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## SE308.3 - SOFTWARE PROJECT MANAGEMENT

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### Project Report - Assignment 1

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# **PETTAH ROAD**

## **RESTAURANT & CAFE**

### **PROJECT MANAGEMENT REPORT**

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# CHAPTER 1: Project Initiation

## 1.1 Introduction

Pettah Road, an Australian-based restaurant and cafe specializing in Sri Lankan cuisine, has set its sights on strengthening its competitive advantage through the creation of a comprehensive website. This website will not only serve as a platform for showcasing its unique Sri Lankan dishes but will also incorporate online food ordering capabilities and additional features such as table reservations. The primary motivation behind this endeavor is to position Pettah Road as a strong contender in the food industry while expanding its footprint with multiple branches throughout Australia.

The proposed website will be designed with a user-friendly interface that highlights the diverse Sri Lankan cuisine offered by Pettah Road. It will feature detailed menus, captivating food photography, and informative descriptions of the dishes. This approach will grant customers the convenience of exploring menu items, their ingredients, and prices from the comfort of their homes or while on the move. The online ordering system will facilitate seamless transactions, making it effortless for customers to place their food orders. This feature aligns with the growing trend of online food delivery and takeout, offering a hassle-free and convenient experience for Pettah Road's customers.

Furthermore, the website will introduce a table reservation feature, enabling customers to book tables in advance for a smoother dining experience. This addition is expected to enhance customer satisfaction by reducing wait times and improving table management. Additionally, the website will feature a section dedicated to customer reviews and feedback, providing Pettah Road with valuable insights to address concerns and continually enhance its services.

To ensure the successful execution of the website project, our proposal includes a project charter that outlines the project's objectives, scope, timeline, and deliverables. The project plan encompasses various phases of development, including design, content creation, website development, testing, and deployment. We intend to assemble a team of skilled web developers, designers, and content creators who will collaborate closely with your team to ensure that the website aligns with your brand identity and meets your specific requirements.

In conclusion, the proposed website for Pettah Road cafe and restaurant holds the potential to serve as a potent tool for attracting new customers, retaining existing ones, and streamlining business operations. By capitalizing on online food ordering capabilities and supplementary functionalities like table reservations, Pettah Road aims to enhance its competitive position and expand its presence in the Australian market. We are confident that the development of a comprehensive website will empower Pettah Road to achieve its objectives and offer an outstanding online experience to its customers.

## 1.2 Project Objectives

1. **Project initiation** - The project's initial objective is to develop the Pettah Road website with enchantments of SEO, user experience, functional and non-functional features.
2. **Website development** - The project focuses on the design and development of a user-friendly website that has features like online food ordering, and table reservations.
3. **Quality assurance** – to deliver quality product testing and quality assurance have to fulfill the UAT testing.
4. **Risk management** - To identify potential risks that can be occur and develop a risk mitigation plan to address them throughout the project lifecycle.
5. **Data Security** - To prioritize data security and privacy by implementing standard security measures for online transactions and customer data protection.
6. **Communication and Engagement** - To establish effective communication channels with stakeholders, including customers and the development team, using project management tools such as Jira, to keep them informed about project progress, updates, and task assignments.
7. **Budget Management** - Manage project costs effectively to ensure that the software development project stays within the allocated budget.
8. **Scalability and Performance** - Ensure that the software is designed to scale and perform effectively.
9. **Change Management** - Manage changes and updates to the software to accommodate evolving requirements and improvements.



## **1.3 Project Scope**

### **1. Online Food Ordering**

The project includes creating a user-friendly interface on the website, allowing customers to seamlessly browse the menu, select their preferred items, customize their orders, and securely process payments online. Additionally, the website will employ a data-driven approach to suggest food options based on customers' past orders to enhance their dining experience.

### **2. Table Reservations**

The scope involves incorporating a table reservation feature on the website, enabling customers to book tables in advance. This functionality will allow customers to choose their desired date, time, and party size and receive prompt confirmation of their reservation. This feature aims to enhance customer convenience and reduce wait times.

### **3. Restaurant Information and Location**

The project encompasses the presentation of comprehensive information about the restaurant, including its historical background, vision, and core values. In addition, the website will provide essential details such as the restaurant's physical address, contact information, operating hours, and directions, ensuring ease of access for customers looking to visit Pettah Road.

### **4. Customer Reviews and Testimonials**

The project will include a dedicated section on the website for customers to share their feedback, reviews, and testimonials concerning their dining experiences at Pettah Road. This feature is designed to foster trust and credibility among potential customers and enhance the restaurant's overall reputation.

### **5. Franchise Opportunities**

The scope extends to providing information regarding franchise opportunities for individuals interested in partnering with Pettah Road. Details about the franchise program, investment prerequisites, the support provided, and the application process will be made available. This will serve the dual purpose of attracting potential investors and facilitating the restaurant's expansion.

### **6. Sri Lankan Event Calendar**

The project will introduce a dedicated section on the website that functions as a comprehensive event calendar for Sri Lankan cultural events, festivals, and celebrations taking place in the local area or across Australia. This calendar will offer information about upcoming Sri Lankan cultural events, including dates, descriptions, and locations. Furthermore, it will be regularly updated to ensure that website visitors have access to the latest event information, enabling them to plan their attendance accordingly.

## 7. Social Media Integration

The project includes the integration of Pettah Road's social media channels within the website. This integration will enable customers to easily share their dining experiences, stay updated with the restaurant's announcements, and engage with the online community. The aim is to extend the brand's reach and nurture a sense of belonging among customers.

### 1.4 Success Criteria

1. **Feature Implementation:** The project will be considered successful when all planned features, as outlined in the project scope, are successfully implemented and thoroughly tested to ensure their proper functioning.
2. **User Acceptance Testing (UAT):** Success will be achieved when all User Acceptance Tests (UAT) are passed without any errors or issues, confirming that the website meets the requirements and expectations of both internal and external users.
3. **Compliance:** The website will be considered successful when it complies with all relevant legal and accessibility standards, ensuring that it meets legal requirements and is accessible to all users.
4. **Cross-Device Compatibility:** Success will be achieved when the website functions seamlessly and without errors on multiple devices, including desktop computers, tablets, and smartphones, ensuring a consistent user experience.
5. **Customer Experience:** The project's success will be determined by the ease with which users can navigate the website, ensuring a user-friendly flow that minimizes confusion and allows anyone to understand and use the website effectively.
6. **Scalability:** Success will be marked by the website's ability to handle increased traffic and the potential for future expansion, including the addition of new features and branches across Australia, without compromising performance.
7. **Timely Completion:** The project will be considered successful when all development phases are completed within the agreed-upon timeline, ensuring that the website is launched according to the planned schedule.
8. **Budget Adherence:** Success will be achieved by executing the project within the allocated budget, ensuring that all financial resources are managed efficiently to prevent cost overruns.
9. **Security:** The project will be deemed successful when the website's security measures effectively protect customer data, with no security breaches or vulnerabilities, ensuring the privacy and safety of user information.

