

**Project Proposal**  
**Self-Serve Dining System**

**CS157A**  
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# **Project Proposal**

## **Project Overview**

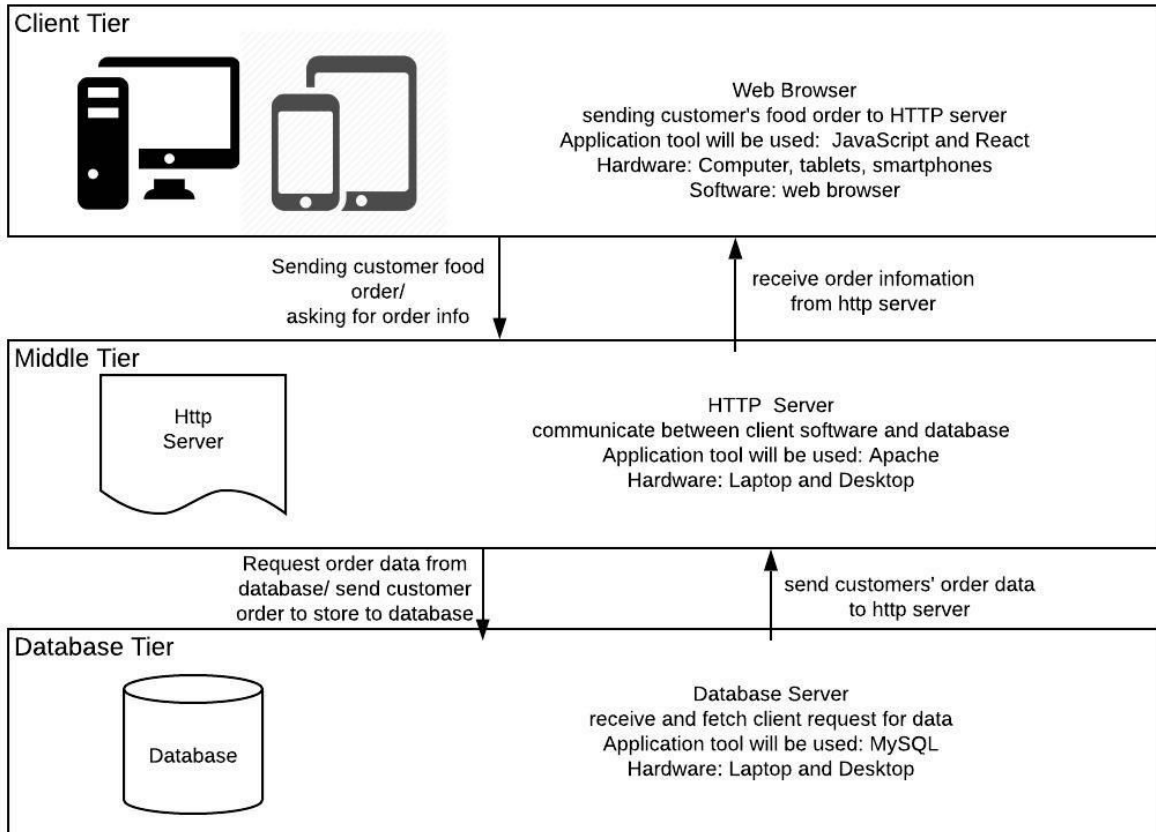
The primary objective of our Dining System is to accomplish self-ordering and checkout for customers in a restaurant. Therefore, there could be no waiters being involved during a meal in any restaurant by using our dining system. Once customers are in the restaurant, they can use a phone or any other device to log in to our Dining System. After that, a menu of all the food that is currently available to order will be displayed on the page, and customers can add or remove the dishes to the cart as needed. Once customers finish dining, they can also self-checking out on the Dining System before leaving. Another main deliverable of our project is the management function of the system. Owner/ manager can view the statistic of sales in the management side of the system. This will give them more information for ordering stock and making business decisions.

The use of self-serving devices will increase profits in the long-term since fewer workers will be needed to take orders and prepare checks for customers. There will still be a need for human workers, but rather than spending time taking customer orders, they can focus on improving customer experience, which will in turn, bring customers back into the restaurant more often. Customer satisfaction will be improved since workers can focus on keeping the restaurant clean, checking up on how customers are doing, and ensuring the quality of the food is up to standards. Not only will profits increase for investors, but the reputation of the company will be improved once people associate the company with quality experiences.

Since the system requires multiple tablets or computers to start the ordering system, the restaurant owner will be the major stakeholder of this system. They will have to invest in all the equipment. However, this system will help to cut down labor costs in the long run. Eventually, the cost to adopt this system is lower compared to labor costs.

## System Environment

### Structure Diagram of the Restaurant Order System



## Functional Requirements

Requirement ID	Requirement Statement
FR01	The website will have a home page which displays a menu of all the food that is currently available to order.
FR02	Users will be able to add and remove dishes from cart.
FR03	Users will be able to submit their cart to restaurant system once they finish selecting dishes.
FR04	Users will be able to check out by using our dining system via PayPal, Venmo or ect.
FR05	Chefs will be able to receive and view all the orders from different tables by using our dining system.
FR06	The kitchen staff will be able to view food orders in chronological order to prepare food.
FR07	Restaurant staff will be able to delete/alter customers' food orders.
FR08	Management staff will be able to view sales statistics by day/month/certain period of time.

## Non- functional Issues

### Quality

The system should run smoothly without lagging. All changes and modifications should update real-time in all devices.

### Security

Users will be able to create their own accounts containing order history and customer preferences. This account can be accessed with a user-name and password.

### Reliability

The database should save all data when there is an input from the system. Any shut down from the ordering system will not affect data store in the database, especially the data of current food orders.

Graphical User Interface (GUI)

Javascript and React framework are will be used to create the User interface.