# Final Report

## Group: Transferred-Students

## Group member:

- Hange Liu, z5239938
- Kanadech Jirapongtanavech, z5176970
- Gaurang Rustagi, z5203094

| User Stories                          | 3  |
|---------------------------------------|----|
| User 1: Customers                     | 3  |
| User 2: Staff - Service Orders        | 8  |
| User 3: Staff - Inventory Maintenance | 9  |
| Class Diagram                         | 11 |
| ER Model                              | 12 |
| Log Book                              | 13 |
| 23/3 Week 05 Regular Meeting          | 13 |
| 27/3 Week 06 Regular Meeting          | 13 |
| 30/3 Week 06 Online Discussion        | 13 |
| 1/4 Week 07 Review Meeting            | 14 |
| 5/4 Week 07 Group Meeting             | 14 |
| 11/5 Week 08 Group Meeting            | 15 |
| 22/5 Week 10 Group Meeting            | 15 |
| Velocity Chart                        | 16 |

## **User Stories**

#### Notes:

- For Size, 1 User story Point = 4 hours
- For Priority, High > Middle > Low

#### **User 1: Customers**

Epic Story 1: As a customer, I should be able to order mains, sides, and drinks and check the status of my order online, so that I can order food online and collect them quickly.

| ID   | US 1.1                                   |
|------|--|
| Name | Choose between "base" and "custom" mains |

#### **User-Story Description:**

As a customer, I want to have an option to choose between base mains and custom mains.

#### **Acceptance Criteria:**

- 1. For their mains, a customer should be given an option between a burger and a wrap
- 2. If the customer selects "base" mains, they must pay the associated cost to select the item.
- 3. "Base" mains cannot be customized.
- 4. If the customer chooses to customize a burger, he/she should have the option for selecting the specification of buns.
- 5. If the customer chooses to customize a wrap, he/she should option for selecting the specification of the patty.
- 6. The customer's choice should be stored in the application.

| Priority | High |
|----------|------|
| Size     | 2 SP |

| ID   | US 1.2                        |
|------|-------------------------------|
| Name | Selection of buns and patties |

#### **User-Story Description:**

As a customer, I want to specify the type and number of buns and patties I want on my custom burger or wrap, so that can I accommodate my taste and dietary preferences.

#### **Acceptance Criteria:**

- 1. The customer should be able to choose the type of bun and patties they want in their custom burger or wrap.
- 2. The customer should be able to choose the number of buns and patties they want.
  - a. If the customer chooses a number greater than the maximum limit, the error message should be shown saying "maximum of 'maximum limit' buns/patties allowed" and allow them to enter the number again.
- 3. The customers choice should be stored in the application.

| Priority | High |
|----------|------|
| Size     | 1 SP |

| ID   | US 1.3                        |
|------|-------------------------------|
| Name | Addition of extra ingredients |

#### **User-Story Description:**

As a customer, I want to add some extra ingredients to my main, so that I can make my meal more delicious.

#### **Acceptance Criteria:**

- 1. A customer should be able to add extra ingredients to their main, the list of ingredient customers can order including but not limited to:
  - a. Tomato
  - b. Lettuce
  - c. Tomato sauce
  - d. Cheddar cheese
  - e. Swiss cheese
- 2. After selecting his preferences the customer should be directed to the review of the main.
- 3. The customer's choices should be stored in the application.

| Priority | High |
|----------|------|
| Size     | 2 SP |

| ID   | US 1.4               |
|------|----------------------|
| Name | Review your creation |

#### **User-Story Description:**

As a customer, I want to see the net price of my gourmet creation, so that I can review accept my choice or discard it.

- 1. After the customers are done with customizing, they should be brought to a review page to review the ingredients they selected.
- 2. Based on the customer's choices, the price of each ingredient in the number should be retrieved to calculate the final price of the main.
- 3. If customers click delete button, then this gourmet creation would be removed from their order

| Priority | High |
|----------|------|
| Size     | 1 SP |

| ID   | US 1.5       |
|------|--------------|
| Name | Choose Sides |

#### **User-Story Description:**

As a customer, I want an option to add a side dish to my order so that I can be more satisfied with my meal.

