VIETNAM NATIONAL UNIVERSITY, HO CHI MINH CITY
HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY
SCHOOL OF INDUSTRIAL MANAGEMENT

SOFTWARE ENGINEERING (CO3001)

Task 1 Report

REQUIREMENT ELICITATION

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I. Task 1.1: Identify the context of this project.

1. Who are relevant stakeholders?

Stakeholder	Role
Customer	Their payment information is used when they pay by credit card
Clerk	Responsible for confirm order, record order and send alerts to customer
Chef	Responsible for preparing food for the order
Manager	Obtain the management information from the system

2. What are expected to be done?

What are expected to be done is the web-base POS that meet all stakeholders' requirement accompanied with associated files.

3. What are the scope of the project?

This Restaurant POS 2 project is being undertaken for the purpose of creating system supporting retail transaction management

Project Scope

This project will include requirement elicitation and analysis, system modeling, design system architecture and implementing the system. It is expected to be completed before 11th November. All activities will be conducted by our team.

Project Deliverables

Project deliverables will include the restaurant's owner a system which can improve productivity of restaurant's staff, speed up the workflow and its associated documents. A system will also be a good solution for restaurant during COVID-19, when we have to avoid face-to-face interaction

Project Acceptance Criteria

The system will have to pass all test cases to make sure that it meet all stakeholders' requirements and good implementation

Project Constraints

Constraints include:

- Some of us have just designed the complete software system for the first time so we cannot avoid making mistake
- The POS can only process at around 300 transactions per day
- The system will not support paying for the order by cash but it could be updated in the future

II. Task 1.2: Describe all functional and non-functional requirements of the desired system. Draw a use-case diagram for the whole system