# CHAPTER 2: Agile Methodology Selection

## 2.1 Methodology Selection - Scrum for the Pettah Road Website Development Project

### Introduction

Agile methodologies have gained prominence in recent years for managing complex and evolving projects. Among the various Agile frameworks available, Scrum is a widely recognized and practiced methodology that is well-suited for web development projects, such as the Pettah Road Website Development Project. This report explores how Scrum will be applied throughout the project, including the roles, artifacts, and ceremonies that will guide the development process.

### Scrum Framework for the Pettah Road Project

Scrum operates on a framework that divides the project into specific roles, artifacts, and ceremonies to ensure effective collaboration, flexibility, and transparency. For the Pettah Road Project, the following components of the Scrum framework will be integral:

#### 1. Scrum Roles:

**Product Owner (PO):** The Product Owner represents Pettah Road and holds a pivotal role in the project. The PO is responsible for defining project requirements, prioritizing the product backlog, and ensuring that the development team's work aligns with business objectives. The PO acts as the bridge between the development team and the stakeholders.

**Scrum Master:** The Scrum Master plays a critical role in facilitating the Scrum process. They ensure that the Scrum principles are adhered to, any impediments are removed, and that the Scrum team is following best practices. The Scrum Master also plays a supportive role in helping the team deliver high-quality increments.

**Development Team:** The development team comprises various experts, including front-end developers, back-end developers, UI/UX specialists, SEO developers, and testers. This cross-functional team is responsible for implementing the features from the product backlog during each sprint. They collaborate to deliver a potentially shippable product increment at the end of each sprint.

#### 2. Scrum Artifacts:

**Product Backlog:** The Product Owner creates and maintains a product backlog. This backlog is a prioritized list of all the features, user stories, and tasks required for the project.



It provides visibility into the work that needs to be done and is continuously refined and updated based on changing requirements and feedback.

**Sprint Backlog:** At the beginning of each sprint, the development team, with guidance from the Scrum Master and Product Owner, selects a set of items from the product backlog to work on during that sprint. These selected items become the sprint backlog, which outlines the work to be completed within the sprint.

**Increment:** Scrum emphasizes delivering a potentially shippable product increment after each sprint. This increment is a version of the website with new features and improvements. It ensures that the project is continuously adding value and is ready for deployment at any time.

**Burndown Chart:** The project will use burndown charts to visualize the progress of the sprint. This chart shows the amount of work remaining over time, providing transparency into whether the team is on track to complete the sprint objectives. It's a valuable tool for both the Scrum team and stakeholders.

### **3. Scrum Ceremonies**

Scrum ceremonies are a set of well-defined meetings that serve to structure the work, maintain collaboration, and provide a framework for inspecting and adapting the project.

**Project Initiation:** Start with a project kickoff meeting to define the webpage's goals, target audience, and key features. Create a product backlog with all the desired features and prioritize them.

**Sprint Planning:** At the start of each sprint, the Scrum team conducts a sprint planning meeting. During this meeting, the Product Owner presents the top-priority items from the product backlog, and the team collaboratively decides which items will be included in the upcoming sprint. They break down tasks and estimate effort to create a sprint backlog.

**Daily Standup (Daily Scrum):** The daily standup is a brief, 15-minute meeting held every day during the sprint. It is an opportunity for team members to synchronize their work, and discuss progress, challenges, and plans for the day. This meeting ensures that everyone is aligned and can collaborate effectively.

**Sprint Review:** At the end of each sprint, a sprint review meeting is conducted. During this meeting, the development team showcases the completed features to stakeholders, including the Product Owner. The purpose is to obtain feedback, demonstrate the value delivered, and make adjustments to the product backlog based on the feedback.

**Sprint Retrospective:** Following the sprint review, the Scrum team holds a sprint retrospective. This is a reflective meeting where team members discuss the sprint process. They identify what went well, what could be improved, and any changes they want to make for the next sprint. It's a crucial component for continuous improvement.

**Repeat:** Continue this cycle of planning, development, review, and retrospective until the webpage is fully developed and meets the client's requirements.

### **Here's why Scrum is a good fit for the project's requirements:**

**Flexibility:** Scrum is highly adaptable to changing requirements. In a restaurant webpage project, the client's needs and preferences may evolve as they see progress. Scrum allows for regular reassessment and adaptation.

**Iterative Development:** Scrum divides the project into smaller, manageable iterations called sprints, usually lasting 2-4 weeks. Each sprint results in a potentially shippable increment of the product. This aligns well with web development, where you can deliver incremental updates to the restaurant's webpage.

**Customer Collaboration:** Scrum encourages continuous customer feedback. In a restaurant webpage project, regular feedback from restaurant owners and potential customers is crucial for making adjustments and improvements.

**Cross-Functional Teams:** Scrum promotes cross-functional teams, including developers, designers, and testers, working together collaboratively. For a webpage project, this ensures a well-rounded approach to design, functionality, and quality.

**Prioritization:** Scrum uses a product backlog to prioritize features and tasks. In a restaurant webpage project, this allows you to focus on the most critical features first, such as menu presentation, contact information, and online ordering, ensuring that high-priority items are addressed early.

## **2.2 Application of Scrum**

Scrum will be applied to the Pettah Road Website Development Project as a structured yet flexible framework for managing project activities. The adaptability of Scrum is well-suited to the dynamic nature of web development, where requirements can evolve as the project progresses. By employing Scrum, the project ensures transparency, collaboration, and alignment with Pettah Road's evolving needs.

In summary, Scrum provides a proven methodology that guides the development process, ensuring that the project stays on track, and any necessary adjustments are made quickly. The iterative nature of Scrum, with regular sprint reviews and retrospectives, guarantees that the project remains adaptive and responsive to changing requirements.

This report outlines how Scrum will be applied in the Pettah Road Website Development Project, covering roles, artifacts, ceremonies, and its overall significance for managing the project effectively and delivering a high-quality product. Scrum will serve as the guiding framework to align project activities with business goals and accommodate evolving requirements.

