**Appendix**

**FORM 1**

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**FACULTY OF COMPUTING AND INFORMATION TECHNOLOGY**

Diploma in Software Engineering

Programme: \_DSF\_\_ (Group: \_\_1\_)

**Assignment**

## AMSE1003 SOFTWARE ENGINEERING

| **Name (Block Letters)** | **Registration No.** | **Signature** | **Marks** |
| --- | --- | --- | --- |
| 1.Ngan Yip Heng | 24SMD04176 | Ngan Yip Heng |  |
| 2.Tham Zhi Cheng | 24SMD04769 | Tham Zhi Cheng |  |
| 3.Wong Zi Jian | 24SMD01788 | Wong Zi Jian |  |
| 4.Yeow Jun Hua | 24SMD10866 | Yeow Jun Hua |  |
| 5.Muhammad Ivan Soon | 24SMD04595 | Muhammad Ivan Soon |  |

Lecturer’s Name: Ms SURAYAINI BINTI BASRI

Date of Submission: 9/29/2024

**FORM 2**

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**FACULTY OF COMPUTING AND INFORMATION TECHNOLOGY**

**Plagiarism Statement and Guideline for Late Submission of Coursework**

Read, complete, and sign this statement to be submitted with the written report.

**We confirm that the submitted works are all our own work and are in our own words.**

| **Name (Block Letters)** | **Registration No.** | **Signature** | **Marks** |
| --- | --- | --- | --- |
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| 2.Tham Zhi Cheng | 24SMD04769 | Tham Zhi Cheng |  |
| 3.Wong Zi Jian | 24SMD01788 | Wong Zi Jian |  |
| 4.Yeow Jun Hua | 24SMD10866 | Yeow Jun Hua |  |
| 5.Muhammad Ivan Soon | 24SMD04595 | Muhammad Ivan Soon |  |

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**Part 1**

Company: Servay

Location: Sabah

Hypermarket

Problem–1:Manual Scan for customer to self check out

* When we shop in the Servay they don't have a self-service counter. Customers cannot complete a check for themself must go to the manual counter to make payment. That has no problem implementing the manual counter but when on busy hours customers flow will increase. So for this reason it will make the manual counter need more staff on the busy hours. However, after a busy period, there will be a gap in the distribution of employees, which will cause the company to hire some unnecessary employees. So to solve this problem we need to develop a self checkout system and put it into the kiosk. Customers have the choice to select a payment method, the solution can separate customers for checkout to reduce the burden on cashiers when in busy hours , human error, and personal costs.

Problem-2: Membership

* Earn points and rewards(attract more customers)
* Membership is the most important part to cultivate long-term customers and attract more resident customers in one business. Servay also has the membership for their customers but it was used in a card to prove that they are the member. If the customers need to become a member manual operation is inevitable because to become a member you will need to fill in the form manually. That also has a problem if your member card was lost and to get a new card customers also need to go to any branch of Servay fill the form in manually to get member card for yourself was a very troublesome and the company will lose some regular customers. To fix the problem of membership we have the solution that can develop a membership system and add it to the mobile app. In the membership system, customers can register as Servay members. You don’t need to go to a designated location.You can operate anywhere you want. Other than that, customers also can get a lot of benefits from the membership system. As a simple customer can always check the points they earned on the membership and also be able to earn points in every transaction.

Problem-3: Creating Mobile application for servay

* Self pay n pick up
* Certain Customers don't have the time to go to Servay due to their own work schedules, hence having a method to self pay n pick up will help them to just purchase the only important thing they need and continue with their schedule with no problems at all, since all they need to is just book a specific time to go any branch of Servay and pick up their items.

Problem-4:LED displays instead of Manual pricings on shelves

* Nowadays in most Servay Branch, the use of manual pricings on shelves to display the prices for specific goods are very common. But due to lack of manpower, some of these pricing tags might be forgotten to change and misguide customers about the price of these specific goods and causing more problems later when paying at the counter.By using LED display, we can be able to avoid this problem by having a backend system that control all the LED display to show the correct price tags for the good that are placed onto the shelves.

Problem-5: Software for staff

* In today’s computerized world, as a staff from the Servay or any organization, any company.For the simple to develop the software,Infotech as a provides software solutions for construction administration and inspection, secure online bidding,and paperless contracting .So to improve the convenience of the entire company we need to develop our own software. In the software, we can have a database to manage all the information of staff , develop a clock-in system for employment , and all the announcements and important information can be uploaded to the software.

