School of Computer Science & Engineering

COMP1531 – Software Engineering Fundamentals

GROUP PROJECT

A_FOR_ABSENT

FINAL REPORT

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Table of Contents

Final User Stories 3

Class Diagram 7

Entity-Relationship Design 8

Log Book 9

1. Progress of Tasks 9

2. Responsibility Allocation 10

3. Group Meetings 10

FINAL USER STORIES

- Priority of each user story is measured in one of 3 values (high, medium and low).
- Each story point refers to ½ day (1SP = ½ day).

Initial Epic story:

1. As a customer, I should be able to create order, check order and make payment.

ID	US1
Name	View menu options
User-story Description: As a customer, I should be able to view the menu so that I can know available types of base burgers and main ingredients. **Acceptance Criteria:** • Base and custom burger options should be displayed. • Base burgers and wraps should be displayed with all ingredients and price. • Menu for customs should be displayed with all available ingredients. • Ingredients should be displayed with name, price and calories.	
Priority	High
Story points	2SP

ID	US2
Name	Order base
User-story Description: As a customer, I should be able to choose a standard base burger or wrap so that I can save my time. **Acceptance Criteria:** • Should be able to choose a standard base burger or wrap. • Should be able to see a net price for the order. • Should be able to proceed to check out page. • Should be able to add more burgers, sides or drinks to the order.	
Priority	High
Story points	4SP

ID	US3
Name	Order custom
User-story Description: As a customer, I should be able to choose ingredients (buns, sandwiches, patties, sauce, etc.) so that I can enjoy the food. **Acceptance Criteria:** • Should be able to choose between burger and wrap. • Should be able to choose quantity of buns from a given range (2 to 4). • Should be able to choose type of patties. • Should be able to choose the quantity of patties from a given range based on the number of buns (single: 1 or 2, double: 2 to 4, triple: 3 to 6).	

• Should be able to choose quantities of other ingredients (tomato, lettuce, tomato sauce, cheddar cheese, swiss cheese, etc.). • Should receive alert if the order quantity exceeds the stock limit. (e.g. customer ordered 2 chicken patties but only 1 is left in stock). • Should be able to see a net price for the order. • Should be able to proceed to check out page. • Should be able to add more burgers, sides or drinks to the order.	
Priority	High
Story points	6SP

ID	US4
Name	Order sides and drinks
User-story Description: As a customer, I should be able to add sides and drinks to my order so that I can have more satisfactions. **Acceptance Criteria:** • Should be able to choose sides (nuggets, chips, salad, etc). • Should be able to choose drinks (Coke, Sprite, Fanta, water, orange juice). • Drinks are displayed with different sizes (contained drink: Can or Bottle; juice: Small or Medium). • Should receive alert if the order exceeds the stock limit. (e.g. a customer ordered 2 cans of coke but only 1 is left in stock). • Should be able to see a net price for the order. • Should be able to proceed to check out page. • Should be able to add more burgers, sides or drinks to the order.	
Priority	High
Story points	4SP

ID	US5
Name	Make payment
User-story Description: As a customer, I should be able to check out so that I do not have to queue at cashier. **Acceptance Criteria:** • Should be able to see the total price for the order. • Should be able to modify the order. • Customer should be given an order ID after checkout.	
Priority	Low
Story points	1SP

ID	US6
Name	Check order status
User-story Description: As a customer, I should be able to check my order status so that I can know when to collect my food.	

