**Popeyes Management App**

IS 436-03 Structured Systems Analysis and Design Project

Deliverable 1: Planning



Group Members:

Jessica Park

Farah Siddiqui

Betelhem Taddele

Danny Nguyen

Jatin Chauhan

Munam Ghazanfar

Ninh Ngo

02/21/2019

Table of Contents

Section 1: ------------------------------------------------------------------------------------------- 3

Systems Request ------------------------------------------------------------------------ 3

Feasibility Analysis ---------------------------------------------------------------------- 5

Team Member Information ------------------------------------------------------------- 7

**SYSTEMS REQUEST**

**Project Sponsor**

Syed Iqbal, Business Owner

Popeyes Louisiana Kitchen

[meabid@gmail.com](mailto:meabid@gmail.com), [essexpopeyes@gmail.com](mailto:essexpopeyes@gmail.com)

**Business Need:**

Create an app that comprises all the needs of Popeye’s Restaurant to maintain a successful business. The needs of the business are a HACCP log, Daily Food Excellence Audit, Rush-Readiness Checklist, photo uploads for products and sanitation, and the ability to upload business numbers such as sales, labor, and inventory. This app will allow the business owner to log onto the app and complete their daily tasks in an organized comprised manner. Additionally, because the business owner owns more than one restaurant and all of the above requirements are done manually by the managers, an app will allow him to manage his businesses more efficiently and in less time.

**Business Requirements:**

The app/webpage will allow the users to be able to report different problems. It will be very beneficial for the owner to receive up-to date information in an organized form all in one specific space. The specific functionality of this system includes:

* The user can add the financial information sales, labor percentage periodic in the app.
* User can upload the photo of the Products.
* Admin must be able to create multiple users and profile
* User should be able to access a To-do checklist i.e. Rush-Readiness checklist, HACCP log and Sanitation practices.
* User should be able to notify the Managers to complete a task which has not been finished yet or incorrectly completed.
* Automated report of all the text and critical instance that occur in each restaurant.
* If the check box for HACCP log that was not checked by 11am, 3pm, 7pm,11pm trigger an email response.
* App should include the speed time of the drive thru and the number of cars per interval.
* Admin should be able to view a summary report of other users to ensure that the assigned task has been completed.

**Business Value:**

In any restaurant there are numerous amounts of safety and health guidelines that a manager must ensure are met daily. Specifically, a manager’s tasks require monitoring and constant supervision to ensure that they meet the requirements set forth by the Health department and by upper management. Seeing as Popeye's guidelines are more stringent than the health department's, it is vital that each individual franchise achieves or surpasses each metric daily. To do this, our stakeholder currently requires that each general manager send daily updates through group messages. In order to reduce the amount of clutter and create a more defined output to track all these tasks, he has hired our team to create a web-based application to tackle these duties.

This web-based application will help improve organizational workflow and work efficiency as well as allow managers to focus more of their time on other areas of work. This application is also expected to improve the scores received during inspections by upper management as general practices should be easier to check and follow each day through the use of this application. The value of this application should also generate easier workflow for store managers as there would eventually be a singular, codified outlook in which they can track their daily tasks rather than inputting information through multiple portals. The implementation of this application should positively affect both general managers and the stakeholder immensely in their daily tasks.

**Special Issues or Constraints:**

The manager responsible, must be notified with an automated email response, whenever necessary. The admin should see full information for selected/desired restaurant; also, an organized overall summary with up-to-date information in one specific space. Managers must and only be able to upload pictures with an informative title, which should be saved with a username, restaurant location and a timestamp in the database. Therefore, unauthorized access must be able to be prevented or blocked.

Data must be protected from any html or sql injections and should be encrypted accordingly. Queries to read from database must display information based on the account type. In case of accidental data loss, all data must be able to be backed up in another remote location.

The project is expected to be completed in a year.

**Feasibility Analysis:**

**Technical Feasibility:** A technical risk is that training would be required to use the new application because the managers currently uses email/SMS as a primary source of communication to record data such as profits, inventory, and labor. However, since the application is to be used by only managers, training costs would not be too high since other employees do not have to learn how to use the new system. Furthermore, training cost is not expected to be too high because the app will be user-friendly. The managers are also already familiar with Redbook features, so new technology would include uploading photos and numbers to the web application and navigating the web application. The project size is large because the app needs to be able to combine the work of multiple locations however it is not too large to the point where it is unattainable. The current existing system is just email/SMS as stated previously so compatibility should not be an issue.