## CHAPTER 3: User Stories

PROJECT NUMBER	PR102
PROJECT NAME	PettahRoad
PROJECT MANAGER	Shaveen Maleesha
DATE	10/10/2023
VERSION	1

### User Registration

Devops ID and Title	UR101	Business priority	High
Requested by	Customer	Business Owner	
Requested date	01/10/2023	Category	Register
Story Points	5	implementation priority	High

User story Description	
As a	Customer
I want to	Create an account with email and password
So that I can .....	Register for the food ordering
status	Approved

### User Login

Devops ID and Title	UL101	Business priority	High
Requested by	Customer	Business Owner	Owner
Requested date	01/10/2023	Category	Login
Story Points	5	implementation priority	High

User story Description	
As a	Customer
I want to	login with credential
So that I can .....	Access to the account
Status	Approved

## Brows Food Menu

Devops ID and Title	UB101	Business priority	High
Requested by	User	Business Owner	Owner
Requested date	01/10/2023	Category	Navigation
Story Points	4	implementation priority	High

User story Description	
As a	Customer
I want to	Browse the menu , and filter by cuisine
So that I can .....	Select food items according to preference
Status	Approved

## View food item details

Devops ID and Title	US102	Business priority	High
Requested by	User	Business Owner	Owner
Requested date	01/10/2023	Category	Navigation
Story Points	4	implementation priority	High

User story Description	
As a	Customer
I want to	View prices and description of food items
So that I can .....	Decide food items
Status	Approved

## Search Foods by Name

Devops ID and Title	US103	Business priority	High
Requested by	User	Business Owner	Owner
Requested date	01/10/2023	Category	Navigation
Story Points	4	implementation priority	High

User story Description	
As a	Customer
I want to	Search food items by names
So that I can .....	Find food items easily
Status	Approved

## Add food items to food cart

Devops ID and Title	US104	Business priority	High
Requested by	Customer	Business Owner	Customer
Requested date	01/10/2023	Category	Purchase
Story Points	5	implementation priority	High

User story Description	
As a	Customer
I want to	Add food items to cart and specify quantity
So that I can .....	processing to checkout
Status	Approved

## Customize or change the cart

Devops ID and Title	US105	Business priority	High
Requested by	Customer	Business Owner	Customer
Requested date	01/10/2023	Category	Purchase
Story Points	4	implementation priority	High

User story Description	
As a	Customer
I want to	Customize or change cart before checkout
So that I can .....	access to changes
Status	Approved

Business Rules / Definitions	
Problem Statement	If the customer want to add some changes before checkout the changes should able to apply
Expected outcome	User satisfaction and flexibility

## View order history and payment

Devops ID and Title	US107	Business priority	High
Requested by	Customer	Business Owner	Owner
Requested date	01/10/2023	Category	Purchase
Story Points	5	implementation priority	High

User story Description	
As a	Customer
I want to	See order total fee including tax and delivery fee
So that I can .....	Confirm order
Status	Approved

## Add delivery Address

Devops ID and Title	US107	Business priority	High
Requested by	Customer	Business Owner	Owner
Requested date	01/10/2023	Category	Delivery
Story Points	5	implementation priority	High

User story Description	
As a	Customer
I want to	add delivery address as saved address or new address
So that I can .....	receive order from any location
Status	Approved

Business Rules / Definitions	
Problem Statement	Customers used to receive order by their saved location as well as many addresses as the prefer
Expected outcome	User satisfaction and flexibility

## Multiple Payment Option

Devops ID and Title	US108	Business priority	High
Requested by	Customer	Business Owner	Owner
Requested date	01/10/2023	Category	Payment
Story Points	5	implementation priority	High

User story Description	
As a	Customer
I want to	Have multiple payment options including credit/debit card digital wallet and COD
So that I can .....	Pay as my preference
Status	Approved

Business Rules / Definitions	
Problem Statement	Customer used tp pay with cards , digital wallets but if not they should have COD methods
Expected outcome	Many customers able to order even they haven't card to pay or don't use cards to pay

## Track the Order

Devops ID and Title	US109	Business priority	Middle
Requested by	Customer	Business Owner	Owner
Requested date	02/10/2023	Category	Order
Story Points	3	implementation priority	Middle

User story Description	
As a	Customer
I want to	track order which was checkout
So that I can .....	waiting to receive order
Status	Approved

## View estimated Delivery Time

Devops ID and Title	US110	Business priority	Middle
Requested by	Customer	Business Owner	Owner
Requested date	02/10/2023	Category	Estimation
Story Points	3	implementation priority	Middle

User story Description	
As a	Customer
I want to	See the estimated time for deliver
So that I can .....	take decisions
Status	Approved

## Select Delivery Time

Devops ID and Title	US111	Business priority	Middle
Requested by	Customer	Business Owner	Owner
Requested date	02/10/2023	Category	Delivery
Story Points	2	implementation priority	Middle

User story Description	
As a	Customer
I want to	Select delivery time slot or set pre orders
So that I can .....	receive orders by exact time period
Status	Approved

## View Order and Payment History

Devops ID and Title	US112	Business priority	Middle
Requested by	Customer	Business Owner	Owner
Requested date	02/10/2023	Category	Payment
Story Points	3	implementation priority	Middle

User story Description	
As a	Customer
I want to	View order history and payment history
So that I can .....	confirm my payments
Status	Approved



## Manage Restaurant Profile

Devops ID and Title	R101	Business priority	High
Requested by	Shop Owner	Business Owner	Owner
Requested date	01/10/2023	Category	Profile
Story Points	5	implementation priority	High

User story Description	
As a	Owner
I want to	Manage restaurant profile , menu items prices and descriptions
So that I can .....	add food items to system
Status	Approved

## Receive Order Notification

Devops ID and Title	R102	Business priority	High
Requested by	Shop Owner	Business Owner	Owner
Requested date	01/10/2023	Category	Order
Story Points	5	implementation priority	High

User story Description	
As a	Accountant
I want to	receive order notifications
So that I can .....	Accept order and add to next process
Status	Approved

## Provide Order Details

Devops ID and Title	R103	Business priority	High
Requested by	Shop Owner	Business Owner	Owner
Requested date	02/10/2023	Category	Order
Story Points	5	implementation priority	High

User story Description	
As a	Accountant
I want to	provide order status
So that I can .....	enable user to track the order
Status	Approved

## Receive Delivery Request

Devops ID and Title	R103	Business priority	High
Requested by	Shop Owner	Business Owner	Owner
Requested date	01/10/2023	Category	Delivery
Story Points	5	implementation priority	High

