PROJECT PROPOSAL

Project: **E-commerce website for Caramels and Almonds**

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PRINCE2

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Client: Caramels and Almonds by Senuthi Wijesinghe

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1. Project Plan History

1.1 Document Location

This document is only valid on the day it was printed.

The source of the document will be found on the project's PC in location.

1.2 Revision History

Date of this revision: 05/07/2023

Date of Next revision:

Revision date	Previous revision date	Summary of Changes	Changes marked
05/07/2023	22/06/2023	Changed the project management tool reference	
22/06/2023	-	First issue	

1.3 Approvals

This document requires the following approvals.

Signed approval forms are filed in the Management section of the project files.

Name	Signature	Title	Date of Issue	Version
Dr. Yasas Jayaweera		Project Board	09/07/2023	1.1
Pruthuvi Wijesinghe		Project Manager	09/07/2023	1.1
Miss. Senuthi Wijesinghe		Client	09/07/2023	1.1

1.4 Distribution

This document has been distributed to:

Name	Title	Date of Issue	Version
Pruthuvi Wijesinghe	Project Manager	09/07/2023	1.1
R.S. Senarathna	Quality Manager	09/07/2023	1.1
H.M. Pumudi Herath	Startup Manager	09/07/2023	1.1
A.S.D De Silva	Risk Manager	09/07/2023	1.1
Hasini Jayasekara Vithanage	Scheduling Manager	09/07/2023	1.1

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1. Introduction

This is the project proposal created for the e-commerce website for 'Caramels and Almonds.' Technology has made our lives very easy, and it has given us many facilities that we could never have imagined before. This proposed website will be introduced to 'Caramels and Almonds' in order to make their current process more efficient and easy to handle. This project proposal will explain the structure and functions of this system.

1.1   Background of the Client

'Caramels and Almonds', owned by Miss Senuthi Wijesinghe, is a well-reputed online cake business in Sri Lanka. 'Caramels and Almonds' was introduced in 2021. Birthday cakes, wedding cakes, anniversary cakes, cupcakes, and brownies are some of the main items they sell. They do focus on making cakes from scratch using traditional methods of baking with wholesome ingredients. They have gained the attention of people by ensuring the freshness and quality of each cake and also by having a fair price.

'Caramels and Almonds' had to face the COVID-19 pandemic, which had a significant impact during the start of their business. This caused sales risks and a revenue drop in their business.

Currently, orders are placed through their Instagram account. Also, customers can place orders by contacting them through WhatsApp. Having a website will have many benefits for them when managing many orders at once. It will help them manage orders efficiently, and the customers will be able to place orders easily within a few minutes.

1.2   Problem Statement

As mentioned above, their operations have become more complicated due to receiving a large number of orders. Orders are placed through their Instagram and WhatsApp

accounts. Other problems, such as a limited number of employees, time-consuming processes, and handling records, are some of the issues that we identified.

Placing orders through the website will empower them to deal with peak business hours. This proposed e-commerce website enables customers to get rid of the waiting process. Even if they are busy, placing orders through a website would be easy. Customers don't have to make phone calls or send WhatsApp or Instagram messages to order a cake when there is a website. This experience will make huge progress.

This website will have a considerable number of built-in choices to keep commitment levels high and keep clients updated about new offers.

1.3   Solution and Objectives

The main objective of this proposed project is to implement an e-commerce website for 'Caramels and Almonds' that will help them manage their daily orders.
Some objectives such as:

1. Give Customers the option of customizing their cake.

   The cake customization feature of the e-commerce website for 'Caramels and Almonds' aims to provide customers with the ability to personalize their chosen cake according to their preferences. Customers will have the option to select from a variety of customizable elements, such as size, quantity, description of the cake, and dietary restrictions.

2. Provide a search bar

   When a customer logs in to the website, it's important to help the customer find the right cake item as soon as possible. Otherwise, the customer might leave the website. One of the important ways to improve the design and help customers find

the information they want is to make the website searchable using the search functionality.