Problem-6: Low Quality Control

* The products that are allowed to be sold need a mandatory for them to meet the quality control required for customers worth buying attention. Products that are sold should have satisfying character in their honesty and reliability to serve the buyers' use. However, some products in shelves are not passed the acceptable level of quality to satisfy their customer. Sometimes, consumers may encounter issues like product spoilage, misleading labeling, or substandard ingredients. Maintaining quality control is essential for consumer satisfaction and trust. Therefore, companies that are ignoring these issues may lose their credibility from customers who shop for products that demand their needs. To combat this problem managers could set a labor task that focuses heavily on constant checking and product maintenance from unwanted damage or following the required guidelines. For example, they are making sure that every item in stock being reevaluated is either disqualified and returned back to its original business seller if any damages and misleading information were found.

**Software quality attributes of the problem**

Problem-1:

This solution proves to show the attribute of efficiency in this problem. This is because Servay manages to get more customers when it is rush hour. Thus, also increasing the profit and efficiency of the company to serve more customers. Thus, more customers who are in a rush can leave quickly and be satisfied.

Problem-2:

This solution also shows the attribute of efficiency. As the application of membership becomes digital, more customers can apply for it wherever they want at their own comfort. This ensures to attract more customers and thus increasing the customers that apply for membership.

Problem-3:

This solution also comes with the attribute of efficiency. More customers will be able to prepare ahead of time regardless how busy they are and can pick up at any time they are comfortable with. This can increase customers coming per day.

Problem-4:

This solution helps with the attribute of maintainability. With the use of these displays, the company does not have to worry about monthly costs for the classic stickers applied. It allows for the flexibility of changing the price without using more stickers and is easier to maintain in the long run as well.

Problem-5:

This solution proves dependability and security. This ensures that the company does not suffer any losses due to staff members slacking. It also ensures the safety of the products in the store to not get losses as well. This proves to be a huge advantage to the company.

Problem-6

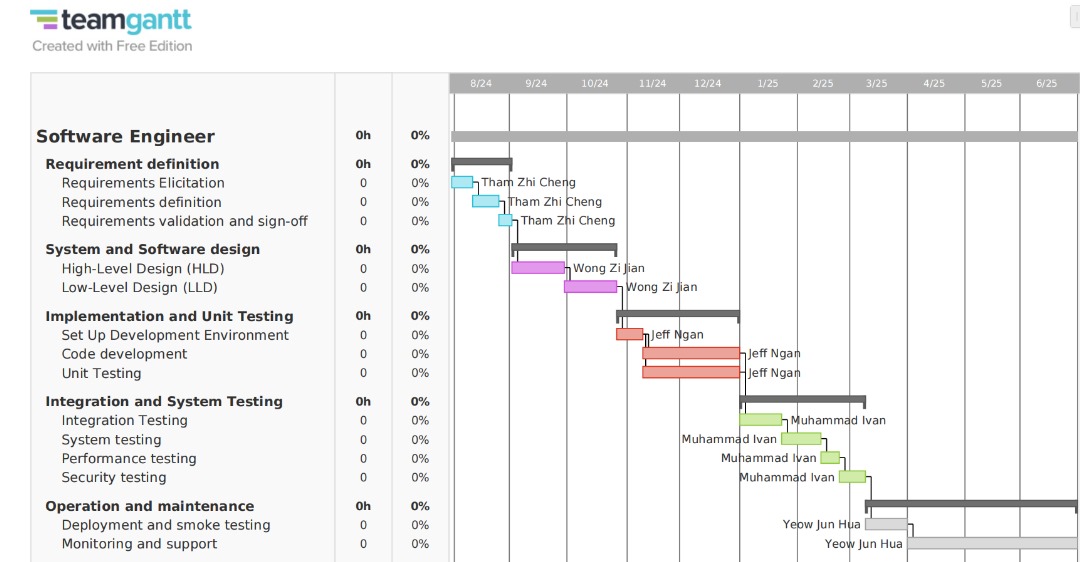
This solution proves dependability and security. Each product is investigated accurately to make sure each product follows the legal guidelines to ensure the safety and integrity are protected. This also creates an opportunity for the original seller to improve their weakness on their products thus reducing the risk and danger to their target customer.