User story Description	
As a	Delivery agent
I want to	receive delivery request location and other details
So that I can .....	deliver the order and mark it as delivered
Status	Approved

# CHAPTER 4: Product Backlog

## 4.1 Building the Product Backlog

PROJECT NUMBER	PR102
PROJECT NAME	"Pettah Road" Restaurant & Cafe
PROJECT MANAGER	John Doe
DATE	25/10/2023

ID	Epic	Feature	As an....	User Story (I want to...)	Sprint	PRIORITY	STATUS	ASSIGNED TO SPRINT
1	User Registration and Authentication	1.1 User Registration	New Customer	1.1 Create an account using email address and Password	1	High	Complete	Yes
		1.2 User Login	Customer	1.2 login with credential	1	Medium	In Progress	Yes
		1.3 Verify user account	Registered User	1.3 Receive email verification for user account.	2	Medium	To-do	
2	Placing and Managing Orders	2.1 Browse Food Menu	Customer	2.1 Browse the menu , and filter by cuisine for Select food items according to preference	1	High	To-do	Yes
		2.2 View Food Item details	Customer	2.2 View prices and description for Decide food items	1	High	To-do	Yes
		2.3 Search Foods by name	Customer	2.3 Search food items by names for find food easily	2	High	To-do	

		2.4 Add food items to Food Cart	Customer	2.5 Add food items to cart and specify quantity and processing to checkout	1	High	To-do	
		2.5 Customize or change the Cart	Customer	2.6 Customize or change cart before checkout.	2	Medium	To-do	
		2.6 View order history	Customer	2.7 View order history and payment history for confirm my payments		Medium		
3	<b>Reviews and Feedback</b>	3.1 User Reviews	Customer	3.1 Rate and review the restaurant and the food		Medium	To-do	
		3.2 Access reviews and ratings from other users.	Customer	3.2 See reviews and ratings from other users.		Medium	To-do	
4	<b>Account Management</b>	4.1 Edit and Update Profile Details	Registered User	4.1 Change profile information		High	To-do	
		4.2 Access and Review order history	Registered User	4.2 View my order history		Medium	To-do	
5	<b>Admin and Restaurant Management</b>	5.1 Mange restaurant profile and Edit menu details	Restaurant Owner	5.1 Manage restaurant profile, menu items prices and descriptions	1	High	To-do	Yes
		5.2 Manage Orders and Receive notifications	Accountant	5.2 Receive order notifications and Receive order notifications	1	High	To-do	Yes
		5.3 Manage Order	Accountant	5.3 Provide order status for Enable	2	Medium	To-do	

		Status Enable Tracking		user to track the order				
6	<b>Payment and Checkout</b>	6.1 Secure Payment Gateway	Customer	6.1 Secure and seamless payment process.	2	High	To-do	
		6.2 Multiple Payment Options	Customer	6.2 Multiple payment options including credit/debit card digital wallet and COD		Medium	To-do	
7	<b>Delivery Tracking and Notification</b>	7.1 Track Order Status	Customer	7.1 Track order which was checkout and waiting to receive order	2	High	To-do	
		7.2 View order status	Customer	7.2 See the estimated time for deliver	2	Medium	To-do	
		7.3 Select delivery time slot	Customer	7.3 Select delivery time slot or set pre orders		Medium	To-do	
		7.4 Receive Delivery location and deliver the Order	Delivery agent	7.4 Receive delivery request location and other details and deliver the order and mark it as delivered	1	High	To-do	Yes

## 4.2 Backlog Maintenance

To make sure that the development team is focusing on the most crucial and pertinent features, the backlog must be maintained and improved during the course of a project. The backlog can be improved in the following ways:

1. **Prioritization:** Constantly analyze the relative importance of features and user stories regarding evolving business requirements, market trends, and user input. This can be accomplished by holding frequent meetings with stakeholders and product owners to ensure that the highest priorities are dealt with first.
2. **User Feedback:** Actively gather and take into account customer feedback. Setting up channels for user input, such as surveys, user interviews, or feedback buttons within the application, may be necessary. Use this feedback to pinpoint problem areas and improve user stories.
3. **Sprint Reviews:** Review the work produced after each sprint afterward, and gather input from the development team and stakeholders. Make changes to the backlog based on this feedback. It can be necessary to rearrange or reprioritize items that did not develop as anticipated.
4. **Emergent Requirements:** During the project, be prepared to accommodate requests for additional features or emergent requirements. Examine the business value of the requirements and any potential effects they may have on the project's objectives.
5. **Technical Debt:** If certain areas of the codebase start to cause issues, add user stories to the backlog to solve technical debt. Although they might not always be visible to end users, these are essential to the project's long-term success.
6. **Dependencies:** Constantly keep an eye on and take responsibility for dependencies. To prevent bottlenecks, make sure dependencies between user stories are tracked and addressed as soon as possible.
7. **Splitting User Stores:** Consider breaking up user stories into smaller, more manageable tales if they are too large or complex. Estimating and setting priorities for shorter tales is simpler.
8. **Documentation:** User stories and their acceptance criteria should be updated in the documentation. You might develop a deeper comprehension of the requirements as the project goes along, and this understanding should be expressed in the user stories.
9. **Backlog Grooming:** Schedule regular backlog grooming meetings so that the team can evaluate, update, and rearrange the backlog's contents as needed. By doing this, the backlog is kept current and in line with the objectives of the project.

# CHAPTER 5: Sprint Planning

When planning the first sprint in our project, here we gave priority to main features which are needed to create order and receive the order through online platform. Based on these main functionalities, we planned to conduct our first sprint for the 14 days (2 week) sprint.

The sprint goals that we consider fulfilling in our first sprint are,

1. User registration and login
2. View and create orders.
3. Manage menus and orders.
4. Deliver the orders.

Based on these sprint goals, here we followed some steps to plan the first sprint. So here are the steps that we followed,

## Step 1: Selecting main functionalities.

According to the product backlog, we selected the following features and related user stories which are the subsets of chosen four main functionalities.

### 1. User registration functionality

- a. Feature 1: user registration – User story: implement user registration form
- b. Feature 2: user login – User story: develop user login functionality

### 2. Menu browsing and create order functionality.

- a. Feature 1: browse food menu – User story: create menu page.
- b. Feature 2: view food item details – User story: implement food item details view.
- c. Feature 3: add food items to the food cart – User story: add items to the food cart.

### 3. Manage menus and orders.

- a. Feature 1: manage menu details – User story: Allow to edit and update menu details.
- b. Feature 2: manage orders and receive notifications – User story: implement a system to manage incoming food orders and notification for new orders and updates.