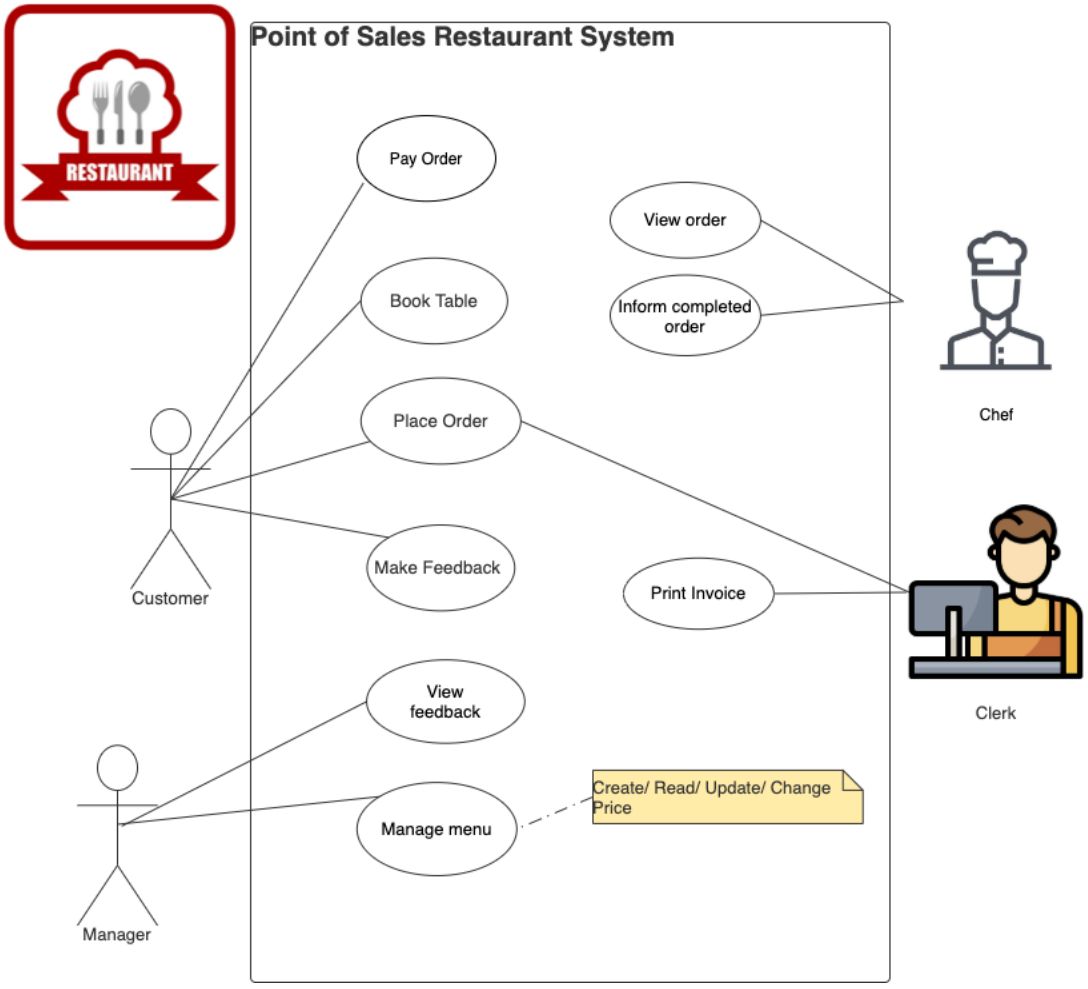
1. Functional requirements

- The system allow the customers to order food with picture and price displayed
- Customer can see invoice while ordering food
- Customer can add food to the cart, and system will automatically update the bill
- Customer can book table with the map of table provided (the available table is highlighted)
- Customer may pay using credit cards or cash
- Customer can send feedback about food, service, staff attitude with star rating and text
- Clerk can confirm order from customer
- Clerk can record the order using POS terminal
- Clerk can alert customer in case the order is not available
- Chef can see the customer order with only information about food included and the order ID
- Chef can let clerk know whether an order is ready using POS terminal
- Manager can modify the restaurant menu
- Manager can receive sales updated every 15 minutes
- Manager receive auto-created sale reports for day, week, month, year
- Manager can view customer feedback.

2. Non-functional requirements

- Allow non-direct contact between clerks and customers
- The system should be implemented using web technology and QR code
- The system will be usable from a mobile device, tablet or a normal computer
- The system should be responsive so that it could be displayed well in multiple screen ratio
- The system is extendable to use in multiple restaurants for future
- The system can process about 300 orders per day.
- The UI of system should be friendly
- The app should work well on popular browsers such as: Safari, Chrome, Edge
- The staff should be able to use the system after 2 hour training
- The system should be available during working time
- The system should be maintained easily

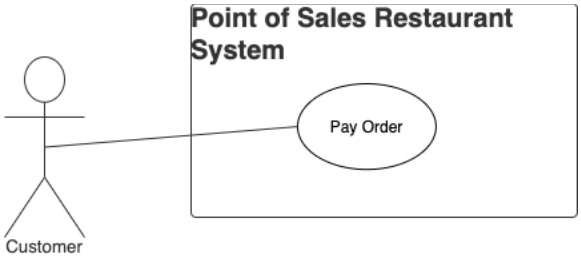
3. **Use-case diagram for the whole system**



III. Task 1.3. Choose one specific feature, i.e. food ordering, table reservation, customer management. Draw its use-case diagram and describe the use-case using a table format

- We choose pay the order feature of POS system

1. **Use-case diagram for the pay order feature**



2. Table format of the use-case

Use-case name	Pay order
Description	Customer will pay for the restaurant order using credit card or cash
Actors	Customer
Pre-condition	Customer ordered at least one meal
Post-condition	Customer successfully pay for bill Customer payment will be recorded into the log
Basic Flow	1. The page list all information of the bill and payment methods. 2. Customer choose payment method. 3. Customer choose pay by credit card. 4. Customer enter the information of credit card 5. The system will verify the card information 6. The system will check if the account balance is enough for the payment 7. The customer confirms the payment 8. The system notifies customer successful payment 9. Customer transaction will be recorded in the log
Alternative Flow 1	1a. Customer choose to tip the staff 1a1. Customer choose the amount to tip 1a2. The amount to tip added to the bill Continue with step 2
Alternative Flow 2	4a. Customer choose to slide the card physically through the machine Continue with step 5
Exception Flow 1	5a. The information entered is wrong Back to step 4 to re-enter the information
Exception Flow 2	6a. The account balance is not enough Back to step 2