#### Acceptance Criteria:

- 1. A customer can optionally choose the following sides to add to his order including but not limited to:
  - a. French Fries
  - b. Chicken nuggets
- 2. The price of each side dish should be retrieved and added to the total price of the order.
- 3. Customers can review their orders and the total price.
- 4. At this point, the customers may click "Review Order" and check out if they are satisfied with their selections so far

| Priority | High |
|----------|------|
| Size     | 2 SP |

| ID   | US 1.6        |
|------|---------------|
| Name | Choose drinks |

#### **User-Story Description:**

As a customer, besides the main and sides, I want to optionally order drink(s), so that I can make my meal more satisfying.

- 1. A customer can choose and add drinks into their orders.
- 2. The price of each drink should be retrieved and added to the total price of the order
- 3. Customers can review their orders and the total price.

| At this point, the customers may click "Review Order" and check out if they are satisfied with their selections so far. |      |
|---|------|
| Priority  | High |
| Size  | 2 SP |

| ID   | US 1.7         |
|------|----------------|
| Name | Choose Sundaes |

#### **User-Story Description:**

As a customer, I want to optionally order sundaes, so that I can make my meal more satisfying.

#### **Acceptance Criteria:**

- 1. A customer can choose and add sundaes into their orders.
- 2. The price of each sundae should be retrieved and added to the total price of the order
- 3. Customers can review their orders and the total price.
- 4. At this point, the customers may click "Review Order" and check out if they are satisfied with their selections so far.

| Priority | High |
|----------|------|
| Size     | 2 SP |

| ID   | US 1.8            |
|------|-------------------|
| Name | Review your order |

## **User-Story Description:**

As a customer, I want to be able to review the final order with its total price of my order, so that I can ensure I order what I want.

- 1. Customers should be able to Review all the item he has ordered including the ingredients for the main.
- 2. The customer should be able to view the total price of the order
- 3. The customer should be given the option of Checkout
- 4. The customer should be given options to delete any items from their order.
- 5. If the customer chooses Checkout & make payment option he should be redirected to a secure page(the banking service of business) to securely make payment for his

| Priority | Middle |
|----------|--------|
| Size     | 1 SP   |

| ID   | US 1.9                  |
|------|-------------------------|
| Name | Checkout & make payment |

#### **User-Story Description:**

As a customer, I wanna be able to check out, so I can confirm and pay for my order.

#### **Acceptance Criteria:**

- 1. When the customer selects the checkout & make payment option, he should be redirected to a secure page(business banking service) to make his payment
- 2. If the payment is confirmed(depending upon the information from the bank's page), the customer should be shown the success message and issued a unique order ID.
- 3. The order ID should be linked to the customer's order and stored as the main index for the order.
- 4. If the payment failed(depending upon the information from the bank's page) the customer should be shown a failed message and given the option to try again.
- 5. Should some items in the customer's orders be unavailable at the time of checkout, the customer should not be able to checkout successfully.

| Priority | High |
|----------|------|
| Size     | 3 SP |

| ID   | US 1.10                       |
|------|-------------------------------|
| Name | Check the status of the order |

#### **User-Story Description:**

As a customer, I want to track my order using its order-id, so that I can see if my order is completed.

- 1. Customers should get an order-id after successful payment.
- 2. Customers should have the option of tracking existing orders as soon as they open the website.
- 3. Customers can type their order-id in an order text field of the website.
- 4. If this order-id does not exist, it shows that it is invalid.
- 5. If this order-id is valid, then it shows the status of the order: in progress or completed.

| Priority | Middle |
|----------|--------|
| Size     | 3 SP   |

#### User 2: Staff - Service Orders

Epic Story 2: As a staff in charge of servicing online orders, I should be able to view the current orders and update the status of them, so that I can deal with online orders easily.

| ID   | US 2.1              |
|------|---------------------|
| Name | View current orders |

#### **User-Story Description:**

As a staff in charge of servicing online orders, I should be able to view the current orders, so I can know when another customer has added an order on time.

#### **Acceptance Criteria:**

1. Staff can view the current orders in the staff orders menu at any time.

| Priority | High |
|----------|------|
| Size     | 2 SP |

| ID   | US 2.2                         |
|------|--------------------------------|
| Name | Update the status of the order |

#### **User-Story Description:**

As a staff in charge of servicing online orders, I should be able to update the status of orders, so that I can inform our customers easily.

- 1. Staff can change the status of the current order at any time.
- 2. If an order is updated that it is completed, it will now disappear from staff orders menu.
- 3. If an order is updated that it is completed, it will show that it is available for pickup in the customer page after refreshing.

| Priority | High |
|----------|------|
| Size     | 2 SP |

## User 3: Staff - Inventory Maintenance

Epic story 3: As a staff in charge of maintaining Inventory, I should be able to view and update the status of the inventory of ingredients in storage, so that I can manage the inventory of ingredients easily.

| ID   | US 3.1                     |  |
|------|----------------------------|--|
| Name | ame View current inventory |  |

## **User-Story Description:**

As an inventory staff, I want to be able to view inventory real time, so that I can manage every ingredient easily.

