

# **SOFTWARE ENGINEERING LAB**

## **EXERCISE NO 1**

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### **Fast Food on Wheels Delivery System**

#### **1 Project Description**

A client is requesting the implementation of custom tailored fast food delivery software management system to run on a server (or on cloud computing service). The kinds of fast food normally to be served include, Pizza, Hamburgers, Hot-dogs, etc. You can safely assume that the restaurant has preset limited types of fast foods, except that clients can choose, add or refuse, condiments and dressings. The system runs a back-end service which manages all the essential databases, e.g., available dishes, customers and customer orders, stocks of ingredients for the dishes, employees - part-timers and full-timers, managers, suppliers of stocks, etc. The front-end services feature interfaces for interacting with the management systems.

#### **Responsibility of each student in your group**

Sibusiso Mgidi - Front End and Back End

Culu Muzikawufani - Front End  
Siala Mbofholowo - Back End  
Ndivho Mamathuba - Back End

### **Back End Tasks**

The system runs a back-end service which manages all the essential databases, e.g., available dishes, customers and customer orders, stocks of ingredients for the dishes, employees part-timers and full-timers, managers, suppliers of stocks, etc.

### **Front End Tasks**

The front-end services feature interfaces for interacting with the user. The front-end developer is responsible for implementing visual elements that users see and interact with in a software application.

## **2 Actors interacting with the system**

- Customer
- Restaurant Manager
- System Administrator

**The customer interacts with the system:**

### **Customer Registration**

—Username.

- Contact Details
- Email address/phone numbers (for confirmation purpose)
- Password
- Address

### **Possible constrains**

The password must contain an uppercase letter and be a minimum of 8 characters

### **User logins**

- Username
- Password

### **Ordering use case**

- User can see the menu
- User adds an item item from the menu
- User orders the food
- User can track the order in real time
- User can cancel the order —User pays for the order
- Payment options: Cash/Card

### **The rwestaurant manager interacts with the system to manage:**

- Stock Inventory
- Orders
- Customer database
- Track delivery
- Accounting/Finacial Administration
- Duties, off-days, leaves, etc.
- Generation of reports- Analytics

**System Administrator responsibilities:**

- Setting up databases
- Stopping/restarting system services
- General system maintenance
- Managing users accounts
- Performing backups
- Upgrading software