3. Provide an AI-based chatbot.

   One of the primary objectives of a business is to increase client interactions and convert them into sales. A chatbot built on this website can assist in achieving these objectives. The days of having to wait in line on a busy business phone line or for message responses to be returned are already over. Customers are more satisfied and more likely to become customers when they can rapidly find the information they are looking for from a chatbot. Including a chatbot on this proposed website will be useful to provide a better customer experience. It will provide an instant, 24/7 response to the customers. Also, it will be helpful for the customers to save their valuable time.

4. A spinning wheel that allows customers to win gifts.

   Having a spinning wheel that allows customers to win gifts will increase customer retention. It creates opportunities for the business to increase customer engagement, participation, and loyalty.

2. Proposed Technical Approach

The proposed website created for 'Caramels and Almonds' helps to handle orders easily and provides a way for customers to place orders easily.

2.1   Development Methodology

Our team has decided to use the agile methodology for this proposed project. In the agile methodology, development and testing steps are iterated through the software

development life cycle, and the whole process is broken into individual models so that team members can work on them separately. The client and the team members will constantly communicate with each other so that the client's requirements and changes that have to be made can be easily identified.

Figure 2.1. 1: Agile Methodology

2.2 Requirement Gathering

We needed to gather proper details about the current process and the functions the client wanted on the proposed website.

Client Meetings

We arranged the first client meeting as a Zoom meeting with our client, Miss Senuthi Wijesinghe, to give an introduction about the proposed project and get the client's approval. Also, we will be scheduling more client meetings in order to make sure that we will provide the desired output for our client. The upcoming meetings will be held to get budget approvals, discuss more about the functions and features of the website, etc.

2.3 Architecture Diagram

2.3.1 As Is System

Currently, customers place orders through Instagram and WhatsApp. They don't have any idea about the available cakes, so the customers will have to get the necessary details before placing the order.

2.3.2 To Be System

With the information we gathered, we will be creating a website that helps both the client and the customers.
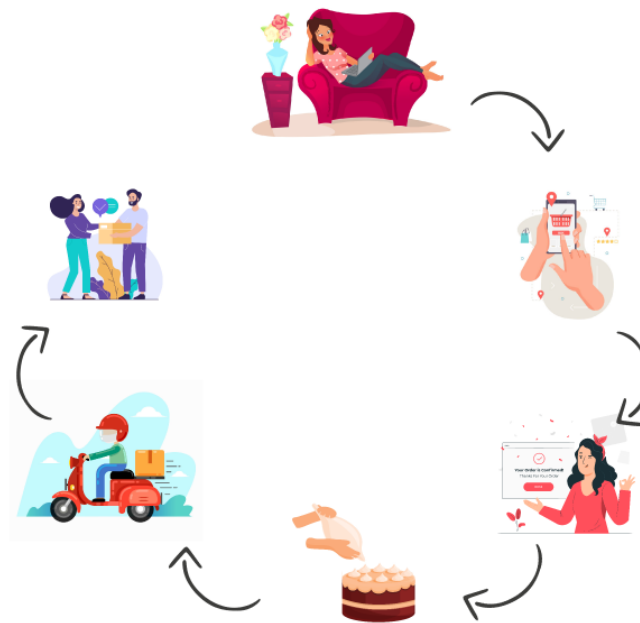
Figure 2.3.2. 1: To Be System

2.4 Functional Requirements

The functional requirements specify the behavior of the inputs and outputs that the system can perform. Here are some of the functional requirements that the system has that our team is going to fulfill.

- Manage the available cakes by performing add, update, or delete operations.
- View and manage orders.
- Manage the categories of available cakes.
- View available cakes on the website.
- Perform the add-to-cart operation.
- Manage the prizes won by the customers using the spinning wheel.
- Manage payments through a payment gateway.
- Provide an artificial intelligence-based chatbot function for assisting

2.5 Non – Functional Requirements

- Protect all user information.
- Maintain the database effectively.
- The website should be available at any time.
- Provide a reliable website.
- The website should be easy to navigate.

