

COMS3009: Software Design

Software Project Proposal

The Restaurant Management System

Team Members

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| Mthulisi Leslie Zimba: | 570937 |
| Kgopotso Dilebo: | 715636 |
| Lethabo Nkabinde: | 722211 |
| Christopher Mashele: | 732475 |
| Fortune Ndlovu: | 731603 |



WITS
UNIVERSITY

School of Computer Science and Applied Mathematics
University of the Witwatersrand
South Africa
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Overview

The following document is a software project proposal of a restaurant automation software application. The purpose of this software application will be to tackle the problems faced by your restaurant and its customers. The estimated costs and duration for finishing the proposed software application are subject to change as we progress with the project.

Problem Diagnosis

Client's request

You requested a technological solution to the problem of staff members having to take bookings and orders manually at your restaurant. You told us that currently customers can only book via a phone call if they're not at the restaurant and that your waiters manually take orders from patrons after they are seated at their tables.

Diagnosis

Our research expert spent the day at your restaurant and identified, in addition to what you told us, the following problems.

Restaurant customers can only order via the phone if they want to order before they get to the restaurant. The restaurant may lose money if the customer does not show up since there is no way of knowing the real identity of whoever placed the order as a caller may use a pseudonym.

It's also hard for the restaurant to keep track of any kind of statistics since most of the daily activities are done manually, hence making it costly to combine all the data into usable information. As an example, the restaurant relies on the word of mouth from customers about performance of the waiters, the hostess has to continuously check for available tables, and the restaurant has no record of previous customers thus cannot offer promotions to regular customers.

With the current system used, customers come to the restaurant not knowing for sure if there's a free table available or not. This might lead to customers turning back as most customers don't like waiting.

Our Proposed Solution

Our team will develop a restaurant management system for your restaurant. Our focus will be mainly on developing a joint software application that can be

used by both the restaurant staff and the customers.

The staff will use the application to manage the daily restaurant routines like taking orders, viewing available tables and updating the restaurant menu.

The customers will use the application to make bookings, menu selections , payments , view meal's waiting time and give feedback about the restaurant service.

Advantages Of Our Proposed Solution

Staff Software Application

- Staff members don't have to physical check for empty tables, the system will automaticay update availability of tables.
- The system keeps track of customers by user ID for statistical purposes. The system stores a record of what each customer orders, the amount of money they use, and the amount of time they are seated at a table. The system will also store a record of number of customers each day, revenue received each day and quantity of each food ordered. This information will help the restaurant make informed decisions on what to offer its customers.

Customer Software Application

- Customers can remotely book tables and amke orders an hour before thier arrival.
- Customers can make payments via thier user profile. This eliminate the fact that customers have to carry cash arround and also act as a solution for a customer who lost a lost wallet.
- Customers will be constantly updated on when their meal will be ready.

Plan Of Work

Team Structure

Our team comprises of 5 members all of which are competent programmers. Our team leader is Christopher and he will be responsible for the coordination of the project and all the secreterial work.

Project Run time

By our current estimations, the project will be complete in three months time. This is a rough estimation and the actual time may reduce or increase as we start work on the project.

Statement of Work

The completion of this proposed project will be in 4 steps as outlined below;

Step 1

We will meet with the restaurant staff to learn their views on the proposed solution. We will also give them a chance to add onto our solution if they have more ideas as they are the ones who will be using the application most of the times.

The expected completion time for this task is only one week.

Step 2

This is the design and development process of the software application. We will design the application to work on Android devices. Users will be able to download it from the google application store.

This step will take close to 8 weeks. During each design step, we will be updating the client to check if they approve of the design implemented.

Step 3

At this stage, we will be doing a Beta test of the software to find out if the restaurant customers and staff members approve and if there are changes they require. This process will only be a week long.

Step 4

This is when we launch the application. The application will be submitted to google store for validation. After validation and approval, marketing of the application can then start and restaurant customers can then start downloading the application.

This process is expected to be 2 weeks long.