**Economic Feasibility:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Cost-Benefit Analysis | First Quarter | Second Quarter | Third Quarter | Fourth Quarter |
| **Benefits** |  |  |  |  |
| Increased Sales |  | 8000 | 8500 | 9000 |
| **Development Costs** |  |  |  |  |
| Server | 2000 | 0 | 0 | 0 |
| Development Labor | 3000 | 0 | 0 | 0 |
| **Total Development Costs** | 5000 | 0 | 0 | 0 |
| **Operational Costs** |  |  |  |  |
| Hardware |  | 800 | 800 | 800 |
| Software |  | 1500 | 1500 | 1500 |
| Software Licensing Fee |  | 1000 | 1000 | 1000 |
| Operational Labor |  | 2500 | 2575 | 2625 |
| Training Cost |  | 500 | 500 | 500 |
| **Total Operational Costs** |  | 5400 | 6375 | 6425 |
| **Total Costs** | 5000 | 5400 | 6375 | 6425 |
| **NPV** | (5000) | 2600 | 2125 | 2575 |

The length of the project will be about one year and the cost-benefit analysis will be divided into four quarters. The first quarter will have a negative net present value (NPV) because the system is still in the development phase, so it will incur costs and no benefits. The remaining three quarters is projected to result in a positive NPV that ultimately makes up for the loss in the first quarter due to the managers having more time to focus on sales and operations rather than collecting and recording Redbook numbers.

**Organizational Feasibility:**

The project goal is to develop an application to provide a more efficient method to monitor and record business numbers and safety/health requirements. This aligns with the business strategy of reducing clutter of data in emails and group messages while simultaneously satisfying health and safety requirements. Implementation of the new system will allow:

* tracking and recording of data through automation rather than by hand
* consistent method of recording data
* easy access to desired business information
* streamline manager responsibilities (salaries, tax payments, etc.)
* managers to focus on other areas in their work

Managers would be receptive to the new system because reducing their time spent on recording Redbook numbers would allow more time to focus on sales and customers.

**Team Member Information:**

|  |  |  |
| --- | --- | --- |
| **Name** | **Contact**  **(Email and Number)** | **Job Title** |
| Danny Nguyen | [Dang6@umbc.edu](mailto:Dang6@umbc.edu)  443-838-0123 | Quality Assurance |
| Jessica Park | [jpark32@umbc.edu](mailto:jpark32@umbc.edu)  443-912-0564 | Project Manager |
| Munam Ghazanfar | [mu4@umbc.edu](mailto:mu4@umbc.edu)  443-425-5544 | Quality Assurance |
| Farah Siddiqui | [farah4@umbc.edu](mailto:farah4@umbc.edu)  443-841-8049 | Business Analyst |
| Jatin Chauhan | [chauhan3@umbc.edu](mailto:chauhan3@umbc.edu)  443-815-8347 | Database Administrator |
| Betelhem Taddele | [be24@umbc.edu](mailto:be24@umbc.edu)  240-899-4304 | System Analyst |
| Ninh Ngo | [lx04615@umbc.edu](mailto:lx04615@umbc.edu)  240-429-2711 | Developer/Programmer |

**Team Bio:**Jessica Park: I am a senior at UMBC with an expected graduation of Spring 2019 with a major in Information Systems. I plan to find a job in Business Operations, Project Management, or Cybersecurity. My role as a Project Manager is to make sure all of my group members are able to complete their tasks in a timely manner and assisting in all areas as needed and submitting the deliverables on GitHub before the deadline while also being the liaison during communication with the Professor.

Farah Siddiqui: I am a senior at UMBC with an expected graduation date of spring 2019. I would like to work as the Business Analyst. My role in the project is going to be interacts with the business stakeholders and subject matter experts in order to understand their problems and needs. I will be gather all the information from the business and requirement to achieve the goal.

Munam Ghazanfar: I am senior at UMBC with an expected graduation date of Spring 2019. I am majoring in Information Systems. After graduation, I would like to work as a Quality Assurance or System Analyst. My role in this project is to monitor the whole project and make sure there are no mistakes and all the requirements are met.

Jatin Chauhan: I am a senior student at UMBC majoring in Information Systems. I’m expected to graduate after current semester i.e Spring 2019. I’m finding a job in Database Development, Project Management, or Website Development. My role in this project is to create a Database schema and develop Database being a Database Administrator.

Betelhem Taddele: I am a senior at UMBC and expected to graduate in spring 2019 with a degree in Information Systems. After I graduate, I would like to work in system analyst and project management position. My role for this project as a System Analyst is to build structures in the form of Information Systems.

Ninh Ngo: I am a senior at UMBC and major in Information Systems. I am graduating after this spring semester. I hope to get into software development after graduation. Previous experience with software development at internship with My Great Software. My role for this project is developer and helping contribute to all deliverables.

Danny Nguyen: I am a senior at UMBC within the Information Systems school. I will be graduating in the Fall of 19’ and I hope to begin my career in computer networking upon graduation. I have previously worked at HRSA under a Pathways and hope to continue my career in civil service as I felt nothing but positivity through my experiences.

**Meeting Time:**

All our group members have different class schedules and it was difficult to just pick one specific day and time for all seven of us to meet and discuss about the project. Therefore, each member listed their availabilities, and based on that we break our meeting times into three different days, so each person can pick any day within the specific time that suits perfectly to their schedule.

|  |  |  |
| --- | --- | --- |
| **TEAM MEETING TIMES** | | |
| **TUESDAY** | **WEDNESDAY** | **THURSDAY** |
| **4-6PM** | **11:30-2:30PM** | **3:30-4:30PM** |