

Project Proposal¹ : *Members Record Management System(GotoGro-MRM)*

Background / Problem Description

Goto Grocery (GotoGro) Inc. is a member-based grocery store that located in Hawthorn. They are providing various types of fresh groceries to their consumer. And they are currently using paper-based system to record all their members data and sales records. They also find it difficult to meet the members expectations and their grocery needs so they often ordered items that is not needed by the members. This will make the company to lose a lot of money in the long run. That is why they needed a web-based application to store all their data information so that they can keep track on their costumer and their product needs.

Scope

The GotoGro project's goal is to employ computerised software to automate the present manual procedure, allowing the customer to save crucial data for extended periods of time with simple access and modification. Both of the necessary software system is available for usage. This system will help us to collect information from the member from year to year, as well as the management of stockpiles and consumer-requested items.

Stakeholders

- *Non-member customer's*
- *Member customer's*
- *Employees of Goto Grocery*

Deliverables and schedule

- *All sources code*
- *Testing*
- *User manual*
- *Training program*

Initial Release Schedule

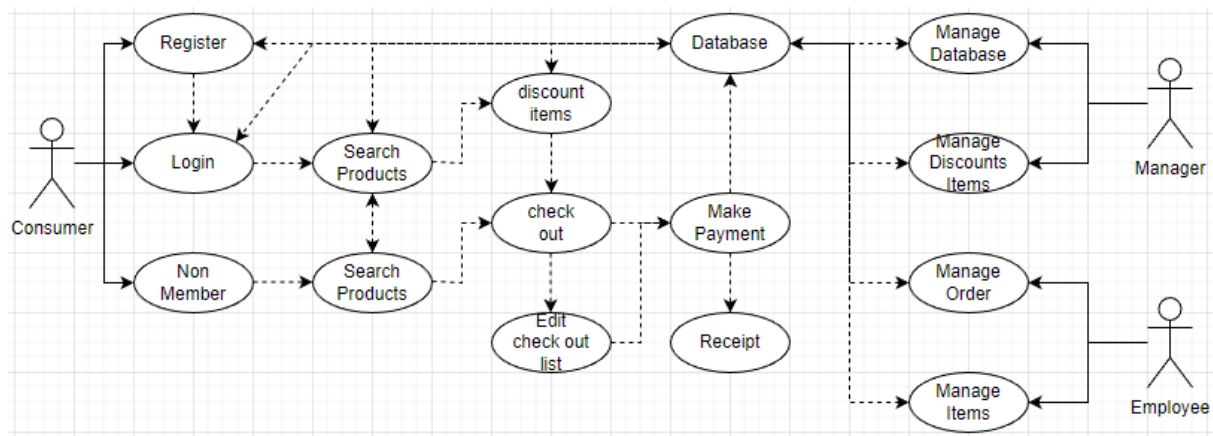
No.	Item	Dependencies	Business Value (1 least – 10 most)	Release Schedule (Sprint 1 2 3 ...)
F1	Add a new member		7	Sprint 1
F2	Add a sales record	F1	8	Sprint 1
F3	Edit a sales record	F2	8	Sprint 1
F4	Analyse a member's grocery needs	Existence of a member's record and that member's sales records	9	Sprint 1
F5	Display sales record	F2	8	Sprint 2
F6	Manage member records	F1	8	Sprint 2
F7	Membership Points	F5	9	Sprint 2
F8	<i>List of discount items</i>	F4	9	Sprint 2

¹ This document is by no means a “full project proposal”. It has been simplified and customized 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.

Solution Direction

In this project we have decided to do web-based application, because we have more knowledge on web designing. Therefore, our system will be needed more storage space to store multiple data like customer info, items, price, discount items and many more. And another reason we choose this because it is more accessible from any device like smart phone, tablet, laptop etc. device that have internet connection will be able to access the website. The other solution that I came out is mobile based application, the reason why we did not pick these options is because it required a smart phone to download the application. Hence it may cost a lot more than a web-based system to develop and maintenance.

STRENGTHS <ul style="list-style-type: none">• Accessibility• Ease of updates• Cost-effective development• No download required	WEAKNESSES <ul style="list-style-type: none">• No offline availability• Safety and security concerns• Slower speed• Less integration with device functions
OPPORTUNITIES <ul style="list-style-type: none">• Allows users from around the world to use it• IT system is becoming more common to businesses• Wider demographic	THREATS <ul style="list-style-type: none">• Server down• Data loss• Vulnerable to hacker



Consumer – In this role consumer will be using our system to view all kind of products and make a purchase. Then they are also able to become a member to get discount items that are available and make changes to items during check out session.

Manager – In this role manager will be able to manage database and manage discount items to keep every item price up to date.

Employee – In this role employee will manage consumer order and manage item on the website to keep every item quantity up to date.

Quality Management

Definition of Done (DOD)

Functional Suitability:

- **At least 95% of the functions are appropriate to be always useable.**

- For remaining 5% of the functions are not appropriate to be used in some circumstances. This is because some functions require some specific circumstances and requirements to be in used. Such as restoration system, it will activate and restores the data when the data or system has been corrupted or during a power shortage. As you can see, these are some specific situations, and that is why the remaining 5% is listed.