Acceptance Criteria: • Customers should be able to enter their order ID. • Different order status should be displayed when valid order IDs are entered ('Queueing', 'Preparing', 'Ready to collect' or 'Collected').	
Priority	Medium
Story points	2SP

2. As a staff, I should be able to view current orders, update order status and maintain inventory.

ID	US7
Name	View current orders
User-story Description: As a staff, I should be able to view current orders so that I can reply to customer enquiries about order status. **Acceptance Criteria:** • Order information of all current orders should be displayed with information of order ID, food details and ordered time. • Orders should be displayed with their status ('Queueing', 'Preparing', 'Ready to collect' or 'Collected').	
Priority	High
Story points	3SP

ID	US8
Name	Update order status
User-story Description: As a staff, I should be able to update an order status so that the customer knows her order is ready for pick-up. **Acceptance Criteria:** • Status will be set to “Queueing” once the order is placed. • Staff should be able to change status to “Preparing” when the food is being prepared in the kitchen. • Staff should be able to change it to “Ready to collect” once the order is ready. • Staff should be able to change it to “Collected” after the order is collected. • Collected orders should disappear from staff’s current order page.	
Priority	High
Story points	2SP

ID	US9
Name	Check inventory stocks
User-story Description: As a staff, I should be able to check the stock of all ingredients so that I can refill the out-stock ones in time.	

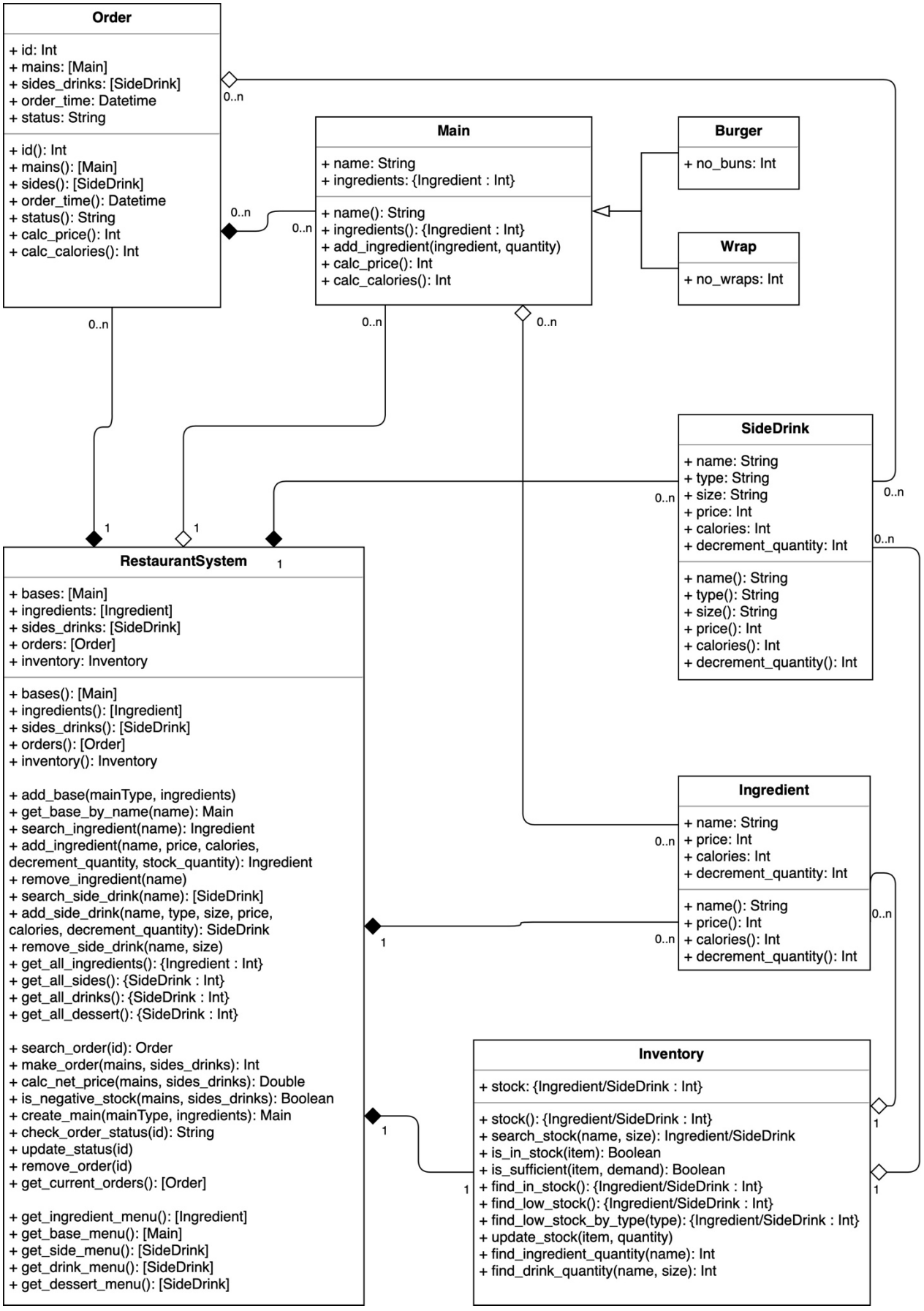
Acceptance Criteria: • Staff should be able to check the quantity of all ingredients in stock. • Staff should be able to check all the ingredients that are low-stock.	
Priority	Medium
Story points	4SP