**Software Process Model**

We recommend the Waterfall model. The Waterfall model is the earliest model and is also known as Linear-sequential Life Cycle. We chose it because we have already analyzed the requirements of Servay Hypermarket and planned out the system and software for it. Other than that, we are still a relatively small team so using the Waterfall model would help us to focus on developing the system and software because it is systematic and easy to follow. We also decided this software process model would be the best because the requirements of the system are already certain and do not require any future changes. The Waterfall model is also appropriate for large software systems so it would be good for Servay Hypermarket since it has branches all across Sabah and they will be able to use a common model for hardware and software. Moreover, the Waterfall model provides a friendly interface therefore customers are comfortable to interact with the system service thus giving high satisfaction to use them in their

Organization.

Part 2



**Functional Requirements and Non-Functional Requirements**

**Functional Requirements**

1. Mobile Application for Servay

1.1 The system should be accessible without any kind of problems such as delay in logging in time.

1.2 The system should allow customers to be able pre-order the products for a specific time to pick up.

1.3 The system shall allow customers to be able to pay using their own bank account or E-wallets.

2. Manual Scan System For Self Customer Checkout

2.1The system should be able to scan items without mistaking the bar code with other bar codes.

2.2 The system shall be able to get the prices of the object scanned under 3 seconds.

2.3 The system shall have a response time of under 3 seconds.

3. Quality Control

3.1 The system should allow constant inspection by the employees to confirm no unexpected damage to the product.

3.2 The system should be able to provide feedback for companies to improve their products.

3.3 The system should ensure all the products must pass the quality qualification.

4. Software for staff

4.1 The system should allow the employees to register their staff account.

4.2 The system should let employees submit complain , feedback on any problem to the company.

4.3 The clock in and out system should not have mistakes in recording employees’ clock-in and clock-out times

5. Membership:

5.1 The system should allow the customer to register as a member using email and password.

5.2 The system should reward the member with member points that convert each RM10 spent into 1 point when checking out .

5.3 The system should allow the member to redeem discounts of 10% with minimum spending of RM50 and maximum spending of RM 100 using 100 member points .

**Non-Functional Requirements**

1.The system should secure its privacy of sensitive information for the worker and employees only.

2. The system processing and responsive time should not exceed 5 seconds.

3. The system should be works fine even with inconsistent versions

4.The system’s server should be active 24/7

5.The system’s processing power must be sufficient to sustain the stability of the entire server

**Architecture Design**

**Client Service Model**

****

**Part 3**

**Test Case 1.1**

| **Test Case Name** | | System should be able access at all time | | **Test Case Description** | System shouldnt have any kind of problem when being used | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | Staff Acc | | | 1 | STAFF ID: EXP22222  Password: 123456 | |
| 2 |  | | | 2 |  | |
| 3 |  | | | 3 |  | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Staff should be able to access the System at all times. | | Can be able to access the system | | System function normally as expected | Pass |

**1.2**

| **Test Case Name** | | Mobile Application, 1.2 Pre order | | **Test Case Description** | Testing is the Pre order system is working as intended. | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | The user has registered as a member in the system. | | | 1 | Example, Username : Jif Gan  OR  email : Janesakura21@gmail.com | |
| 2 |  | | | 2 | Password is “\*\*\*\*\*\*\*\*\*\*” | |
| 3 |  | | | 3 |  | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Login into the system, or will be able to auto login if user have login using mobile app before | | Be able to login into the system without any issue | | User is able to login without any problem, If a user had logged in before, the system automatically logs in using the user's data. | Pass |
| 2 | User is able to choose the branches of Servay to pre order their groceries | | Able to see which branches of Servay based on their location | | Users are able to see what branches of Servay based on their location and their active hours. | Pass |
| 3 | User is able to check is the item they wish to purchase is in stock, the cost and the amount they wish to purchase | | Able to see the quantity still available, the cost of the item, and be able to buy in bulk if wished to. | | Able to see the quantity. of the item wished to purchase, the cost But somehow cannot be able to buy more than 1 | Fail |
| 4 | User is able to choose what time to pick up | | Able to choose time to pick up after choosing what to purchase | | Able to choose the time of when the user wish to pick up their purchases | Pass |
| 5 | User is able to make payment using E-wallet or Bank cards | | Able to pay using E-wallet or Bank cards | | Able to pay using E-Wallet or Bank cards without any issue | Pass |
| 6 | The Order purchase will be recorded into the system and passed to the active worker to start processing the order | | Workers are able to see the Order Purchase | | The Order purchase is recorded into the system and passed to the processing room. | Pass |

