102 </div>
103 <div>
104 <label for="scountry">Country</label>
105 <select name="scountry" id="scountry" data-type="string" data-message="This field cannot be empty
106   <option value="">Select</option>
107   <option value="IN">India</option>
108 </select>
109 </div>
110 </fieldset>
111
112 <p><input type="submit" id="submit-order" value="Submit" class="btn" /></p>
113
114 </form>
115 </div>
116
117
```

EXPLORER ... index.html X

FarmEasy--Ecommerce-Website-for-farm-products-master > index.html > ...

```
1 <!DOCTYPE html>
2 <html>
3
4 <head>
5   <title>FreshFramFood</title>
6   <meta charset="utf-8" />
7   <meta name="viewport" content="width=device-width,initial-scal=1.0">
8   <meta http-equiv="X-UA-compatible" content="ie=edge">
9   <link rel="stylesheet" href="style.css" media="screen" type="text/css" />
10  <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css">
11  <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/font-awesome/4.7.0/css/font-awesome.min.css">
12  <script type="text/javascript" src="https://ajax.googleapis.com/ajax/libs/jquery/2.0.3/jquery.min.js"></script>
13  <script type="text/javascript" src="js/jquery.store.js"></script>
14  <script type="text/javascript" src="js/main.js"></script>
15  <script type="text/javascript"
16    src="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/js/bootstrap.min.js"></script>
17
18 </head>
19
20 <body>
21
22   <section id="nav-bar">
23     <nav class="navbar navbar-expand-lg navbar-light">
24       <h1>FreshFramFood</h1>
25       <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarNav"
26         aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle navigation">
27         <span class="navbar-toggler-icon"></span>
28       </button>
29       <div class="collapse navbar-collapse" id="navbarNav">
30
31         <ul class="navbar-nav ml-auto">
32
33           <li class="nav-item">
34             <a style="color: black;" class="nav-link" href="#new-arrivals">Products</a>
```

Ln 1, Col 1 Tab Size: 4 UTF-8 LF HTML

EXPLORER ... index.html X

FarmEasy--Ecommerce-Website-for-farm-products-master > index.html > html > body > section#nav-bar > div.slider > div#carouselExampleInterval.carousel.slide

```
60 <div class="slider">
61   <div id="carouselExampleInterval" class="carousel slide" data-ride="carousel">
62     <div class="carousel-inner">
63       <div class="carousel-item active" data-interval="10000">
64         
66       </div>
67       <div class="carousel-item" data-interval="2000">
68         
70       </div>
71       <div class="carousel-item">
72         
74       </div>
75       <div class="carousel-item">
76         
78       </div>
79       <div class="carousel-item">
80         
82       </div>
83     </div>
84     <a class="carousel-control-prev" href="#carouselExampleInterval" role="button" data-slide="prev">
85       <span class="carousel-control-prev-icon" aria-hidden="true"></span>
86       <span class="sr-only">Previous</span>
87     </a>
88     <a class="carousel-control-next" href="#carouselExampleInterval" role="button" data-slide="next">
89       <span class="carousel-control-next-icon" aria-hidden="true"></span>
90       <span class="sr-only">Next</span>
91     </a>
92   </div>
93 </div>
```

Ln 70, Col 9 Tab Size: 4 UTF-8 LF HTML

```

1 <!DOCTYPE html>
2 <html>
3 <head>
4 <title>Your Order</title>
5 <meta charset="utf-8" />
6 <link rel="stylesheet" href="style.css" media="screen" type="text/css" />
7 <script type="text/javascript" src="https://ajax.googleapis.com/ajax/libs/jquery/2.0.3/jquery.min.js"></script>
8 <script type="text/javascript" src="js/jquery.store.js"></script>
9 <script type="text/javascript" src="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/js/bootstrap.min.js"></script>
10 </head>
11
12 <body id="checkout-page">
13
14
15 <div id="site">
16 <header id="masthead">
17 <h1></h1>
18 </header>
19 <div id="content">
20 <h1>Your Order</h1>
21 <table id="checkout-cart" class="shopping-cart">
22 <thead>
23 <tr>
24 <th scope="col">Item</th>
25 <th scope="col">Qty</th>
26 <th scope="col">Price</th>
27 </tr>
28 </thead>
29 <tbody>
30
31 </tbody>
32 </table>
33 <div id="pricing">
34

```

```

40 <div id="user-details">
41 <h2>Your Data</h2>
42 <div id="user-details-content"></div>
43 </div>
44
45 <form id="paypal-form" action="" method="post">
46 <input type="hidden" name="cmd" value="_cart" />
47 <input type="hidden" name="upload" value="1" />
48 <input type="hidden" name="business" value="" />
49
50 <input type="hidden" name="currency_code" value="" />
51 <input type="submit" id="paypal-btn" class="btn" value="Pay with PayPal" />
52 </form>
53
54 </div>
55
56 <div>
57
58 </div>
59
60 <div>
61
62 </div>
63
64 <div>
65
66 </div>
67
68 <div id="site-info">
69 Copyright &copy; FreshFramFood 2021 <br> Made with &#10084;&#65039; By PAVAN_POLISETTI
70 </div>
71
72 </body>
73 </html>

```

## Result:

Thus, the details of architectural design /Framework/implementation along with the screenshots were provided.