ID	US10
Name	Update inventory stocks
User-story Description: As a staff, I should be able to update the quantities of ingredients so that the they are available for customers to select. **Acceptance Criteria:** • Staff should be able to increase the quantity of an ingredient in stock. • The quantity of an ingredient in stock should reduce correlatively when an order is made.	
Priority	Medium
Story points	6SP

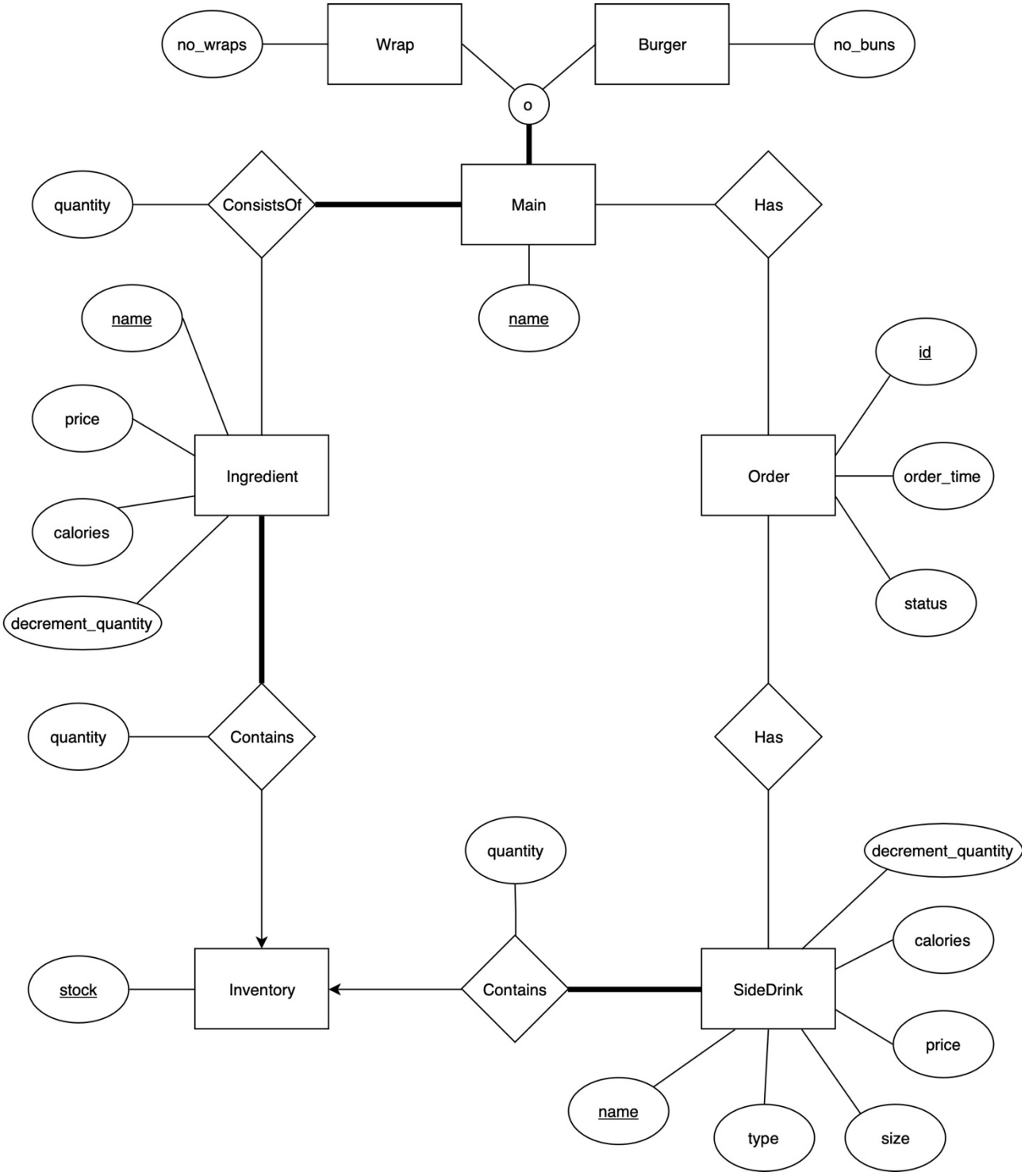
ID	US11
Name	Create new ingredients
User-story Description: As a staff, I should be able to create new ingredient options (ingredient name, price, calories and quantity) so that new ingredients are available for customers to select. **Acceptance Criteria:** • Staff should be able to add a new ingredient to stock with the information of name, price, calories and quantity. • This ingredient then should be visible in customer's menu and staff's stock list.	
Priority	High
Story points	3SP