2.6 Implementation and Development Requirements

Table 2.6. 1: Implementation and Development Requirement

Software Requirements	Hardware Requirements
Visual Studio Code	Personal Computer
Apache server	24-hour power supply
MS Word	Wi-Fi Router

Draw.io	CPU i3/i5
Illustrator	

2.7 Running Environment Requirements

Minimum requirements

- Windows 11 Desktop
- 2.80 GHz or better 64-bit or 32-bit processor
- 16 GB System RAM
- 2 GB of virtual memory
- Onboard Graphics card with 256 MB

The speed of the processor, RAM, and video card all affect performance. Although JT2Go will operate if the system meets the minimum requirements outlined in this section, the performance of the program is directly proportional to the configuration.

2.8 Quality Assurance Plan

All software development processes, activities, and work items are monitored and verified as part of software quality assurance (SQA) to ensure that they meet all standards and criteria. To ensure a high level of quality throughout the process, SQA includes the entire software development life cycle, from specifying requirements to coding and deploying the software.

Figure 2.8. 1: Software Quality Assurance

3. Expected Project Results

We will be developing an e-commerce website for 'Caramels and Almonds'. The system will provide the cake shop with a comprehensive solution for managing several orders at once. By integrating this system into the website, the cake shop can enhance efficiency, streamline operations, and improve the overall management of their business. At the end of the timeline, the client can have a completed e-commerce website with the below results:

Outputs

- Fully functional e-commerce website
- AI-based chatbot integration

Outcomes

- Enhance user experience
- Improved customer engagement
- Increased sales and conversions

Impacts

- Business growth
- Customer loyalty and retention
- Competitive advantage

3.1 Measures of Success

- After understanding the client's requirements, our team will develop a project plan to develop a website for ''Caramels and Almonds'.
- Collect the necessary details from client meetings.
- Create an easy-to-understand, user-friendly environment.
- Develop a database that stores all the details.
- Complete the project in a timely manner.
- Our team will have a quality check and clear all doubts with all tests.
- The satisfaction of the two parties at the end of the project with the correct performance of the system is important.

4. Roles and Responsibilities

Table 4. 1: Roles and responsibilities

Role	Responsibility	Participants
Project Client	Client of the project.	Miss. Senuthi Wijesinghe
Project Manager	Responsible for the entire project. Project planning Team management	Pruthuvi Wijesinghe

	Identify lessons learned throughout the project.	
Risk Manager	Identify potential risks that could impact the project. Conduct risk assessments and brainstorming sessions. Develop risk mitigation strategies. Monitor and track identified risks. Prepare risk plans and logs. Ensure continuous improvements in the project.	A.S. De Silva
Quality Manager	Ensure the delivery of a high-quality website. Develop project's quality management plan. Identify areas that could be improved and recommend corrective actions. Monitor the quality of the project deliverables. Ensure the project documents are accurate and up-to-date.	R.S. Senarathna
Start-up Manager	Facilitate effective communication between the client and project team. Build a strong relationship with the client throughout the project.	H.M. Pumudi Herath

