Fast Food Restaurant Website Application Project Plan

- 1. Introduction
 - 1. Objective
 - 2. Project Overview
- 2. System Features and Requirements
 - 1. Functional Description
 - 2. User Interface
 - 3. Dynamic Updates
 - 4. Competitive Analysis
 - 5. Technology Requirements
- 3. Project Estimates
 - 1. Project Timeline
 - 2. Project Budget
 - 3. Project Team
- 4. Conclusion
 - 1. Project Review
 - 2. Team Signatures

1. Introduction

1.1 Objective:

The objective of this project is to develop a web application that will be utilized by a fast food restaurant to improve operational efficiency while providing effective methods of tracking performance and progress of the employees along with managing their payroll. Moreover, the fast food restaurant web application will provide customers various services including online transaction features, menu, ability to customize food items, access to special discounts, and providing estimated time for pickup both online and in-person.

1.2 Project Overview:

Fast food restaurants have been on the rise of popularity, as people are getting busier in their lives which compulse them to choose a fast food service option rather than spending their prestigious time to learn or cook delicious food for themselves. Therefore, customers can order online through their computer, tablet, phone, and laptops through our web application. Our web application will provide them the ability to customize their food order to accommodate their preferences like avoiding certain food items, and providing alternatives for everyone including people with medical issues like peanut allergy, and being lactose intolerant. Our secure web application will enable customers to pay for their meal online without any fear for both the customer and fast food restaurant of losing their money. Additionally, our web application will foster customer service by providing fast food restaurant's special discounts on certain days and food items. Furthermore, customers can see their estimated food preparation time through our web application, and they will be notified that their order is ready for pickup. Our website application will help fast food restaurants to manage their employees payroll and customer services in a convenient and efficient manner.

2. System Features and Requirements

2.1 Functional Description:

The purpose of this application is to simplify and track the operations of the customer's meal including customizable menu, estimated pick up time, and special discounts. Moreover, fast food restaurant(s) can evaluate and track their employee's payroll information, performance, and work schedule. Additionally, our web application will help fast food restaurant(s) to trace their business growth and certain food items sales on regular days and special occasions.

◆Restaurant's Admin Features:

An Admin utilizing this website application will be able to view a list of available employees, reasons for unavailability of an employee, tracking employee's working hours, punctuality and performance, accept or deny employee's request for change in work schedule, monitor and modify schedules of employees, customizing web application accepting order time frame, providing incentives to employees to motivate

them to work even on unassigned busy days, employee's payroll information. Access to customer reviews about food, employees, and restaurants.

◆Customer Features:

A customer utilizing this website application will be able to view a list of their students, place or cancel their food order, schedule and modify their order, view and customize their profile and provide ratings for the food and the restaurant, and can view their transaction bill.

◆Employee Features:

View their ratings and reviews from customers regarding their performance. Report a certain customer. View their payroll information, overtime salary, incentives, and their performance. View and request to change their schedule in a calendar.

2.2 User Interface:

The web application will feature a user-friendly interface with a navigation bar that includes a login button, shopping cart, and search bar. Users can easily access special food items displayed prominently on the landing page, along with best-selling options highlighted. By clicking on food images, customers can customize ingredients and add selected items to their cart with specified quantities. The account management system will allow users to log in or create a new account, this will include email verification. Once logged in, customers can view and modify their orders in the shopping cart, with options to cancel or change selections. The payment process is straightforward, allowing users to choose their preferred payment method, securely enter card details, and confirm payment. After completing the order, users receive a summary of their items and pickup times, with a receipt sent to their email, ensuring a seamless experience from selection to confirmation. The web application also features admin and employee login. Employees will be able to see their work schedule, availability, ability to send requested changes in their schedule or ask for time off, and report any employees or customers. Admin would be able to modify food prices and menu items, add or remove employees/information, and include payroll information at any moment. Furthermore, they can monitor the sales and performance of the business, keep track of items that become popular, food items and employees.

2.3 Dynamic Updates

The website should allow an Admin user to continuously update Menu items, modify prices, employee information, and payroll information.

An employee account will be able to update their availability, request for change in schedule, report a customer

A customer account will be able to create, update, and delete reviews.

The requirements stated above will be implemented through restricted access to features based on account type.

2.4 Competitive Analysis

This website application will connect the Admin, Restaurant, and Customer accounts to streamline ordering, promotion, and communication between the restaurant and patrons. This improvement will allow greater response to a changing customer base. Moreover, the web application removes excess burden on the restaurant by making them more organized in their interactions with the customer and the employees. Our web app will provide a secure, convenient, and reliable platform for the customers, employees, and the admin.

2.5 Additional feature (if time persists):

- 1. GPS to monitor the punctuality of the employee arriving on time.
- 2. Curbside pick up feature
- 3. Issuing refunds
- 4. Membership for customers

2.6 Technology Requirements

Frontend	JavaScript, React.js, HTML, CSS
Backend	Java, Springboot
Database	MySQL
Cloud Service	Amazon Web Services (AWS)

3. Project Estimates

3.1 Project Timeline:

There will be 7 sprints

Sprint 00: Proposal, Planning, Research

Sprint 01: Prototype Design (Figma)

Sprint 02: Begin implementation, set up database

Sprint 03: Continuance of database and implementation

Sprint 04: Testing project

Sprint 05: Continuing testing and debugging, revisions

Sprint 06: Deploy the project

3.2 Project Budget - \$50

Project development budget should not exceed \$50 yearly utilizing free AWS services.

Service costs after full deployment should not exceed \$225.96 (\$18.83 / month).

3.3 Project Team:

Tim Yang	Developer
Abhijit Singh Ubhi	Product Owner
Randy Kim	Developer
Erik Contreras	Scrum Master, Developer
Gurinderpreet Singh	Developer
Zyed Azizi	Developer
Victor Granados Onate	Developer

4. Conclusion

4.1 Project Review

The goal of this project is to develop a website that will simplify the interactions between a restaurant, the employees, and the customers by creating an easy to use design for the frontend combined with reliable transference and management of data in the backend. It will boost data integrity by restricting access based on the user account type. Admin accounts will allow the user to control business and management operations. Employee accounts will allow the user to control personal information. Customer accounts will allow the user to control their reviews and order information.

- The project should be deployed within 7 sprints and will not exceed a budget of \$50 annually during development. The cost of services may increase to an estimated \$225.96 depending on business performance.
- This project will benefit restaurants, admins, employees and customers all around for a better, faster service.

4.2 Team Signatures Tim Yang:

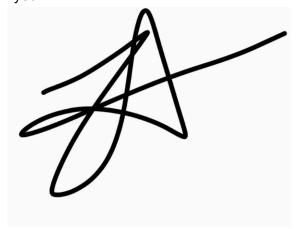


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