# Software Requirements Specification
## for
## Food Delivery System

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# Revision History

| Revision | Date | Author(s) | Description |
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| 1.0 | 22.07.2020 | Taufiq,Shawon | Chapter 1 - Introduction |
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# Chapter 1

# Introduction

## 1.1 Purpose

The objective of this project is to allow the admin of any delivery company to find out and edit all the information of their client and delivery man. It allows the client to order their foods from nearby restaurants. And the delivery man will also be informed about their nearby orders as well as the restaurants will be notified as they need to prepare the food.

## 1.2 Intended Audience

Any delivery company those who want to manage their clients' record can use this project. But as we are making this project specifically for food delivery. There will be 3 intended user for this system:

- Consumers: The intended audience are those who don't want to go out or don't feel like cooking at home. Mostly the bachelors.

- Delivery man: As the delivery man will also be benefited by our system so they are also our audience. So the target audience are those who have a bicycle or bike and want to make some money doing food delivery. This will also help some of the unemployed people.

- Restaurants: Our intended restaurants will be all. But the new restaurants which are not getting enough customers or those who don't have enough room for the customers to serve will be benefited the most. Moreover, food sells will be more because of using out software.

## 1.3 Intended Use

Without any management system, it is a tedious job for any organization to keep track of all the users information.

- In this project, Users can order food faster.

- The admin will be able to monitor the user information and can provide offers or discount to specific customers

## 1.4 Product Scope

The Food Delivery App is a medium through which customers can choose the restaurant of their choice and order specific food. Potentially good quality restaurants will be connected through this and customers will order food as per their choice.

Our goal is to making a web application for a company to spread good quality food among the buyers and the customer will get the food of their choice without any hassle at home. In this case, using the app will benefit the company will increase employment by hiring a delivery man and increase the sales of restaurants.

## 1.5 Risk Definition

As we all know, no system is 100 percent safe. So, we need to be aware of any risky situation. The Potential risks this type of application may have are given bellow:

1. Overloading

2. Server Crash

3. Affected by Hackers

4. Minor Bugs in system that may cause severe problem in the long run.

5. Database using mistake

But our App has ensured the minimal risk possible as we have:

1. Avoided recursive functions and nested loops.

2. Avoided string concatenation in loops.

3. Released resources.

4. Avoided instantiations inside loops.

5. Avoided throwing exceptions as much as possible as this causes slow down.

6. Used caching to improve performance.

7. Disabled tracing to get the max performance.

8. Encrypted all the data in transit using https.

9. Ensured that up-to-date and strong standard algorithms or ciphers are used

10. Disable caching for responses that contain sensitive data.

# Chapter 2

# Overall Description

## 2.1 User Classes and Characteristics

User Classes and Characteristics:

User classes may be differentiated based on frequency of use, subset of product functions used, technical expertise, security or privilege levels, educational level, or experience. We got some physical characteristics and some system characteristics. In physical characters we have User, Delivery boy, Restaurant and system characters Server and Database administrator and Employee administrator.

Physical Characteristics:

User: User are those who use this application for get some food without any harassment. This application will save time of cooking for the user. They can order food any time from nearby restaurants.

Delivery boy: Delivery boy are those who deliver the food on time to the customers or users. They can earn some money with this application. They can earn some bonus by crossing the daily basis limit.

Restaurant: Restaurant are like food factory. They hire a lot of cook so that they can make food on time. For this application restaurant grow their business a lot.

System characteristics:

Server and Database administrator For food delivery application we need a server for our database. Server main focus is Data management or resources management. Today's most used server is Clint server model. A database server is a server which uses a database application that provides database services to other computer programs or to computers, as defined by the client server model. Database main objective is manage this applications data.

Employee administrator:

For this administration employees need ID and pass so they can access to the database. If any employee do access in database system will recorded their activists and if they want to change their will be a confirmation or verification needed. So that the data base will not harmed at all. And all the information will encrypted so no one change it easily. Features for Customer:

Sign up: New customers will create an account through it. Which will allow you to login later with a password. There will be an option to sign up using Google, Facebook, etc.

Personal Profile: Once signed up, a profile will be created. You can login to the profile using only password and all history will be saved there. Card information system can be kept for paying the bill.

Restaurant Search: Only those restaurants that are close to the consumer will be displayed in the app. The customer will be able to see the menu of food by selecting the menu of the restaurant of his choice and order the food as per his choice. There will be ideas about food prices, offers, etc .

Order: This is the most important feature in this app. Where consumers will be able to add and delete items of their choice.

Payment: Once the item is selected, the payment option will appear and will be displayed on an investment screen. If the consumer wants, he can make payment online or there will be cash on delivery system.

Real-time tracking: Customers can see where their order is currently through real-time tracking. When the order is being prepared, the location of the delivery man can be known through everything.

Features for Restaurant:

Content Management: Special offers and important information including food menu, ingredients, images and prices will be in the application. Restaurant authorities can update them if they want.

Communication: You can pay if the restaurant authorities want or you can contact the customer directly. This is very important to check if the delivery man is ready to pick up.

Features for Delivery man:

Sign up /Login: Delivery Man needs to sign up. Be able to login to the past. You must submit the required documents when signing up.

Order Receive: The delivery man can receive the order as per his requirement. Basically, the delivery man can work independently whenever he wants.

Payment: As soon as each order is delivered, a certain amount of payment will be credited to the Delivery Man's account.

## 2.2   User Needs

The first thing to keep in mind in the food delivery app is the news of the user. Customer satisfaction and the app must be thought to be very easy to run. In addition, some more important things to look at -

1. When ordering food, the nearest restaurants around the customer will be seen in the news feed.

2. Good quality restaurants will be connected to the app.

3. Quality of food and testing will be confirmed.

4. In case of any problem, the customer can contact the admin panel. If there is any problem in the delivery of food, there will be a refund system.