ID	US12
Name	Delete existing ingredients
User-story Description: As a staff, I should be able to delete an existing ingredient if it is no longer served so the customer cannot choose it. **Acceptance Criteria:** • Staff should be able to delete all the data of an ingredient from the stock. • This ingredient then should not be in customer's menu or staff's stock list.	
Priority	Medium
Story points	3SP

UML CLASS DIAGRAM



ENTITY-RELATIONSHIP DESIGN

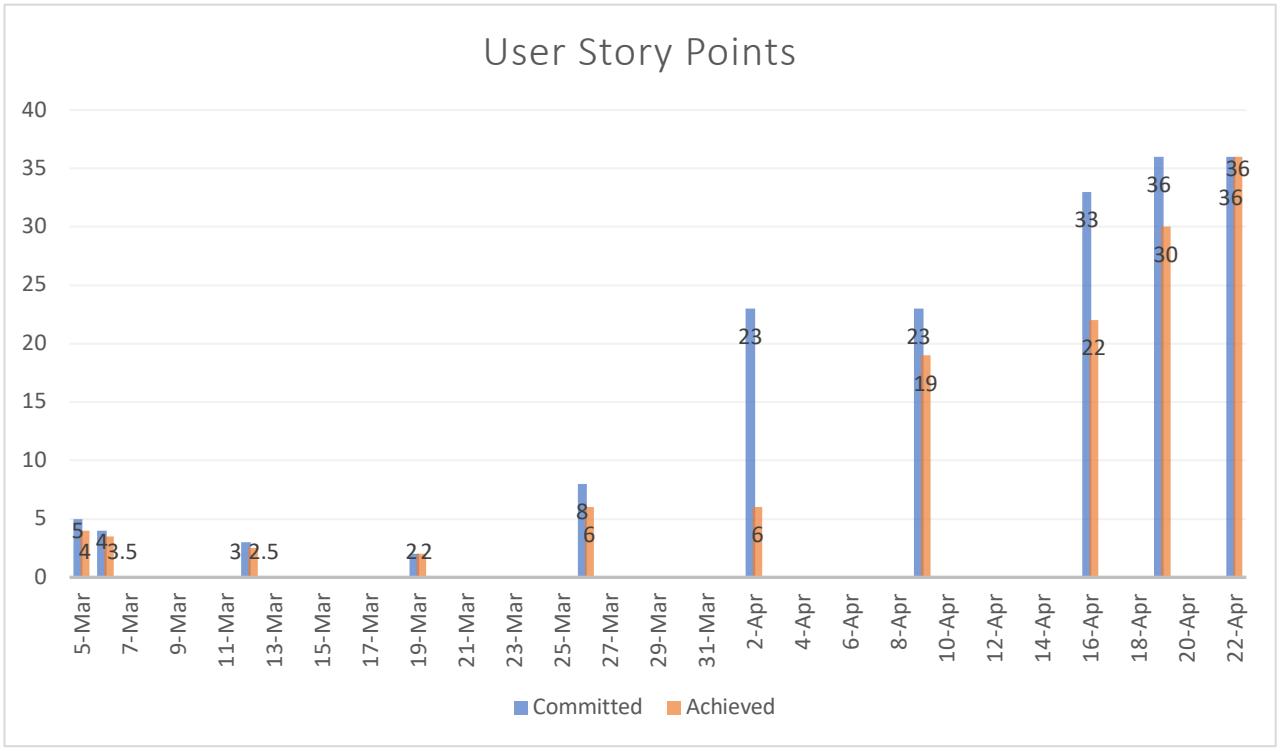


Assumption:

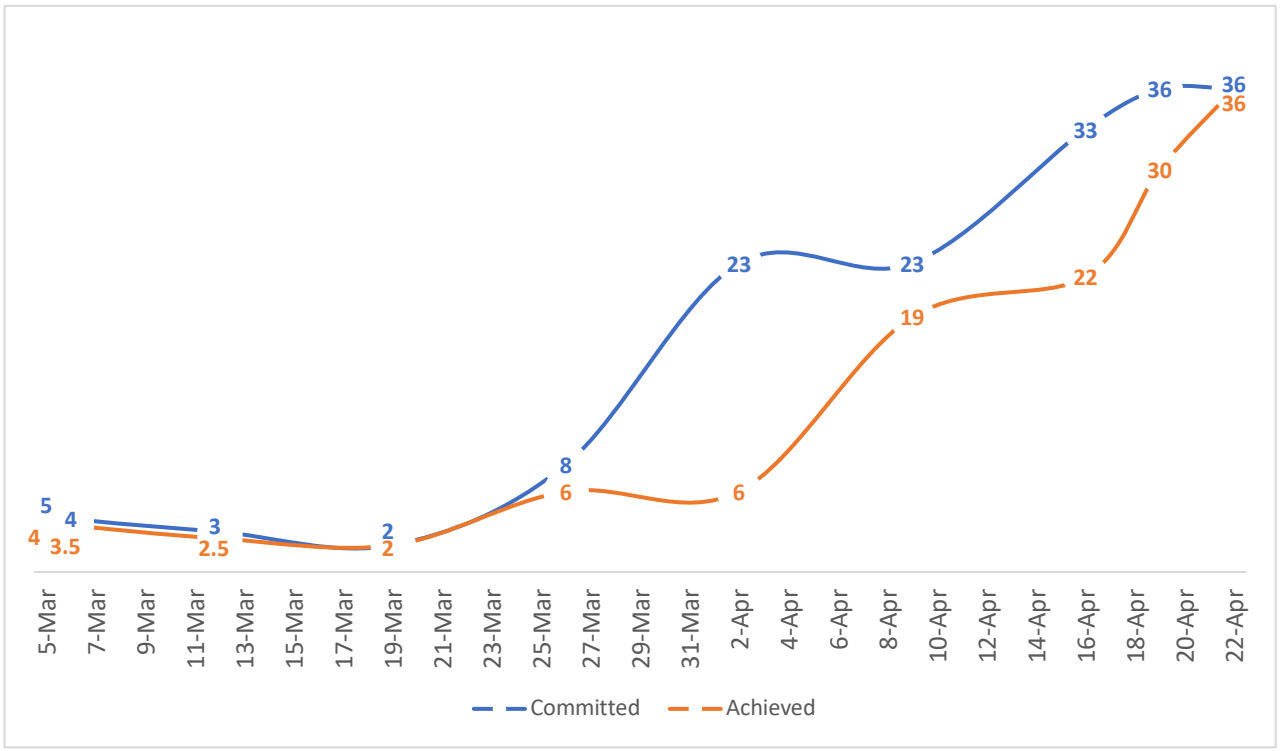
- A customer does not have to purchase both mains and sides – drinks in her order.
- A main is either a burger or a wrap.
- A main must consist of several ingredients.
- There are some base standard mains already in the menu but they may or may not be ordered.
- Customers can only choose ingredients, sides and drinks if they are contained in the inventory.