### 4. Deliver the orders.

- a. Feature 1: track the delivery location– User story: implement a system to track the delivery location.
- b. Feature 2: Mark the order status – User story: implement a system to update the delivery status.

## **Step 2: Defining sprint goals.**

Here we established the two main goals regarding this first sprint.

1. Implement user authentication feature.
2. Develop basic menu browsing functionality.

## **Step 3: Estimating sprint duration.**

Here when we are planning the sprints, we hope to conduct each sprint as 2 weeks sprint, that means we assumed to complete each sprint within 14 days based on the complexity of user stories, team availability, and team velocity.

Sprint will start on – 25/10/2023.

Sprint will end on – 13/11/2023.

## **Step 4: Creating a Sprint Backlog**

Here we focus on breaking down each user stories into simple tasks to follow a sprint backlog.

Here is our sprint backlog.

### **User Authentication:**

Task 1: Implement user registration form (6 hours) - Assigned to Developer A

Task 2: Develop user login functionality (8 hours) - Assigned to Developer B

Task 3: Implement password reset option (8 hours) - Assigned to Developer A

Task 4: Set up user account verification (4 hours) - Assigned to Developer C

### **Menu Browsing and Cart:**

Task 5: Create menu page (6 hours) - Assigned to Developer D

Task 6: Implement food item details view (8 hours) - Assigned to Developer E

Task 7: Develop search functionality (6 hours) - Assigned to Developer D

Task 8: Add items to the food cart (8 hours) - Assigned to Developer F

Task 9: Allow cart customization (6 hours) - Assigned to Developer E



## Sprint Backlog

Project Name	Project Manager	Start Date	End Date	Project Deliverables	
PETTAH ROAD Website Development Project	Shaveen	25/10/2023	13/11/2023	Scope Statement	

ID	Task Name	User Story	Owner	Sprint	Duration
1501	Feature 1: User Registration	Create an account using email address and Password	Chathuranga	Sprint 1	12hrs
1502	Feature 2: User Login	login with credential	Chathuranga		8hrs
1505	Feature 3: Browse Food Menu	Browse the menu , and filter by cuisine for Select food items according to preference	Ishara		10hrs
1506	Feature 4: View Food Item Details	View prices and description for Decide food items	Naveen		10hrs
1508	Feature 5: Add Food Items to Food Cart	Add food items to cart and specify quantity and processing to checkout	Supipi		10hrs
1516	Feature 6: Manage Restaurant Profile and Edit Menu Details	Manage restaurant profile , menu items prices and descriptions	Namindu		10hrs
1517	Feature 7: Manage Orders and Receive Notifications	Receive order notifications and Receive order notifications	Ishara		8hrs
1524	Feature 8: Receive Delivery Location and Deliver Order	Receive delivery request location and other details and deliver the order and mark it as delivered	Namindu		12hrs
1503	Feature 9: Verify User Account	Receive email verification for user account.		Sprint 2	8hrs
1507	Feature 10: Search Foods by Name	Search food items by names for find food easily			6hrs
1509	Feature 11: Customize or Change the Cart	Customize or change cart before checkout			6hrs
1518	Feature 12: Manage Order Status Enable Tracking	Provide order status for Enable user to track the order			12hrs

1519	Feature 13: Secure Payment Gateway	Secure and seamless payment process.			16hrs
1520	Feature 14: Receive a digital receipt after completing a purchase.	Digital receipt after making a purchase			10hrs
1521	Feature 15: Track Order Status	Track order which was checkout and waiting to receive order			12hrs
1522	Feature 16: View order status	See the estimated time for deliver			10hrs

# CHAPTER 6: Daily Standups

By conducting the daily standup meeting, we always try to keep the project on plan.

So, each day of working for development of this application, we take 10 – 15 minutes short meeting for check the progress of the development and issues with the development process.

The things we discussed here are,

- Finished tasks.
- Ongoing tasks
- Tasks to be started.
- Dependencies or areas where collaboration is necessary between the team members.
- Overall project progress

Apart from the above overall discussion, the following are the questions that we discussed at the standup meetings.

**I. What did we do yesterday?**

Here, our team members shared about what tasks and activities they completed yesterday.

**II. What will we do today?**

Here, we discuss each one of our plans for the current day or that day.

**III. Are there any obstacles or impediments blocking our progress?**

Here, team members shared any issues, or challenges that are hindering our development process including technical issues, and dependencies on others.

**IV. Ask for any help to others?**

Here, if any one need an expertise or assistance from other members, he or she mentioned the task or tasks they need an additional support.

**V. Are there any changes in priorities or project updates?**

Here, our project manager shared information about updates and scope changes to keep the team informed.

# CHAPTER 7: Sprint Review and Retrospective

## 7.1 Sprint Review – Sprint 1

Activity	Description	Who
Goal of the sprint	<ul style="list-style-type: none"><li>Develop and demonstrate core features related to user registration, login, food menu browsing, item selection, cart management, restaurant profile management, order notifications, and order delivery functionality.</li></ul>	Scrum master
Review of the top requirements	<ul style="list-style-type: none"><li>Login</li><li>Menu management</li><li>Online ordering</li><li>Manage restaurant profile</li></ul>	Product owner
Demonstration	<ul style="list-style-type: none"><li>Members responsible for user stories and present our work, emphasising alignment with sprint objectives.</li><li>As the example,<ul style="list-style-type: none"><li>Demonstration of the user registration process.</li><li>Showcase the user login functionality.</li><li>Demonstrate how users can browse the food menu.</li><li>Display the prices and descriptions for food items.</li><li>Show how users can add food items to their cart.</li><li>Guide users through the cart management and checkout process.</li><li>Demonstrate the functionality for restaurant owners.</li><li>Presentation of the order notification process.</li></ul></li></ul>	Team

Activity	Description	Who
Discussion and Feedback	<ul style="list-style-type: none"> <li>Stakeholders, including end-users and product owners, provide feedback on the demonstrated features.</li> <li>Feedback is collected in a structured format.</li> <li>As the example, <ul style="list-style-type: none"> <li>one stakeholder gives few various options what we can add to that list</li> <li>Discuss how this information helps users decide what to order.</li> <li>Discuss how restaurant staff receive notifications when new orders are placed.</li> </ul> </li> </ul>	Stakeholders
Prioritization and Action Items	<ul style="list-style-type: none"> <li>The team and product owners prioritize collected feedback based on impact and feasibility.</li> <li>Action items are defined to address critical feedback.</li> </ul>	Team and product owner
Closing	<ul style="list-style-type: none"> <li>Summarize key takeaways from the Sprint Review.</li> <li>Discuss the focus and goals for Sprint 2.</li> </ul>	Scrum master

The Sprint Review for Sprint 1 has provided an overview of the core features that have been developed, including user registration, login, menu browsing, item selection, cart management, restaurant profile management, order notifications, and order delivery. Feedback from stakeholders is essential to fine-tune these features and align with project objectives. The focus in Sprint 2 will be on further refinement and expansion based on user feedback and needs.