**1.3**

| **Test Case Name** | | 1.3 Paying using E wallet or Bank | | **Test Case Description** | Customer should be able to pay using E-wallet or Bank | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | Bank account link | | | 1 | Having link to Banks branch ID | |
| 2 | E-wallet | | | 2 | Having link to E-wallet systems | |
| 3 |  | | | 3 |  | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Customer should be able to make order without any problem | | Be able to make orders | | Customers are able to make their orders | Pass |
| 2 | Customer can choose which method to pay | | Customer can be able to choose how to pay using E-wallet or Bank | | Customer are able to choose using rather E-Wallet or Bank | Pass |
| 3 | Customer can be able to pay using E-wallet or Bank | | Paying using E-wallet or Bank | | Customer are able to pay using E-wallet or Bank | Pass |
| 4 | System should be able to request payment from the customer’s chosen E-wallet or Bank to pay | | Request payment from E-wallet or bank | | Able to request the payment from E-wallet or Bank | Pass |

| **Test Case Name** | | 2.1The system should be able to scan items without mistaking the bar code with other bar codes. | | **Test Case Description** | To check whether the scanning system scans the barcode correctly for the product and records the serial number, and designated price for the object and also removes the object's serial number history from the stock. | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | The barcode on the object must be clear | | | 1 | A pencil worth RM10 with a serial number of 1234. | |
| 2 | - | | | 2 | - | |
| 3 | - | | | 3 | - | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Customer selects an object, for example, a pencil worth RM 10 and has a serial number of 1234 and scans it at the manual scanner. | | System scans its barcode and records its designated price, RM10, serial number and product added to the cart which is a pencil. | | System successfully adds it into the customers checkout cart with its correct price which is Rm10, serial number and product added into the cart which is a pencil. | Pass |
| 2 | System then adds Rm10 to the customers overall cart. | | System adds Rm10 to the persons cart which has Rm0. | | The system now has recorded that the customer's overall cart is worth Rm10. | Pass |
| 3 | System then uses the serial number to subtract the item from the system's memory so that it can track the order for the system. | | Item for serial number 1234 is subtracted by 1. | | System subtracted 1 item from serial number 1234 in the database. | Pass |

| **Test Case Name** | | 2.2 The system shall have a response time of under 3 seconds. | | **Test Case Description** | To allow any user using the self checkout center to not experience any system issues such as lag or delay in using the system. | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | System must be active and in use by a user. | | | 1 | A pencil worth RM10 with a serial number of 1234. | |
| 2 | - | | | 2 | - | |
| 3 | - | | | 3 | - | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Customer scans the pencil through the self checkout counter. | | Counter registers the item into the system under 3 seconds. | | Counter registers the item into the system in 2.5 seconds. | Pass |
| 2 | The customer then proceeds to checkout. | | Counter prompts the customers cart in under 3 seconds with the correct details. | | Counter prompts the customer thor cart with the correct details in under 2.2 seconds. | Pass |
| 3 | Customer pays using a credit card at the self checkout counter then gets his item. | | Counter will be able to complete the transaction under 3 seconds and allows the customer to take his item. | | Counter completed the transaction in 4.3 seconds and allows the user to take home his item. | Fail |

| **Test Case Name** | | 2.3 The system should be able to total up the prices of the object scanned without mistake. | | **Test Case Description** | The system must be able to total up all items that are in the customer's cart before asking for payment from the customer. | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | The customer must let the system know he is done adding items into the cart by pressing on the “Checkout” option on the system. | | | 1 | A pencil worth RM10 with a serial number of 1234. | |
| 2 | - | | | 2 | An eraser worth RM2 with a serial number of 5678. | |
| 3 | - | | | 3 | - | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Customer scans the pencil he wants to buy. | | System adds RM10 to his cart | | System added RM10 to his cart | Pass |
| 2 | Customer scans the eraser he wants to buy and presses the “checkout” button in the system. | | System adds RM 2 to his cart. | | System added RM2 to his cart totalling his cart up at RM12. System then proceeds to ask the customer to pay RM12 to get his item | Pass |
| 3 | Customer proceeds to pay using a credit card and takes his item. | | System completes the transaction and receives only RM12 from the customer. | | System received exactly RM12 from the customer and allowed the user to take his item. | Pass |