- **At least 85% - 90% of the functions are completed.**

- At least 85% - 90% of our functions are completed and useable. Another 10% of our functions might not be functional due to bugs or errors, this is because of human errors, and we cannot keep 100% promise that our system will be completely fine without errors or bugs. So that, we estimated that around 10% - 15% of our system will be affected by bugs and errors and to be found and improve it.

- **Maximum of 4 defects per KLOC (Thousand lines of codes).**

- This is because we can create more quality systems with a maximum of four defects per KLOC. This is just an estimate of the maximum number of defects we will allow in our system. Why is this considered a quality system because the number of defects per KLOC is less than five? It is because we determined that the defect density is only 4 within thousands of lines of code.

Performance Efficiency:

- **At least 95% of the functions within the response time is accurate and on time.**

- We will try to reduce our system's responsiveness as much as possible to minimize latency and delays. This is performed to prevent a sudden pause in the workflow and a sudden decrease in the time required to accomplish a task. Why 95%? We are unable to guarantee 100% because of unknown factors such as Wi-Fi latency, device latency, weak connections, and so on.

- **At least 2GB of the allocated memory space will be used.**

- This is to store all the data required to operate the system and data given by the user. The memory space used, may vary as time goes on. This is because the data stored will increase as time goes on, as there will be more data to be stored and more data is required to be used to produce stock reports.

- **The system will be able to produce sales reports based on daily, weekly, monthly, and yearly data, as well as predict the items that is popular.**

- These are the client-requested functions that must be implemented in the system. To enhance the reliability and consistency of the company's profit margins, as well as their market reputation, they must be capable of producing quality and accurate sales data. This enables them to measure and predict possibilities to boost their stocks and profits.

Usability:

- **Easy and user-friendly interface.**

- This will make it easier for the user to navigate the system. To avoid headaches and decrease workflow, our system must have an easy-to-use and user-friendly interface that allows users to navigate the system more easily.

- **User Manual.**

- To instruct users on how to use the system. To fully understand our system, we must provide a user manual that teaches and guides them on how to use it to its full potential.

- **Double confirmation feature to prevent users from making errors.**

- This enables the user to confirm their actions before they are confirmed. This is just an extra security measure to confirm a user's action before performing it; this is to prevent user errors and mistakes from selecting something by accident.

- **Device compatibility**

- The system will be compatible with different devices to allow users to have easier access. Since our system is web-based, it has the capabilities of being compatible with most devices, since the NO.1 requirement needed to access the system is a browser and WI-FI. Reliability:

- **80% of the database is reliable under normal operations.**

- The required data used to operate the system is information about the items stored as well as information that users provide. Because the remainder 20% may be cached or junk data from other uses, we cannot guarantee 100% consistency because it is uncontrollable.

Maintainability:

- **Functional testing passed**

- To determine and test the functional requirement. This is to determine and evaluate the system based on its functions to ensure that it is in good working condition and that every feature and function could really accomplish what is requested from them with accuracy and precision.

- **The system can be modified without interrupting the existing system**

- System codes can be modified and updated while in use, without interrupting the existing system. This is to ensure that no interruptions will be made during working hours.

Resources

VIGHNESH A/L GANAPATHI – 104057178 – Cyber Security

Hi, My name is Vighnesh and I'm just a regular student who is trying to score well in all my subjects. I love to learn to new things but often to be too lazy at the start. I'm the leader for the group, one of the programmers.

NGAU YONG SHENG – 103526703 – Data Science

My name is Yong Sheng, I am just a regular student who aim just to pass all the subject. I am willing to learn new stuff that will enhance my resume. My role for this project is to code out the UI and help out on some back-end programming.

Liew Chan Yeong Derrick-103536663- Data Science

My name is Liew Chan Yeong Derrick and my roles for this project is UI Designer and responsibility for this project is to prepare and design our web application

Yit Kim Leong - 103710331 - Software Development

My name is Yit Kim Leong and I aim to learn as much as I can about programming and will be responsible for helping in both ends of the system. My role will be to support the main programmers in the group and provide input for usability testing.

Chiam Jun Hao – 103526716 – Cyber Security

My name is Chiam Jun Hao and my goal for my studies is to get as high marks as I can. And my role in this project is to support front end and back-end coding. Therefore, I will also do some research about the project and try to make it as perfect as possible.

Approval Signatures:

Project Team

	Name of student	Student Id	Signature
1	Vighnesh A/L Ganapathi	104057178	<i>VIGHNESH</i>
2	Ngau Yong Sheng	103526703	<i>ysheng</i>
3	Chiam Jun Hao	103526716	<i>Chiam</i>
4	Liew Chan Yeong Derrick	103536663	<i>Liew</i>
5	Yit Kim Leong	103710331	<i>Leong</i>

Project Sponsor [Your Tutor]

Tutor's name (on behalf of the client)	Signature:
Ms Robina	