LOG BOOK

1. PROGRESS OF TASKS



Bar Chart



Line Graph

2. RESPONSIBILITY ALLOCATION

i. Lixing

- Write user stories for the customers.
- Implement functions and write tests for US2, US3, US4, US5 during Milestone 2.
- Write the Custom Burger part in home.html, fix bugs in functions participating in making order process.
- Edit the final Class Diagram relating to changes throughout the frontend development.

ii. Fanrui

- Write user stories for the staffs.
- Implement functions and write tests for US1, US6, US11, US12 during Milestone 2.
- Write Order List and Stock parts in staff.html, fix bugs in functions participating in updating inventory.
- Edit the final user stories based on tutor feedbacks and group discussions.

iii. Dat

- Combine and edit user stories, add user stories that are missing.
- Implement functions and write tests for US7, US8, US9, US10 during Milestone 2.
- Design the overall template of the front end, write Base Burger part in home.html and New Ingredient in staff.html.
- Generate the ER Model, velocity charts and the overall layout of the final report.

3. GROUP MEETINGS

i. 5 March – First Meeting

- Form the new group.
- Complete the Epic Stories and User Stories of the actors: Customer, Staff - Service Orders and Staff - Inventory Stock.
- Complete the Acceptance Criteria of the actor Customer.

ii. 6 March – Complete Milestones 1

- Improve the Epic Stories and User Stories.
- Complete the Acceptance Criteria of the actors: Staff - Service Orders and Staff - Inventory Stock.
- Decide the submitting time: Thursday, 7 March.

iii. 12 March – Milestone 1 Presentation

- Improve the User Stories and Acceptance Criteria.
- Make US9 into three different user stories.

iv. 19 March – Milestone 2 Discussion

- Classes and subclasses of the class diagram.
- Functions following the acceptance criteria.

v. 26 March – Class Diagram Design

- Changes in attributes and methods of the classes RestaurantSystem and Inventory.

vi. 2 April – Class Diagram Demo

- Remove class Staff and Log from the diagram.
- Every member works on different user stories.
- Lixing works on US2, US3, US4, US5.
- Fanrui works on US1, US6, US11, US12.
- Dat works on US7, US8, US9, US10.

vii. 9 April – Working Software Demo

- Improve the implementation of function regarding a making order process.
- Add some small tests for checking order errors based on tutor feedbacks.

viii. 16 March – Front End Design

- Agree on the overall layout of home.html and staff.html.
- Distribute tasks to each member based on sections in the html files.
- Lixing writes the Custom Burger section.
- Fenrui writes the Order List and Stock sections.
- Dat writes Base Burger and New Ingredient sections.

ix. 23 March – Milestone 3 Presentation

- Decide the structure of the final report and responsibility of each member.
- Lixing works on the Class Diagram.
- Fenrui works on the User Stories.
- Dat works on ER Model and velocity charts.