| **Test Case Name** | | 3.1 Regular inspection system | | **Test Case Description** | Ensure that employees perform regular inspections for product damage. | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | Product inspection systems are conducted | | | 1 | Product : Blender | |
| 2 | Employees are trained on inspection procedures. | | | 2 | Type: Home appliance | |
| 3 | Provide a schedule for when routine inspections are available. | | | 3 | Inspection Date: 2024-10-01 | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Log into the regular inspection system. | | User successfully logs in with valid credentials. | | Outcome 1: Successful login. | Pass |
| 2 | Schedule a product inspection task. | | The inspection task is scheduled without errors | | Task scheduled successfully | Pass |
| . | Select a product for inspection. | | The system retrieves the selected product details. | | Product details retrieved successfully. | Pass |
| . | Inspect the product for physical damage. | | The inspector identifies the condition of the product accurately. | | Inspection reveals damage. | Pass |
| n | Mark the product as damaged if issues are found | | The product is marked as defective in the system | | Product marked correctly as defective. | Pass |
|  | Remove the damaged product from the shelf. | | The product is successfully removed from the shelf. | | Product removed as required. | Pass |
|  | Generate an inspection report. | | An inspection report is generated detailing the findings | | Report generated successfully with all necessary details. | Pass |
|  | Submit the report for review. | | The report is submitted for further action or review. | | Report submitted successfully | Pass |

| **Test Case Name** | | 3.2⦁ Feedback system | | **Test Case Description** | Validate that the system provides feedback to companies for product improvement. | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | Feedback mechanism is integrated within the quality control system | | | 1 | Product : Cereal  Type: Packaged Food  Issue: Expired product | |
| 2 | Employees have access to the system and can log product feedback | | | 2 | Date of Feedback: 2024-10-02  Seller Response: Waiting | |
| 3 | Companies are registered and available to receive feedback for their respective products. | | | 3 | Feedback Sent: Yes | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Log into the feedback system. | | The user successfully logs in with valid credentials | | Successful login. | Pass |
| 2 | Select Product. | | The system correctly retrieves the product. | | Product details retrieved successfully. | Pass |
| . | Identify the issue (Incorrect labeling). | | The issue is logged correctly, with specific details entered about the labeling mistake. | | Incorrect or insufficient issue details logged. | Fail |
| . | Fill out the feedback form with issue details. | | The form is correctly filled out with detailed feedback about the incorrect labeling | | Form filled out successfully. | Pass |
| n | Submit the feedback. | | Feedback is successfully submitted, and the system notifies the supplier. | | Feedback submitted, and supplier notified. | Pass |
|  | Monitor for supplier response. | | Supplier responds within 3 days, acknowledging or addressing the issue | | Supplier responds within the expected time | Pass |

| **Test Case Name** | | Quality qualification system | | **Test Case Description** | Ensure all products meet the minimum quality standards before being sold. | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | A quality standard exists for all products. | | | 1 | Product : White T-shirts  Type: Clothing | |
| 2 | Employees are trained to identify substandard products. | | | 2 | Quality Test: Fabric strength below standard  Action: Product disqualified and returned to seller | |
| 3 |  | | | 3 |  | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Log into the quality qualification system. | | The user successfully logs in with valid credentials. | | Successful login. | Pass |
| 2 | Select Product to review. | | The system retrieves the right product. | | Product retrieved successfully. | Pass |
| . | Review product specifications (Safety standards and material quality). | | The system provides detailed specs, allowing proper review on legal quality standards | | All specs are accessible. | Pass |
| . | Compare product details with guidelines. | | The product specs are compared against safety guidelines, and any issues are recognized | | Product is compliant | Pass |
|  | Mark product as qualified or disqualified | | The system updates the product status based on the | | Product status updated as qualified | Pass |
| n | If disqualified, initiate the return process | | The system successfully initiates the return process, and the product is flagged for removal from stock. | | Return process initiated. | Pass |
|  | Document findings and update product records | | All findings and product status changes are documented and stored in the system. | | Documentation completed and stored | Pass |

| **Test Case Name** | | 4.1 Sign-in with staff information to file | | **Test Case Description** | To check the sign-in function by use staff name and password | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | The staff information must already save in the file | | | 1 | staff name = Wong Zi Jian | |
| 2 |  | | | 2 | password = “\*\*\*\*\*\*\*\*\*\*\*” (must in strong password) | |
| 3 |  | | | 3 |  | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Download staff’s software and open it | | The page of menu to let staff select sign-in and login | | Have the menu show that sign-in, login and exit button to let user select their choice |  |
| 2 | Enter your choice for next step | | Show the sign-in page to user | | System with read what user type and if go true show the next page, if not back to the main menu |  |
| 3. | Enter username and password and save the data to file | | The username and check user password is a strong password or not , if not system with say this is not a strong password please try again, if true system success | | Have a place can let user to type their username and password, for the password system will check the password,if password not pass need user to type their password again |  |
| 4. | Click the sign-in as a staff button | | Save user information to file and go back to the main page | | If the password is meet standards the sign-in button will effective, after user chick the sign-in button save user information in the file and return to the main page |  |

