Task 1.1:

Context of project:

Our customers have multiple restaurants and want to develop a web-based POS system that can apply the current business workflow to all the restaurants. The system should work well at the point of sale and especially during the coronavirus pandemic. For further details:

- Type of industry: (Fast) food restaurant (support both dine-in or take-away).
- Payment option : Both advanced payment (via credit card, debit card, mobile money)and traditional payment (via cash) are accepted
- Food processing: Prepared ingredients will be processed and put together to make the dish after an order is successfully confirmed.
- Involved subject: Customer, Restaurant's staff (Clerks, kitchen, manager), related banking system (VISA, MasterCard, domestic banks,...).

For the business processes:

- Customers are prompted to declare their health status due to the pandemic beforehand using QR code. Once finished, they are allowed to get into the restaurant and choose the table (If the option is take-away, this step can be ignored).
- Customers can either scan QR or use a URL (incorporated into the Progressive Web Application (PWA)) to view the menu on the website and complete their order.
- After that, the order's information will be sent to the clerk automatically for confirmation. The clerks then communicate with the kitchen staff to process the order.
- Order is carried out and customers will enjoy their meal.

Stakeholders:

- Customers that come to the restaurant for meals or order food at home.
- Waiters/waitresses who are responsible for delivering food, cleaning and collecting feedback at the restaurant.
- Clerks who help customers in the in-store check-out process including confirming customer's orders, packaging food. In case they contact

customers, they request price checks, collect payment and give an appropriate change to the customers.
- Kitchen staff who prepare meals based on the order sent from the cashiers.
- System managers who operate and maintain the systems.
- Restaurant supervisors who oversee all restaurant operations to ensure that restaurants run smoothly.
- Related banking services that keep track of money flow from customer's account to restaurant's account and calculate the tax if necessary.
- Suppliers who supply ingredients to the restaurants.

Expectation to be done:

- The customer should be able to order food without direct contact with the clerk.
    - The customer can access the system, scan QR code, place an order from the menu and purchase it.
    - The menu should provide descriptions of the food and other related information such as unit price, the amount of calories, sugar, etc.
    - The system can also calculate the bill and provide customers with two main methods of payment, which are cash and credit card.
- The clerks should be able to see and confirm customer's orders, give them any recommendation and notification if needed.
- The kitchen staff should be able to see the order then prepare the food, and report if the order could not be done.

⇒ In a whole, it is expected to have a responsive web-based POS system that implements their current business flow. This further increases business intelligence, reduces wasted effort and opportunity to scale to a large business.

Scope of the project:

This project only works in restaurants such as the restaurant described in the project description or shop-and-go industry. In the future, the project is expected to grow and expand to other restaurants of the same kind.