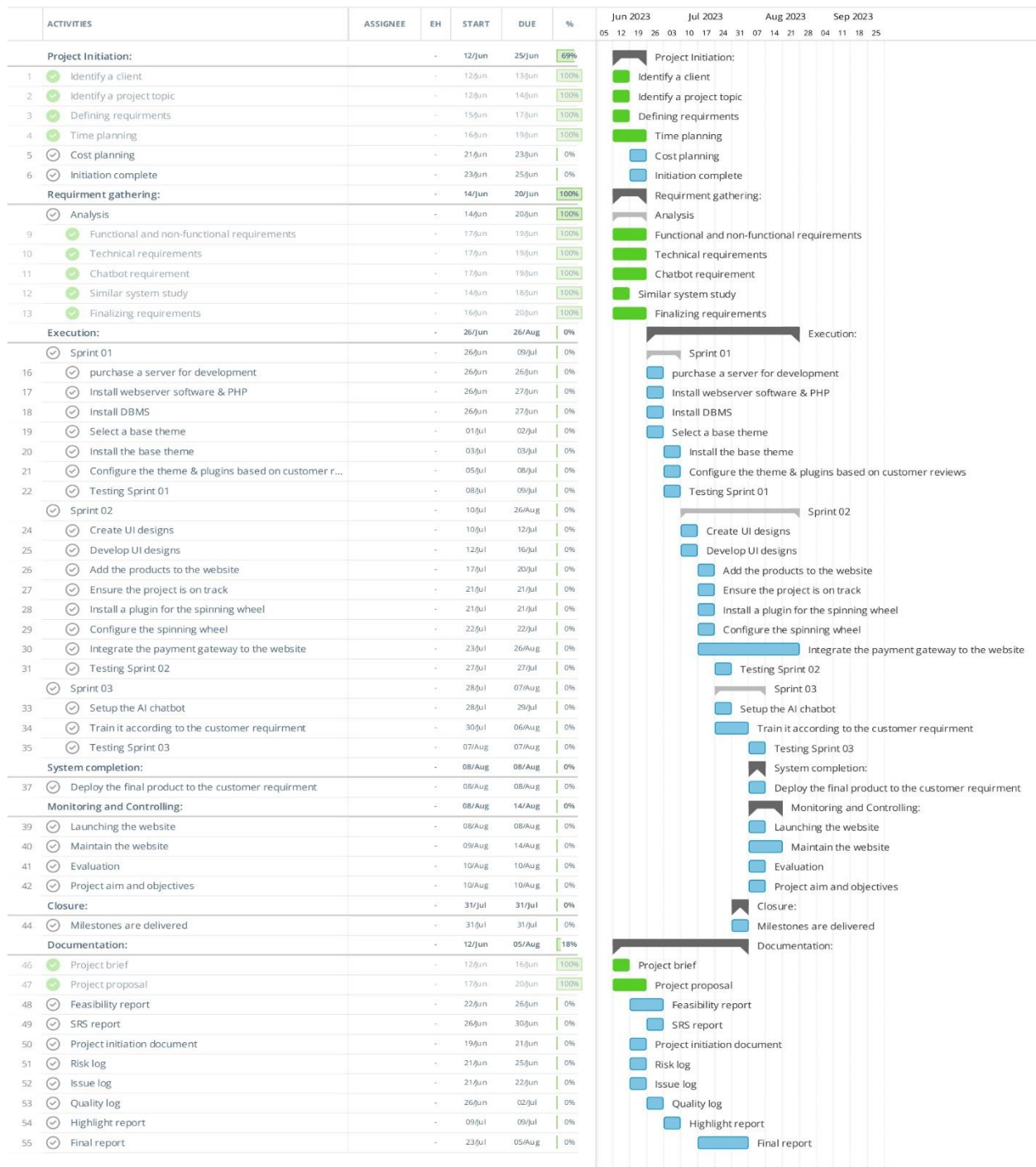|	Gathering and documenting the client requirements. Ensure client satisfaction throughout the project life cycle. Allocate necessary resources for the project team. Define and manage the project scope.	
Scheduling |Manager	Collaborate with the team members to develop the project plan and timeline. Provide reminders for upcoming deadlines. Responsible for scheduling and coordinating team and client meetings. Prepare meeting minutes.	Hasini Jayasekara Vithanage