| **Test Case Name** | | 4.2 Feedback system for staff to company | | **Test Case Description** | System should send the feedback to the human resource management | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | Staff account | | | 1 | feedback letter | |
| 2 |  | | | 2 |  | |
| 3 |  | | | 3 |  | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Click feedback button | | Show the feedback form for user | | The feedback form should n't have any GUI problems. |  |
| 2 | Type feedback | | User can type their feedback on the form | | Make sure user can type any word on the form |  |
| 3 | Submit form | | Submit the letter to human resource email | | System will check user was already fill all the question on the form and the button will effective to click, the feedback form should send to human resource email |  |

| **Test Case Name** | | 4.3 Clock in and out system | | **Test Case Description** | System should not have any mistakes in recording employees’ clock-in and clock-out times | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | Staff account | | | 1 | Record time | |
| 2 | In working time | | | 2 | Employee current picture | |
| 3 |  | | | 3 |  | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Click to open clock in system | | Show the GUI of clock system | | The page should not have any GUI problems. |  |
| 2 | Click the choice button to select your location and take a current picture | | System will use GPS check your current location and show the nearly branch to user and open camera to take selfie for prove | | System should point out the correct current location of the user and not any problem for the picture taking. Check if the form already filled and effective the button |  |
| . | Click the button to clock in to work | | Save the time, location and date to the user work list and save into cloud file | | Make sure current time, location and date don’t have any problems , system success to check the picture is match for staff face |  |

| **Test Case Name** | | 5.1.1 Registering as member with data requirement | | **Test Case Description** | To check the register function by using valid email and password | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | Password must include more than 8 uppercase or lowercase characters, numbers or special symbols | | | 1 | password = Ali1234$ | |
| 2 | Needs to agree to terms and conditions of Servay application | | | 2 | tick in box | |
| 3 | Needs to agree to privacy policies of Servay application | | | 3 | tick in box | |
| 4 | Email must not be the same as email already registered | | | 4 | email = ali123@gmail.com | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Go to Servay Hypermarket application | | Display the login and register button | | The login and register button is displayed | Pass |
| 2 | Click on register button | | Display register page | | Register page is displayed | Pass |
| 3 | Enter email and password that follows the requirement displayed | | Email and password are entered | | Email and password are entered | Pass |
| 4 | Click on register as member button | | Display “Welcome To the Servay Family” | | Display “Welcome To the Servay Family” | Pass |

| **Test Case Name** | | 5.2.1 Rewarding members with member points when checking out. | | **Test Case Description** | To check the amount of member points the member receive using the correct formula. | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | The amount spent must be above more than RM0 | | | 1 | RM100 | |
| 2 | The amount of member points received must be 10% of the total amount paid. | | | 2 | RM100 x 0.1 = 10 points | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Click on the pay button | | Display the amount the member has paid and display the points the member has received. | | The total amount paid and the member points received by the member are displayed. | Pass |

| **Test Case Name** | | 5.3.1 Redeeming discounts using member points. | | **Test Case Description** | To check the redeeming function using the correct value of member points. | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pre-conditions:** | | | | **Test Data:** | | |
| 1 | The member must have at least 100 member points | | | 1 | member\_points = 138 | |
| 2 | The total amount spent must be between RM50 to RM100. | | | 2 | amount\_spent = RM59 | |
|  | | | | | | |
| **Step #** | **Step Details** | | **Expected Results** | | **Actual Results** | **Remarks (Pass / Fail / Not executed / Suspended)** |
| 1 | Click on the redeem discount button | | Display “10% discount has been applied” and deduct the total payable amount by 10%. | | “10% discount has been applied” message displayed and 10% of the total payable amount has been deducted. | Pass |

**Usage of Git**

**Link :**

The Usage of Git have provided us a very good opportunity to be able to handle our workload much more efficiently when combined using TeamGantt, it allowed us to be able to check on each other’s work without requiring others to keep on sending files to each other, instead we just post our files to the repository of github using Git.