## 7.2 Retrospective Structure

What works well	What didn't go well	What should we try next
<ul style="list-style-type: none"> <li> <b>User Registration (Feature 1):</b>  The user registration process performed smoothly, allowing customers to create accounts easily using their email addresses and passwords. </li> </ul>	<ul style="list-style-type: none"> <li> <b>Receive Order Notifications (Feature 7):</b>  Some customers reported delayed or inconsistent order notifications. In a few instances, customers missed updates on their order status, affecting their experience. </li> </ul>	<b>Receive Order Notifications (Feature 7):</b> Implement a robust notification system that ensures timely updates to customers about their order status. Create a dedicated support channel for customers to inquire about order status, improving communication.
<ul style="list-style-type: none"> <li> <b>User Login (Feature 2):</b>  The user login functionality was secure, ensuring that users could access their accounts with credentials seamlessly. </li> </ul>	<ul style="list-style-type: none"> <li> <b>Receive Delivery Location and Deliver Order (Feature 8):</b>  Delivery requests occasionally lacked precise location details, leading to challenges for delivery drivers. This resulted in longer delivery times and potential customer dissatisfaction. </li> </ul>	<b>Receive Delivery Location and Deliver Order (Feature 8):</b> Develop a more detailed delivery location request process, possibly incorporating a mapping feature for precise delivery instructions. Provide additional training or resources for delivery drivers to handle situations with incomplete location information more effectively.

What works well	What didn't go well	What should we try next
<ul style="list-style-type: none"> <li> <b>Browse Food Menu (Feature 3):</b>  Customers found the menu browsing experience intuitive and appreciated the ability to filter food items by cuisine, simplifying food selection according to their preferences. </li> </ul>		<b>Add Rating and Reviews</b> Encourage customers to leave reviews and ratings for restaurant services and individual menu items to improve overall quality.
<ul style="list-style-type: none"> <li> <b>View Food Item Details (Feature 4):</b>  Viewing food item details, including prices and descriptions, providing customers with all the necessary information to make order. </li> </ul>		<b>Special Offers and Discounts</b> Implement an effective system for managing promotions and discounts to keep customers engaged and interested.
<ul style="list-style-type: none"> <li> <b>Add Food Items to Food Cart (Feature 5):</b>  Adding food items to the cart and specifying quantities for checkout was efficient and user-friendly, facilitating the ordering process. </li> </ul>		
<ul style="list-style-type: none"> <li> <b>Manage Restaurant Profile (Feature 6):</b>  Successfully managed restaurant profiles, including menu items, prices, and descriptions, ensuring up-to-date </li> </ul>		

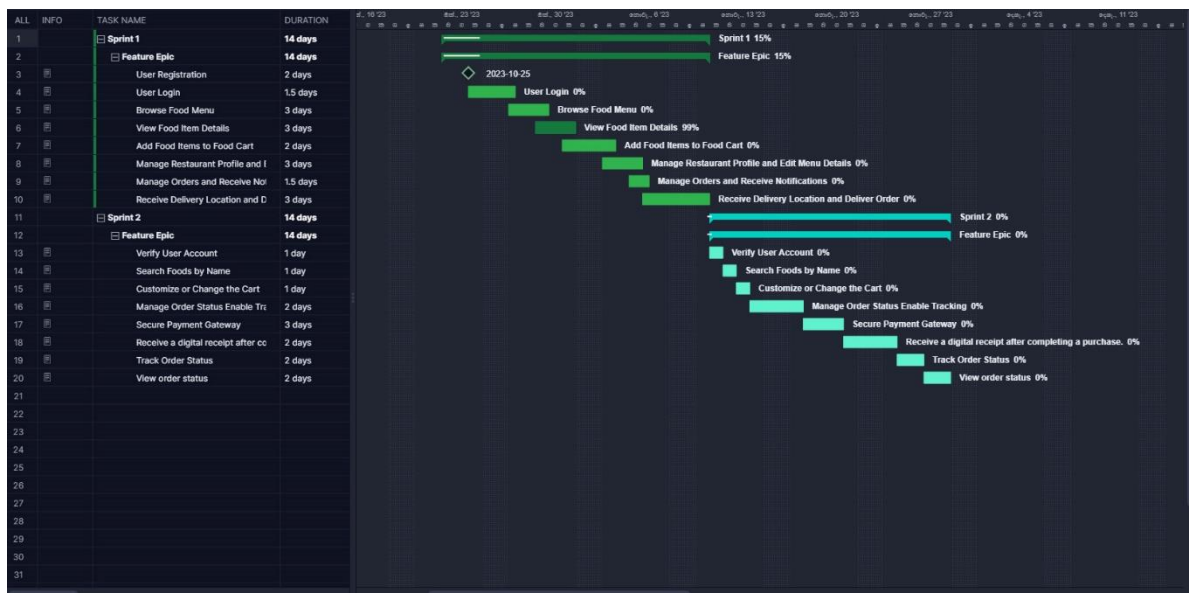
What works well	What didn't go well	What should we try next
and accurate information for customers.		

Our retrospective has shown that while our restaurant software excels in some areas, such as user registration and menu browsing, there are challenges to address, particularly in order notifications and delivery precision. To enhance the user experience and operational efficiency, we propose improvements, and we're committed to a culture of continuous improvement as we move forward.



