

OMIS 651 – Fall 2022

Assignment 1: Requirements Determination

Available Date: 9/6/2022

Due Date: **9/13/2022** at **11:59 PM** on **Blackboard**

Instructor: Amin Vahedian

Mary's Electrical Supplies and Services

Mary owns a small shop that sells electrical supplies and employs one electrician, Mike. The shop owns a pickup truck and a van.

Mary runs the shop and is responsible for opening and closing. She takes purchase and service orders in person or by phone. Mike is responsible for performing the service. Mary is responsible for keeping the shop stocked. She monitors the inventory of the shop and maintains a purchase list.

Mary does the accounting for the shop and keeps track of sales and profit.

A Business Process: Perform Electrical Service

When a customer requests service from the shop, Mary makes an initial appointment with the customer. Mike goes to the appointment and develops a plan for the work, which determines what supplies are needed and how long the work will take. He then makes an appointment with the customer to perform the work. At the end of each day, Mike goes to the shop and checks for all the supplies he needs for all the work he planned that day. If an item is not found in the shop, he adds it to the purchase list with a due date that is before the service appointment. On the day of the service appointment, Mike loads all the supplies into the van and takes them to the location where he performs the service.

Exercise:

Mary would like to acquire a software system to support this process. Using the information above, identify at least two user requirements and their corresponding functional requirements for this software system.

First, identify system users (1 points):

- User 1: Store Owner/ Manager
- User 2: Electrician/ Service provider
- ...

Second, identify tasks for each user (1 points):

- User 1: Store Owner/ Manager
 - Task 1: Booking appointment with the customer.
 - Task 2: Scheduling date and time for the customer
 - Task 3: Checks and takes purchase and service orders online and offline.
 - Task 4: Maintaining inventory and purchase lists

User 2: Electrician/ Service provider

- Task 1: Checks the customer appointment details and develops the plan of work.
- Task 2: Gathering supplies to execute the work.
- Task 3: He searches for the supplies and adds them to the cart.
- Task 4: Even adds items to the purchase list if they are unavailable.

Fill out the requirements in the following table (4 points):

Store owner/ Manager Requirements:

User Requirements	Functional Requirements
Customer Appointment Booking	<ul style="list-style-type: none">• Scheduling date, and time and giving appointments to the customer.• Updating appointments on the calendar for an electrician to look after.• Add, Modify and delete appointments• Get a notification if the appointment date is getting closer.
Managing purchase and service orders	<ul style="list-style-type: none">• Make a different inventory list for in-store and online appointments.• Edit purchase lists to add or remove items.• Get a notification if any supplies are getting out of stock.• Record purchase and service orders as data history for future store analysis.
Maintaining Inventory and purchase lists	<ul style="list-style-type: none">• Check supplies in purchase lists.• Pull out duplicate orders.• Add to cart if supplies are unavailable.• Delete items that are not necessary.• Checking expiry dates of items constantly

Service provider(electrician) Requirements:

Customer Appointment	<ul style="list-style-type: none">• Checks for appointment due dates• Updates his calendar and checks with the store manager• View purchase list for supplies.• Add items to the cart if they are unavailable.• Updates purchase list for the store manager to check the inventory.
Developing a plan of work	<ul style="list-style-type: none">• Developing workflow from start to Finish.• Reviewing the location of the customer and estimating the total time to complete the work.• Gather all the supplies that are required for that particular service
Checking for Supplies	<ul style="list-style-type: none">• Checking for all the supplies required for the plan of work for a particular customer.• Check the inventory list and add to the cart if the required supplies are unavailable.• Update the items in the database.• Categorize the items as per the services.
Service Information	<ul style="list-style-type: none">• Gather all the supplies required for the service.• Complete the service in the estimated time.• Update the purchase list if any supplies are leftover after the service.• Saves the information for the store manager.