#### **Acceptance Criteria:**

- 1. There should be a page that shows the current stock of every ingredient.
- 2. Inventory levels should be decreased once a customer checkout an order. (Every item inventory in the order should decrease accordingly)
- 3. If an ingredient is low on stock, the customer should not be able to select more than what's currently available.

| Priority | High |
|----------|------|
| Size     | 4 SP |

| ID   | US 3.2                            |  |
|------|-----------------------------------|--|
| Name | Update the inventory (restocking) |  |

## **User-Story Description:**

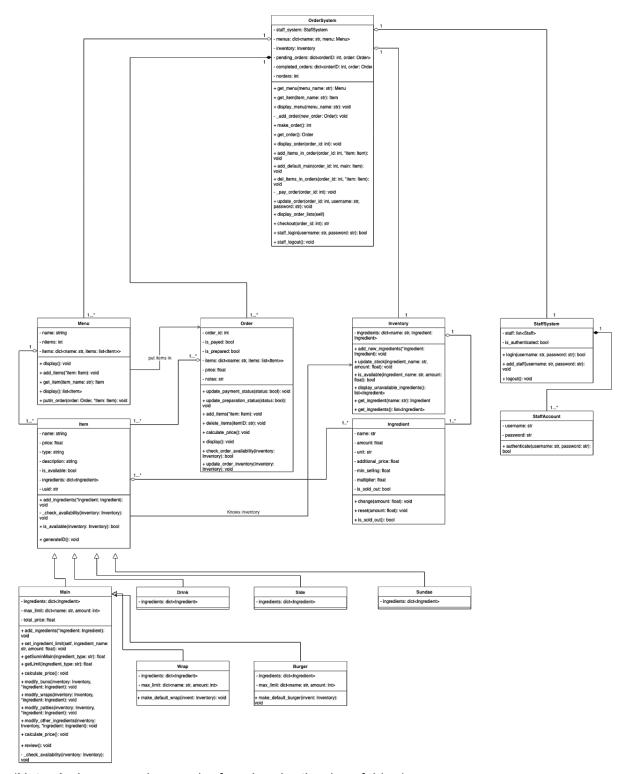
As an inventory staff, I want to be able to update the current stock number of every ingredient, so that our customers may order them.

- 1. The quantities of each item in the inventory should include but not limited to:
  - a. Drinks
    - i. One bottled 600ml
    - ii. One can 375 ml
    - iii. Juice 2 sizes: Small 250ml, Medium 450ml
  - b. Sides
    - i. Fries 3 sizes: Small 75g, Medium 125g, Large 200g
    - ii. Nugget in whole quantity 1 nugget
  - c. Mains
    - i. Bun 1 bun for all variations (wholegrain etc.)
    - ii. Wrap 1 wrap for all variations

- iii. Patty 1 patty for all meat
- iv. Tomato 1 thin slice
- v. Lettuce by the gram. Ordering 1 lettuce means 30 grams decrement.
- vi. Cheese 1 slice for all variations
- vii. Sauces 1 package
- 2. Increment or decrement for all ingredients must follow the quantities specified above
- 3. The staff should have access to the inventory so they can update it once they finished restocking.
- 4. After the staff is done with updating the inventory, he should have an option to save changes or discard changes.
- 5. Staff should not be allowed to save changes with invalid inventory e.g. putting alphabets or floating points instead of integers. Throw an error "Invalid inputs"

| Priority | High |
|----------|------|
| Size     | 4 SP |

## Class Diagram

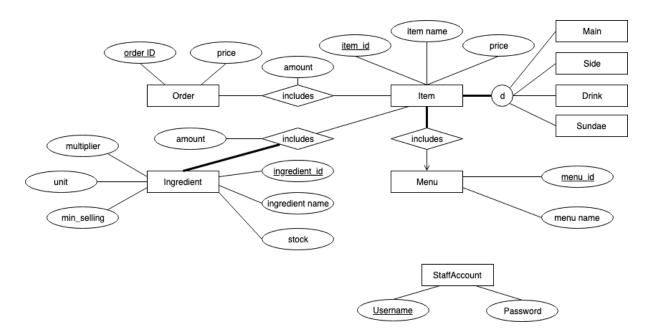


(Note: A clearer version can be found under the docs folder.)