5. Schedule

Caramels and Almonds

	ACTIVITIES	ASSIGNEE	EH	START	DUE	%
	Project Initiation:		-	12/Jun	25/Jun	69%
1	Identify a client		-	12/Jun	13/Jun	100%
2	Identify a project topic		-	12/Jun	14/Jun	100%
3	Defining requirments		-	15/Jun	17/Jun	100%
4	Time planning		-	16/Jun	19/Jun	100%
5	Cost planning		-	21/Jun	23/Jun	0%
6	Initiation complete		-	23/Jun	25/Jun	0%
	Requirment gathering:		-	14/Jun	20/Jun	100%
	Analysis		-	14/Jun	20/Jun	100%
9	Functional and non-functional requirements		-	17/Jun	19/Jun	100%
10	Technical requirements		-	17/Jun	19/Jun	100%
11	Chatbot requirement		-	17/Jun	19/Jun	100%
12	Similar system study		-	14/Jun	18/Jun	100%
13	Finalizing requirements		-	16/Jun	20/Jun	100%
	Execution:		-	26/Jun	26/Aug	0%
	Sprint 01		-	26/Jun	09/Jul	0%
16	purchase a server for development		-	26/Jun	26/Jun	0%
17	Install webserver software & PHP		-	26/Jun	27/Jun	0%
18	Install DBMS		-	26/Jun	27/Jun	0%
19	Select a base theme		-	01/Jul	02/Jul	0%
20	Install the base theme		-	03/Jul	03/Jul	0%
21	Configure the theme & plugins based on customer r...		-	05/Jul	08/Jul	0%
22	Testing Sprint 01		-	08/Jul	09/Jul	0%
	Sprint 02		-	10/Jul	26/Aug	0%
24	Create UI designs		-	10/Jul	12/Jul	0%
25	Develop UI designs		-	12/Jul	16/Jul	0%
26	Add the products to the website		-	17/Jul	20/Jul	0%
27	Ensure the project is on track		-	21/Jul	21/Jul	0%
28	Install a plugin for the spinning wheel		-	21/Jul	21/Jul	0%
29	Configure the spinning wheel		-	22/Jul	22/Jul	0%
30	Integrate the payment gateway to the website		-	23/Jul	26/Jul	0%
31	Testing Sprint 02		-	27/Jul	27/Jul	0%
	Sprint 03		-	28/Jul	07/Aug	0%
33	Setup the AI chatbot		-	28/Jul	29/Jul	0%
34	Train it according to the customer requirment		-	30/Jul	06/Aug	0%
35	Testing Sprint 03		-	07/Aug	07/Aug	0%
	System completion:		-	08/Aug	08/Aug	0%
37	Deploy the final product to the customer requirment		-	08/Aug	08/Aug	0%
	Monitoring and Controlling:		-	08/Aug	14/Aug	0%
39	Launching the website		-	08/Aug	08/Aug	0%
40	Maintain the website		-	09/Aug	14/Aug	0%
41	Evaluation		-	10/Aug	10/Aug	0%
42	Project aim and objectives		-	10/Aug	10/Aug	0%
	Closure:		-	31/Jul	31/Jul	0%
44	Milestones are delivered		-	31/Jul	31/Jul	0%
	Documentation:		-	12/Jun	05/Aug	18%
46	Project brief		-	12/Jun	16/Jun	100%
47	Project proposal		-	17/Jun	20/Jun	100%
48	Feasibility report		-	22/Jun	26/Jun	0%
49	SRS report		-	26/Jun	30/Jun	0%
50	Project initiation document		-	19/Jun	21/Jun	0%
51	Risk log		-	21/Jun	25/Jun	0%
52	Issue log		-	21/Jun	22/Jun	0%
53	Quality log		-	26/Jun	02/Jul	0%
54	Highlight report		-	09/Jul	09/Jul	0%
55	Final report		-	23/Jul	05/Aug	0%

Figure 5. 1: Gantt chart

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6. References

Trello brings all your tasks, teammates, and tools together (no date) Trello. Available at: https://trello.com/ (Accessed: 05 July 2023).

Software engineering: Software quality assurance - javatpoint (no date) *www.javatpoint.com*. Available at: https://www.javatpoint.com/software-quality-assurance (Accessed: 21 June 2023).

Measurable outcomes in project management: What to consider (2023) *Accelo*. Available at: https://www.accelo.com/resources/blog/measurable-outcomes-in-project-management-what-to-consider/ (Accessed: 21 June 2023).

Westland, J. (2022) *5 ways to measure project success*, *ProjectManager*. Available at: https://www.projectmanager.com/blog/5-ways-to-measure-project-success (Accessed: 21 June 2023).