5. Good use of delivery man will be ensured.

6. Provide good quality food packaging.

7. Discount offer.

8. App will be user friendly and supported for any device.

9. App size will be small.

## 2.3   Operating Environment

1. Operating System:

It can run on any modern OS with an internet connection because it's a web application like Ubuntu, Linux Mint, Solus, Debian; Windows 7,8,10

2.Hardware Platform:

we are also planning to create mobile application on the road. Then it will work in Android using devices which has minimum memory requirement of 512 MB RAM

## 2.4 Constraints

1. On the road if we end up making the mobile app, it may get tricky to integrate the mobiles database with the apps database so we have decided it would be wise to use rest API from the beginning.

2. Giving the notifications to the Customer, Restaurant and Delivery man because it's a web application we don't expect them to be logged in at all times, we have decided to send email as notifications but that's not an effective way so the best way down the road would be to notify with the help of an app, either create a mobile app from scratch or convert web application into an app using android studio.

3. We have to complete our project within 3 months. It is very challenging. Because we have to learn many things than we will apply.

4. We must use Version Control System for this project.

## 2.5 Assumptions

1. We assume our users are from Bangladesh.

2. We assume users knows English well.

3. We assume user will use common browser, which can view our website properly.

4. We assume they have internet connection enabled.

# Chapter 3

# Requirements

Requirements falls mainly under two category. The functional requirement is describing the behavior of the system as it relates to the system's functionality. The non-functional requirement elaborates a performance characteristic of the system.

## 3.1 Functional Requirements

Food Search:

As a user

I want to a filtration system.

So that this system save our time.

Confirmation/Acceptance:

- We can make a system where user can search easily in this web application.

- This filtration will save time of many user.

- They can filter the restaurant that they like.

Add to cart:

As a user

I want to a system where I can cart whatever I like.

So that, I can order multiple food at same time

Confirmation/Acceptance:

- Our programmer can add this cart in this system.

- Cart will have limitation, only three food item can be carted.

- Those food item that are being cart their price will be auto update by the system.

- Also discount price will be shown in this cart.

- Also user can remove form cart that they do not need that moment

Payment:

As a user

I want a safe payment system.

So our bank detail or other payment methods will be secured all time.

Confirmation/Acceptance:

• Our developer and programmer will make an algorithm of safe payment method.

• Where all the information are secured.

• User can pay in 3 way. By Hand cash, by card, or by wallet.

• For card there will be few confirmation like phone massage by phone number and a verification code.

Wallet:

As a user

I want wallet system.

So that, we can pay for our food easily.

Confirmation/Acceptance:

• There will be an encrypted system so that user money can be safe.

• Wallet can be used ordering food.

• They can also pay all the charge from this wallet.

Get discount:

As a user

I want to get some discount or offer.

So that I can always attractive in this application and buy more food.

Confirmation/Acceptance:

• We can add some algorithm where user can get discount and also get some offer that restaurant give.

• Offers like ' buy one get one free ' or ' (–

• Also set an algorithm where they can give this discount code for particular package customer or user.

Order placement:

As a user

I want to place an order.

So that, I can have my food.

Confirmation/Acceptance:

• User can order food from cart or direct form the food page.

• From cart first user add food to the cart then place order.

• From food page they can order food direct.

• They can increase or decrease the number of food item form placing order.

Auto tracking:

As a user

I want an auto tracking system.

So that, my place will be auto update all time no matter where I am.

Confirmation/Acceptance:

• Our system can track user location with an algorithm.

• It will be auto fill up to the address place.

- Tracking system allow access to location on their device.

- System will tell that where there food are by using delivery man location

Delivery man Earning:

As a delivery man

I want to earn some easy money.

So that, I can use may free time and earn money

Confirmation/Acceptance:

- They can earn money by deliver the food to the user.

- There will be some daily limit. If that limit will cross delivery man earn some extra money.

- Crossing daily limit will give price to delivery man.

- Delivery man need some strong documentation. So that they can be legal to the system.

- Also the can earn some tips from user if there service will be good and on time delivery.

Food Review:

As a user

I want to review my food. So the restaurant will be aware to serve good food with good quantity.

So that, other people can also place order by viewing the review.

Confirmation/Acceptance:

- Our programmers and developers will create the option to post reviews together where every user can give their opinion

- Every restaurant will have an option that people can give their review.

- If the user wants, write a review based on the quality and quantity of food.

- 1 to 5 stars can be given along with comments in the review.

- Restaurants will be rated by customer reviews

## 3.2 Non Functional Requirements

This part requires to be extra careful on the small details of the project such as:

- Sign-Up User name:

1. The user name must have more than 5 characters.

2. The users will log in with their individual IDs.

3. The field cannot be empty when login

- Sign-Up password:

1. The passwords of the users should be alphanumeric

2. There cannot be any empty field

3. The password must be between 4 to 10 characters

4. The password cannot be the username or user ID

- Sessions:

1. When inactive for a long time, the user will be logged out automatically

2. The page will reload itself every 5 minutes

• Cookies:

1. Cookies implemented for better User Experience

2. Customers, Restaurants and Delivery man will have different home page versions

3. Cookies will be implemented in login

Other than all of those, we have to take care of the following aspects:

All of the application data will be store in a SQL database and therefore a SQL Database must also be installed on the host computer. This software is freely available and can be installed and run under most operating systems. The server hardware can be any computer capable of running both web and database servers and handling the expected traffic. For a small scale restaurant that is not expecting to see much web traffic,an average personal computer may be appropriate. Once the site starts generating more hits, though, it will likely be necessary to upgrade to a dedicated host to ensure proper performance. The exact cutoffs will need to be determined through a more thorough stress testing of the system.