## **ER Model**

#### Assumption:

- 1. In the system, we just have one **inventory**, which means we do not need to model the inventory as an entity set.
- 2. In the system, the information of **order**s needs to be stored.
- 3. In the system, **ingredient**s have following attributes:
  - unit: string, the unit of ingredients, such as "gram" or "bottle".
  - **min\_selling**: float, the smallest amount which an ingredient can be sold at. For example, nuggets has to be sold more than 3 pieces. If there are only 2 pieces of nuggets, nuggets are unavailable.
  - **multiplier**: float, the amount which an ingredient can be updated at. For example, sugar must be updated by 100 grams every time.



(Note: A clearer version can be found under the docs folder.)

## Log Book

## 23/3 Week 05 Regular Meeting

Location: Library | Participants: Kanadech, Gary, Gaurang | Duration: 2 hrs

#### Decisions:

- Discuss iteration 2
- Modify user stories according to the advice from our tutor
- Finish hand-written CRC cards and Class diagram
- Agree to the development plan for next week

## Requirements Elicitation:

Identifying the necessary classes

#### Obstacles:

Not sure whether the class diagram is correct

## 27/3 Week 06 Regular Meeting

Location: Lab | Participants: Kanadech, Gary, Gaurang | Duration: 2 hrs

#### Decisions:

- Finish the basic skeleton for the codes
- Finish the first version of the Class Diagram
- Begin implementing more features based on the draft codes

#### 30/3 Week 06 Online Discussion

Location: Online, Messenger | Participants: Kanadech, Gary, Gaurang | Duration: 1 hrs

Milestones: Finished the basic skeleton of the project codes

#### Decisions:

Finish the basic skeleton for the codes

- Finish the first version of the Class Diagram
- Begin implementing more features based on the draft codes

#### Work Assigned:

- Kanadech: Use Pickle to store class information; Create the system creator to read data from an external file and initialize the online order system
- Gary: Finish the user story part 1 and some basic tests
- Gaurang: Implement the staff system and login function

## 1/4 Week 07 Review Meeting

Location: Columbo Theatre | Participants: Kanadech, Gary

Milestones: Finish the system creator and user stories for ordering drinks and sides.

#### Content:

- Found out some problems in our codes
- Decided to refactor our codes to make it more orderly

Obstacle: For the same user stories, we use different implementations. So we have to reach a consensus about how should we use our classes.

#### Tasks to do:

- 1. Refactor our codes and fix some logical bugs
- 2. Add more features like exception handling into our codes

#### 5/4 Week 07 Group Meeting

Location: CSE Building | Participants: Kanadech, Gary, Gaurang | Duration: 1 hrs

Milestones: Finished all the functional requirements for our user stories, and the integration test for the order system

#### Content:

- Clarified the customer workflow of our codes
- Decided to integrate our unit tests and transform the integration test into more specific user-stories tests via pytest

#### Work Assigned:

• Gaurang, Kanadech: Finish the staff login part and the pytest part

#### Tasks to do:

- Staff login
- User-stories tests

## 11/5 Week 08 Group Meeting

Location: CSE Building | Participants: Kanadech, Gary, Gaurang | Duration: 1 hrs

#### Content:

• Assigned the responsibility for the front-end development

#### Work Assigned:

- Gary: Develop Flask and Jinja according to the user stories
- Gaurang: Beautify the front-end HTML and add CSS file
- Kanadech: Refactor the pytest files and test the front-end

## 22/5 Week 10 Group Meeting

Location: CSE Building | Participants: Kanadech, Gary, Gaurang | Duration: 0.5 hrs

Milestones: Finished all the development and testing work

Content: Mainly discussed the presentation for the final deliverable

# Velocity Chart

| Sprint   | Date        | Work Completed (Size/SP) | Completion % | Details                                    |
|----------|-------------|--------------------------|--------------|--|
| Sprint 1 | 25/03-28/03 | 6                        | 20.69%       | Finished US1.1, US1.5, US1.6               |
| Sprint 2 | 29/03-31/03 | 8                        | 44.83%       | Finished US1.2, US1.3, US1.4, US2.1, US2.2 |
| Sprint 3 | 1/04 - 4/04 | 7                        | 72.41%       | Finished US1.7, US1.8, US1.9,              |
| Sprint 4 | 5/04-7/04   | 8                        | 100.00%      | Finished US3.1, US3.2                      |

