Development of a Member Management System for Goto Grocery

Members:

Enzo Peperkamp - 102895415

I am in full agreement with the team's decision regarding the objectives, scope, and deliverables outlined in this document. The proposed member management system will undoubtedly benefit Goto Grocery by streamlining its operations and enhancing the member experience. It's well-structured and clearly presents our strategic approach to address the identified challenges.

Nelchael Kenshi Turija - 103057559

I agree with the project plan proposed below. The plan addresses Goto Grocery's challenges, and fully explains what the benefits are in addressing these problems. All sections are well-thought out and the entire plan is well-structured. The schedule is well spaced out to avoid overexerting the team in sprints.

Julian Codespoti - 102997816:

I agree with the outlined project plan. The clarity and structure of this document are commendable. I believe that by executing this plan meticulously, we will effectively address Goto Grocery's challenges and substantially enhance the overall member experience. I'm eager to collaborate and bring this vision to fruition.

Alex Kyriacou - 103059830

I believe the below represents a solid foundation for the rest of this project. It represents a flexible but succinct plan as to how we plan to approach this project for the rest of the semester.

Marella Morad - 103076428

I agree with the proposed project plan for Goto Grocery. The plan outlines our strategic approach to addressing challenges and enhancing the member experience, with the schedule ensuring efficient execution.

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Background

Situated in the Hawthorn region, Goto Grocery operates as a member-centric grocery store facing challenges in meeting its members' expectations and satisfying their diverse grocery needs. The store currently utilizes an outdated paper-based system to record member details and sales transactions, an approach that has repeatedly demonstrated inefficiency and a propensity for errors. Consequently, Goto Grocery has encountered issues such as ordering unnecessary items, leading to wastage and financial burdens.

Project Objectives

To develop and implement a comprehensive, user-friendly member management system that:

1. Modernises and enhances store operations.
2. Ensures accuracy in record-keeping.
3. Provides timely comprehension of members' needs.
4. Offers a more sophisticated approach to inventory management.
5. Is ready for deployment within a year of project commencement.

Scope

This project encompasses the design, creation, and execution of a sophisticated software application tailored to serve as a member management system for Goto Grocery. The software will present a graphical user interface (GUI) to ensure user-friendly data entry, management, and analysis. The key functionalities of the application are detailed below:

Stakeholders

The primary stakeholders for this project include:

1. **Goto Grocery's management and staff:** As the end-users of the system.
2. **Customers:** The system will enhance their shopping experience.
3. **Project team:** Responsible for delivering the system.

Risks and Mitigation

1. **Risk:** Technical difficulties during development.

   Mitigation: Regular project status checks and having a technical expert on standby.

2. **Risk:** Resistance from staff due to change.

   Mitigation: Providing comprehensive training and demonstrating the benefits of the new system.

Testing and Quality Assurance

The system will undergo rigorous unit testing, integration testing, and user acceptance testing to ensure quality and reliability.

Budget and Resources

The project will require a team of 5 developers and a project manager, with an estimated budget of $100,000, which includes software development, testing, deployment, and staff training.

Out of Scope

1. **Payment and Financial Transactions:** The application will not handle payment processing or financial transactions. It will focus solely on managing members' records, grocery needs, and inventory.
2. **Automated Ordering and Restocking:** While the software will track inventory levels and members' needs, it will not directly place orders or manage restocking operations. These activities will continue to be handled manually by store staff.
3. **Integrations with External Systems:** The application will not integrate with other third-party systems, such as accounting software or point-of-sale systems.
4. **Online Shopping Platform:** The software will not provide an online shopping platform for members. It will serve as a tool to assist the brick-and-mortar store in better catering to its members' needs.

By staying focused on the specified objectives and scope, the project will provide Goto Grocery with a powerful and efficient solution to streamline its operations, improve member satisfaction, and reduce unnecessary costs.

Deliverables and Schedule

1. **Software Application:** A fully functional member management system with a user-friendly interface.
2. **Source Code:** All developed source code.
3. **User Manual:** A comprehensive user manual.
4. **Training Program:** A training program for the staff at Goto Grocery.

Initial Release Schedule of the Product Backlog Items

No.	Item	Dependencies	Business Value (1 least – 10 most)	Release Schedule (Sprint 1 | 2)
F1	Create database table for members	-	9	1
F2	Create database table for sales records	-	9	1
F3	Create database table for products	-	9	1
F4	Create endpoint for adding members	F1	8	1
F5	Create endpoint for editing members	F1	8	1
F6	Create endpoint for removing members	F1	8	1
F7	Create endpoint for adding sales records	F2	8	1
F8	Create endpoint for editing sales records	F2	8	1
F9	Create endpoint for removing sales records	F2	8	1
F10	Create endpoint for adding products	F3	8	1
F11	Create endpoint for editing products	F3	8	1
F12	Create endpoint for removing products	F3	8	1

F13	Create endpoint for retrieving products	F3	8	1
F14	Create endpoint for retrieving sales	F2	8	1
F15	Create endpoint for retrieving members	F1	8	1
F16	Create a prediction algorithm to predict member's grocery needs based on previous sales	F1, F2, F3	7	2
F17	Generate sales and inventory reports	F16, F1, F2, F3	7	1
F18	User authentication and account management	F4, F5, F6	5	1
F19	Build web page to allow users to add new members	F4	8	2
F20	Build web page to allow users to edit existing members	F5	8	2
F21	Build web page to allow users to remove members	F6	8	2
F22	Build web page to allow users to add new sales records	F7	8	2
F23	Build web page to allow users to edit existing sales records	F8	8	2
F24	Build web page to allow users to remove sales records	F9	8	2
F25	Build web page to allow users to add new product	F10	8	2
F26	Build web page to allow users to edit existing product	F11	8	2
F27	Build web page to allow users to remove product	F12	8	2
F28	Build web page to allow for sales data to be imported into backend system via CSV	F7	5	2
F29	Build web page to allow for data to be exported to CSV	F13, F14, F15	7	2
F30	Build web page to allow users to view sales reports and analytics	F17	7	2
F31	Implement search functionality on the stock management page with filters to let users browse products	F13	5	2

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[1] This document is by no means a "full project proposal". It has been simplified and customised for the purposes of SWE20001 teaching. The full project proposal includes many other sections which have not been discussed during the first few weeks of SWE20001 teaching.