# CHAPTER 8: Project Timeline

## 8.1 GANTT Chart



## 8.2 Tasks

Project N	Project M	Charge C	Customer	Project St	Task Nam	Planned S	Planned F	Planned L	Planned T	Planned C	Planned F	Percent C	Person	Linked Fr	Linked To	Actual St	A
sf	er	re		Open	Sprint 1	2023-10-7	2023-11-1	14 days	80 hours			15				2023-11-1	
sf	er	re		Open	Feature E	2023-10-7	2023-11-1	14 days	80 hours			15				2023-11-1	
sf	er	re		Open	User Regi	2023-10-7	2023-10-7	2 days	12 hours			0					
sf	er	re		Open	User Logii	2023-10-7	2023-10-7	1.5 days	8 hours			0					
sf	er	re		Open	Browse Fc	2023-10-7	2023-11-1	3 days	10 hours			0					
sf	er	re		Open	View Fooi	2023-11-1	2023-11-1	3 days	10 hours			99				2023-11-1	
sf	er	re		Open	Add Food	2023-11-1	2023-11-1	2 days	10 hours			0					
sf	er	re		Open	Manage F	2023-11-1	2023-11-1	3 days	10 hours			0					
sf	er	re		Open	Manage C	2023-11-1	2023-11-1	1.5 days	8 hours			0					
sf	er	re		Open	Receive D	2023-11-1	2023-11-1	3 days	12 hours			0					
sf	er	re		Open	Sprint 2	2023-11-1	2023-12-1	14 days	80 hours			0					
sf	er	re		Open	Feature E	2023-11-1	2023-12-1	14 days	80 hours			0					
sf	er	re		Open	Verify Use	2023-11-1	2023-11-1	1 day	8 hours			0					
sf	er	re		Open	Search Fo	2023-11-1	2023-11-1	1 day	6 hours			0					
sf	er	re		Open	Customizi	2023-11-1	2023-11-1	1 day	6 hours			0					
sf	er	re		Open	Manage C	2023-11-1	2023-11-1	2 days	12 hours			0					
sf	er	re		Open	Secure Pa	2023-11-1	2023-11-1	3 days	16 hours			0					
sf	er	re		Open	Receive a	2023-11-1	2023-11-1	2 days	10 hours			0					
sf	er	re		Open	Track Ord	2023-11-1	2023-11-1	2 days	12 hours			0					
sf	er	re		Open	View orde	2023-11-1	2023-12-1	2 days	10 hours			0					

Remainin	Milestone	Complete	Priority	WBS	Locked	Baseline	Baseline	Baseline	Baseline	Baseline	Notes	Summary	Depende	Depende	Tags	Board
80 hours	False	False		1	False							True				To Do
80 hours	False	False		1.1	False							True				To Do
12 hours	True	False		1.1.1	False						Create an	False				To Do
8 hours	False	False		1.1.2	False						login with	False				To Do
10 hours	False	False		1.1.3	False						Browse th	False				To Do
10 hours	False	False		1.1.4	False						View prici	False				To Do
10 hours	False	False		1.1.5	False						Add food	False				To Do
10 hours	False	False		1.1.6	False						Manage r	False				To Do
8 hours	False	False		1.1.7	False						Receive o	False				To Do
12 hours	False	False		1.1.8	False						Receive d	False				To Do
80 hours	False	False		2	False							True				To Do
80 hours	False	False		2.1	False							True				To Do
8 hours	False	False		2.1.1	False						Receive e	False				To Do
6 hours	False	False		2.1.2	False						Search for	False				To Do
6 hours	False	False		2.1.3	False						Customizi	False				To Do
12 hours	False	False		2.1.4	False						Provide o	False				To Do
16 hours	False	False		2.1.5	False						Secure an	False				To Do
10 hours	False	False		2.1.6	False						Digital rec	False				To Do
12 hours	False	False		2.1.7	False						Track ordi	False				To Do
10 hours	False	False		2.1.8	False						See the e	False				To Do

# CHAPTER 9: Risk Management

## 9.1 Risk Identification & Risk Mitigation

### Project Overview:

Pettah Road is embarking on a website development project to establish a comprehensive online platform with features such as online food ordering, table reservations, and more. While the project presents exciting opportunities for business growth and enhanced customer engagement, it also carries certain risks that need to be identified, assessed, and mitigated to ensure successful project delivery.

Risk	Probability	Impact	Mitigation Strategy
<b>Underestimation of Effort</b>	Moderate	High	Regularly review project progress against the plan, and if any tasks are taking longer than expected, allocate additional resources or adjust the project timeline as necessary.
<b>Scope Creep</b>	Moderate	High	Clearly define the project scope and objectives in the project charter. Ensure that any changes to the scope are thoroughly evaluated and approved through a formal change request process.
<b>Changing Requirements</b>	Moderate	High	Maintain open and continuous communication with Pettah Road's team to identify changing requirements early. Document and assess any requested changes rigorously before implementation.
<b>Technical Challenges</b>	Low	High	Conduct thorough technical assessments and testing during development to identify and address potential challenges early. Ensure the project team has access to technical expertise or resources if needed.
<b>Budget Overruns</b>	Moderate	High	Regularly monitor project expenses against the budget. Implement strict change control procedures for any budget-altering decisions.
<b>Resource Availability</b>	Moderate	Moderate	Maintain a skilled and flexible project team. Cross-train team members to handle multiple roles if necessary. Establish backup

			resources for critical roles.
<b>Data Security</b>	Low	High	Implement robust security measures, including encryption, secure payment gateways, and regular security audits. Stay updated with data security regulations and compliance requirements.
<b>User Adoption</b>	Moderate	Moderate	Conduct user testing and gather feedback during development to ensure the website meets user expectations. Plan for a user adoption strategy, including user training and support.
<b>Market Competition</b>	Moderate	Moderate	Stay informed about market trends and competitor activities. Continuously monitor the competitive landscape and be prepared to adjust marketing strategies.
<b>External Dependencies</b>	Low	Moderate	Identify and document external dependencies, such as third-party services or software. Have contingency plans in place in case of service disruptions.

This table provides a clear overview of the identified risks, their probabilities, impacts, and corresponding mitigation strategies for the Pettah Road Website Development Project.

