Kyle Just - Group Representative Abdul Kalam Syed Russell Rickards Taft Ring Joshua Jenkins

#### **Group Assignment #1**

1. Create your system vision document (problem description, system capabilities, and business benefits).

**Problem Description:** The restaurant currently uses a pen and paper method to take down customer orders. This system is cheap and was easy for the owners to implement during their opening, but now that the business has grown, the system is under constant strain. There are frequent errors with orders being relayed to the kitchen. Orders get ignored, done out of order, and there is no way to tell if an order is much older than the rest.

System Capabilities: The new computerized Point of Sale system (POS) for the restaurant will add many new capabilities and several improvements for the restaurant. The new system will be able to store the time each order was placed, display orders to the kitchen in order, and allow for a higher volume of customer orders. The system will be able to accurately and efficiently track orders throughout the day, and produce an End of Day Report, allowing the business owner to keep track of sales. Additionally, the system will allow customers to make orders remotely so that the restaurant can comply with Covid-19 ordinances and attract sales online. The web portal will allow the business to use coupons and other promotions to increase sales as well.

Business Benefits: The POS system increases revenue stream by making the ordering system more efficient. The quick time for each order both brings more people to the restaurant and increases the speed between orders. The less time it takes for an order, the better the quality of life of the customer, thus becoming probable that they will frequently return and/or recommend the restaurant to others. Lastly, it allows for less money and time being spent on teaching. Employees can learn quickly due to having the options in front of them by name rather than having to completely memorize the full menu before taking orders (menu memorization is recommended).

### 2. Identify and list all stakeholders of your system.

- Restaurant Manager / Owner
- Front of House Employees (Cashiers)
- Back of House Employees (Cooks)
- Customers (online order)

# 3. To what events must your system respond? List each event, the resulting use case, and the actor(s).

Event	Use Case	Actors
Cashier or online customer creates the order	Create Order	Cashier, Customer
Cashier wants to edit order	Edit Order	Cashier
Cashier marks the order as deleted after sent to database	Delete Order	Cashier
Cook prepares the order	Prepare order	Cook
When a customer receives the order, cashier marks the order as complete in the system which processes the payment	Complete order	Cashier
The restaurant closes for the day	Generate sales report	Manager

## 4. Write a brief use case description for each use case.

Use Case	Use Case Description	
Create Order	Front-of-house (cashier) or online customer builds orders to be entered into the database and sent to the cook's station display.	
Edit Order	Cashier can edit an already created order upon request. The edited order is then shown on its respective station display.	
Delete Order	Cashier or online customer can cancel an already created order upon request. The order is then marked as deleted in the database.	
Prepare Order	Back-of-house employee (cook) completes and marks the order as ready for serving and the order is sent back to the cashier station display.	
Complete Order	The cashier will mark an order as completed after being handed to the customer and completing payment. The order will be marked as complete in the database and taken off the cashier's station display.	
Generate Sales Report	Generates a summary containing: the number or orders, average order time, total sales, revenue, profit, and other information for a given amount of time.	

# 5. Draw a use case diagram for your system.

