***Arab American University***

***Faculty of Engineering and Information Technology***

***Computer Systems Engineering***

**Engineering project management**

***Online ordering health fast food restaurant***

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**ABSTRACT**

Technology advancement recently has been entering all of our lives aspects, so to survive in the business market, we should keep up with these developments.

In this project, we are going to be evolving our restaurant by providing the service of remote ordering where people can order their preferences meals from their homes or even while they are inside our restaurant and receive them with the least amount of effort.

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# Chapter 1:

## Initiating and pre initiating

### Business case

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| 1. **Introduction/ Background**   The main goal of our restaurant is to provide healthy meals to its guests, we believe that we can expand our goal to include all residents of the city not just the guests of the restaurant, by the possibility of submitting online orders and providing delivery service for these orders, online ordering will make it easier for restaurant guests also through the possibility of make orders more easily and flexibility, In addition to attract more orders through it, it will protect the customer base by staying connected with them. |
| 1. **Business Objective**   Online ordering food will support continuing growth and profitability for our restaurant, all people can view the list of food, prices, and discounts available inside the restaurant in an easy and clear way, which will contribute to more orders, whether inside the restaurant or outside the restaurant with the help of the delivery service that is available in the list.  Online ordering food will reduce the restaurant's need for workers inside it to take orders from guests, as well as maintain continuity of communication between the restaurant and customers and their follow-up of all that is new, whether food or discounts. |
| **4.0 Critical Assumptions and Constraints**  The project must meet all agreed requirements and be easy to use for the customer and restaurant workers.  After it is available, it should not need a lot of maintenance (two maintenance operations at most every six months).  He must compensate for the costs of establishing it during the first 4 months.  It should work in different environments and operating systems.  Some restaurant workers must be trained on how to use it, deal with it, and receive orders, especially admins.  Delivery service workers must be trained on how to use it.  There must be a user guide for the consumer. |
| **5.0 Analysis of Option and Recommendation**  There are three options for addressing this opportunity:  1. Do nothing. The business is doing well, and we can continue to operate without this new project.  2. we will be asking a specific company to implement the project or app.  3. We rely on our skills and implement it  Based on discussions with stakeholders, we believe that option 3 is the best option |
| **6.0 Preliminary Project Requirements**  Core requirements for customers:   1. Order placement: With an easy-to-order feature, the user can place an order of selected dishes and healthy food with just a few simple taps on the screen. 2. Tracking of Drivers: With the real-time tracking feature, it becomes easy for the users to track delivery drivers and know their real-time location information. Users can check how much time a driver will take to reach their food parcel. 3. Payment gateway integration: must Integrate our app with Payment Gateways like PayPal, and make sure that it provides the users with multiple payment options.   Core requirements for drivers:   1. Driver’s profile: Through this feature, a driver can keep his profile updated. It contains his full name, address, email, contact number, photo, and other personal data. 2. Notification for orders: Through push notifications, drivers can get constant updates & alerts for new food orders online. It will help in the accurate delivery service of your restaurant. 3. Map for the delivery route: this allows drivers to choose the shortest and fastest routes to reach the location.   Core requirements for admin workers:   1. Monitoring every action: Monitor all the drivers, changes in the menu, deliveries, ratings & reviews of drivers, canceled orders, and other important data. 2. make changes: make changes (add, delete, update, and get) in the menu, orders, and drivers. |
| **7.0 Budget Estimate and Financial Analysis**  The overall budget of this project is going to be $32,600 by the time the project is able to serve people, this budget is going to be the summation of building the website for ordering food, which would cost 3 new developers plus us for 12 weeks at a cost of $21,600 (60 hours per week \* 12 weeks \* 3 employees \* $10 per hour, buying new restaurant equipment will cost $10,000, promoting the project will cost $1,000.  Project benefits will be mainly from selling food as well as introducing delivery services, if we assume we will be selling 70 meals a day for an average cost of 10$ for each meal, and selling it for 20$, would be 700$ a day, after paying employees costs 400$ (10 employees and drivers \* 8 \* 5), the net revenue from meals will be 300$ a day, saving the revenue of delivery services for extra costs. |
| **8.0 Schedule Estimate**  The estimated time for this project is approximately going to be three months, there is no flexibility in the schedule, and we also assume that the new system will have a useful life of at least one year. |
| **9.0 Potential Risks**  That maybe our application will not popular with the people of the city, so the project will fail miserably.  Maybe our application will not be as welcome among the restaurant guests, therefore, we will need additional workers in the restaurant and, accordingly, new costs.  Maybe the transportation crisis in the city will affect the delivery service and thus the demand of customers for orders. |
| **10.0 Exhibits**  Exhibit A: Financial Analysis |

### Project Charter

**Project Title**: Online ordering for the healthy fast-food restaurant

**Project Start Date:** 12 January 2023 **Projected Finish Date:** 12 April 2023

**Budget Information:** $50,000

**Project Manager:** Ali Abualrob, (00972)592937952, ali.rajeh2612@gmail.com.

**Project Objectives:** Creating an application for online orders that is easy to use and meets all basic requirements, enabling users to view the food menu, enter their orders, activate the payment way that is suitable for them and is available, as well as benefit from the delivery service when needed.

**Main Project Success Criteria:**

* Creating an application that works in all environments through which the user can view the list of available foods, their prices, and existing discounts, and then create his order, use the delivery service when needed, and choose the appropriate method to pay.
* The application includes the required requirements for users, drivers, and admins, with easy access, maintenance, and speed.

**Approach:**

* Develop a survey for stakeholders to determine requirements and features for users, admins, and drivers.
* Research for software to provide more security for our app.
* Determine a way to measure the value of the app in terms of costs and new revenues, both during the project and six months after project completion.
* The possibility of running it in all environments and various types of operating systems.

**Roles and Responsibilities**

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Name** | **Internal/External** | **Contact Information** |
| Sponsor, Project Manager. | Ali Abualrob | Internal | ali.rajeh2612@gmail.com |
| Team member | Basil R Salahat | Internal | b.salahat1@student.aaup.edu |
| Team member | Yousef Kmail | Internal | Yousef.hnaty@gmail.com |
| Team member | Ahamd Mohammad | External | ahamd.mohammad@gmail.com |
| Team member | Amal Ahmad | External | amal.ahmad@gmail.com |
| Team member | Jan Joni | External | Jan.joni@gmail.com |

**Sign-off:** (Signatures of all above stakeholders. Can sign by their names in the table above.)

Ali Abualrob, Basil R Salahat, Yousef Kmail, Ahamd Mohammad, Amal Ahmad, Jan Joni.

**Comments:** (Handwritten or typed comments from the above stakeholders, if applicable)

“I will do my best to make this project a success and upgrade it to the best level” Ali Abualrob.