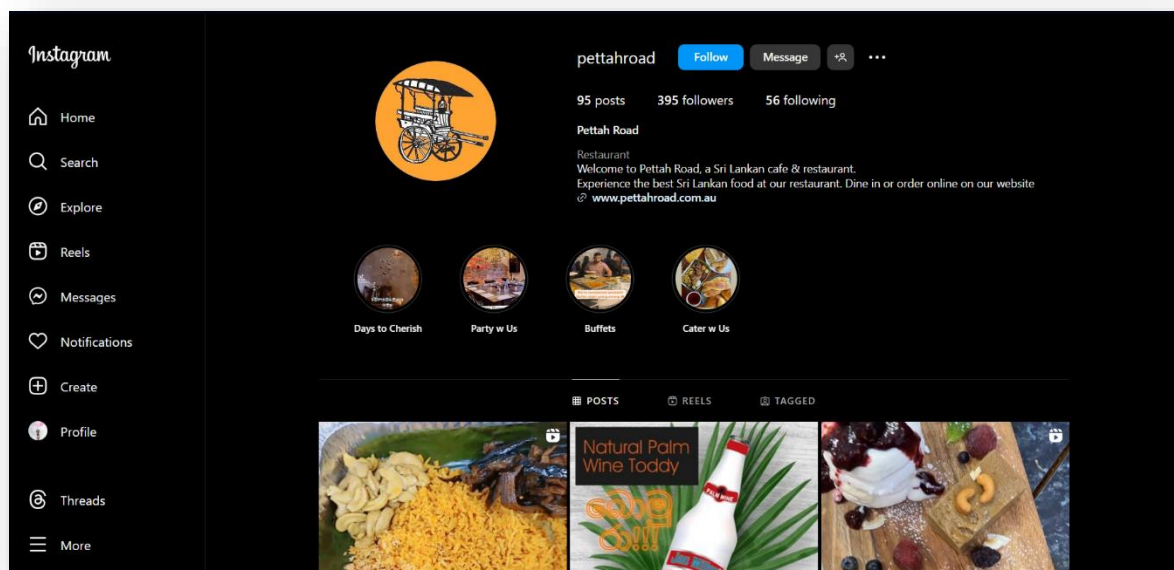
## CHAPTER 10: Documentation and Reporting

Effective documentation and reporting procedures are essential in an Agile project for building the Pettah Road website in order to keep stakeholders updated on progress, modifications, and any potential difficulties. Agile approaches encourage communication through documentation and reporting as well as accessibility and teamwork. The following describes how we will apply these procedures throughout the project.

- **User Stories:** Using the INVEST criteria (Independent, Negotiable, Valuable, Estimable, Small, Testable), user stories will be thoroughly documented. The backlog for these stories will be kept up to date, and stakeholders will review them frequently.
- **Product Backlog:** The product backlog will be an ever-changing list of user stories with estimations and a priority order. It will be updated frequently as new needs and priorities materialize. It will be possible to access this backlog for all team members and stakeholders.
- **Sprint Backlog Creation:** A sprint backlog will be produced before to each sprint. It will include the chosen user stories, their completion requirements, and acceptance criteria. The sprint's progress will be monitored using this backlog.
- **Daily Standups:** Team members will discuss their success, difficulties, and plans for the day during daily standup meetings. Everyone will be kept up to date on the project's status thanks to these meetings.
- **Sprint Review and Retrospective:** A review meeting will be held at the conclusion of each sprint to present finished work to stakeholders. The following step is a retrospective meeting where the positive and negative aspects from the previous sprint will be discussed.
- **Risk Register:** We'll keep a record of potential risks and mitigation techniques in a risk register. This document will be frequently updated to reflect new risks and adjustments to risk levels.

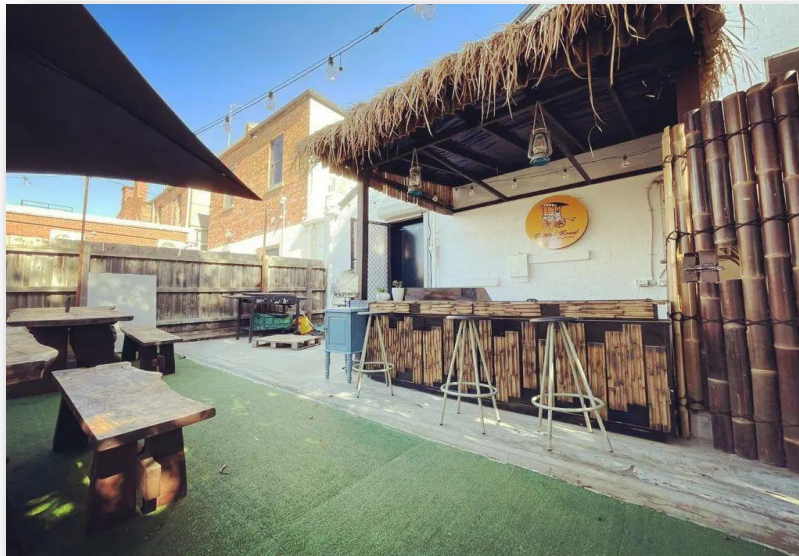
# CHAPTER 11: References

- Project Excel Files Link – [https://drive.google.com/drive/folders/12oke6bXZZgddI4-CjhFRTu2hgu7hFXMf?usp=drive\\_link](https://drive.google.com/drive/folders/12oke6bXZZgddI4-CjhFRTu2hgu7hFXMf?usp=drive_link)
- Facebook – [https://web.facebook.com/pettahroad/?\\_rdc=1&\\_rdr](https://web.facebook.com/pettahroad/?_rdc=1&_rdr)
- Instagram - <https://www.instagram.com/pettahroad/?hl=en>



## CHAPTER 12: Conclusion

Finally, the Pettah Road website development project represents a huge step forward in our mission to offer a cutting-edge online platform. We developed a foundation for effective communication and dynamic adaptation by adhering to Agile principles and keeping comprehensive documentation. Daily standup meetings kept everyone informed, while sprint reviews and retrospectives encouraged continuous input and development. We were able to face possible issues straight on thanks to our proactive risk management strategy. As we move forward, we will continue to be devoted to continuous improvement, eager to improve the platform based on meaningful user feedback. We would like to express our deepest thanks to our devoted staff, important stakeholders, and trusted partners for their critical contributions in achieving this goal. As we strive to improve the user experience, the future promises great possibilities.





## CHAPTER 13: Contribution of Group Member

Name	NSBM ID	Contribution
AAS Sandali	20497	<ul style="list-style-type: none"> <li>Risk Management / Project Coordination</li> </ul>
WSWMI Vimukthi	20794	<ul style="list-style-type: none"> <li>Agile methodology Selection</li> </ul>
DMSP Dassanayake	20829	<ul style="list-style-type: none"> <li>Product Backlog / Making Project Report</li> </ul>
PASN Pathiraja	20832	<ul style="list-style-type: none"> <li>Sprint Planning / Daily Standups</li> </ul>
VPYC Perera	20836	<ul style="list-style-type: none"> <li>Project Timeline / Agile Methodology Selection</li> </ul>
WMKS Fernando	20840	<ul style="list-style-type: none"> <li>User Stories / Sprint Review and Retrospective</li> </ul>
LN Hasalanka	20855	<ul style="list-style-type: none"> <li>User stories / Sprint Review and Retrospective</li> </ul>
WND Perera	20860	<ul style="list-style-type: none"> <li>Project Initiation</li> </ul>
GS Maleesha	21032	<ul style="list-style-type: none"> <li>Project Initiation / Project Coordination</li> </ul>