Functional Requirement Specifications

of

Inventory Management System

(IMS)



Submitted to: Md. Sazzad Hossain

Submitted by: Md. Rayhanul Islam Raj (5779)

Date:

[**1. Registration, Authentication & Authorization 2**](#_bf0lhlmw15p6)

[1.1. Registration 2](#_9bb0jeeo37ba)

[1.1.1 Components 3](#_etgnkg64gbla)

[1.1.2 Buttons 4](#_xh2inj3nkr7u)

[1.2. Sign in 4](#_dbhcdsba4bef)

[1.2.1 Components 4](#_mv38or2ae7y6)

[1.2.2 Buttons 5](#_z4wof0kq99of)

[**2. Header 5**](#_x6byw7we6zoo)

[**3. Left Sidebar 5**](#_h0qsabkljy66)

[3.1. Brand logo with name 5](#_nggbgj8kqkgn)

[3.2. Menus 6](#_bu713469zmqc)

[**4. Dashboard 7**](#_ze2ma3u0hqx)

[4.1. Cards 8](#_aythjv6krr88)

[**5. Supplier 9**](#_euwvhsqgfn6f)

[5.1. Add a new supplier 9](#_31k96ewitjj)

[5.1.1. Components 10](#_ovqjk4b4oo9w)

[5.1.2. Buttons 11](#_s58teryp2s6f)

[**6. Customer 11**](#_bdqdlnms1hjb)

[6.1. Add a new customer 11](#_ns2up0rihzo8)

[6.1.1. Components 11](#_pr8yo0rdm6n6)

[6.1.2. Buttons 12](#_hz6zwk2hxbvx)

[**7. Purchase 12**](#_blktthxsrnlu)

[7.1. New Purchase 12](#_6uvtz3bzjzxi)

[7.2. Purchase Report 12](#_pgtl5s86trvd)

[**8. Sale 12**](#_59921guazugz)

[8.1. New Sale 12](#_uxoenyyo1tct)

[8.2. SaleReport 12](#_beyk02ntsmns)

[**10. User Management 13**](#_m765etuyuvcv)

[10.1. Components 13](#_gnf64kwjm8q)

[10.2. Buttons 13](#_9nlbf2o4k5m9)

[**11. Category 14**](#_qxlx88idc9h)

[11.1. Add a new category 14](#_55ebc81s0fs5)

[11.1.1. Components 14](#_pa9eecfqgn9f)

[11.1.2. Buttons 15](#_dp2i37ab04ul)

[11.2 All Category 15](#_36r5ahvgzar5)

[**12. Product 15**](#_6nsd6mjhadb7)

[12.1. Add a new Product 15](#_cykrofe55kwj)

[11.1.1. Components 16](#_y0ra7k1upnrv)

[11.1.2. Buttons 16](#_bw81lntat41d)

[12.2 All Products 16](#_mcmhbj9i46yx)

# Registration, Authentication & Authorization

## **1.1. Registration**

Users must be registered by super admin. This system will be accessed only by registered users.

### 

### **1.1.1 Components**

**Full name**

* It is a mandatory field.
* Input type must be text.
* Won't accept alphanumeric and special characters.
* Length must be greater than 2 and less than 51 characters.

**Email**

* It is a mandatory field.
* Input type should be email.
* It must be verified as a valid email address by regex.

**Password**

* It is a mandatory field.
* Input type must be password.
* Accept any alphanumeric & special character.
* Length must be greater than 5 and less than 13 characters.

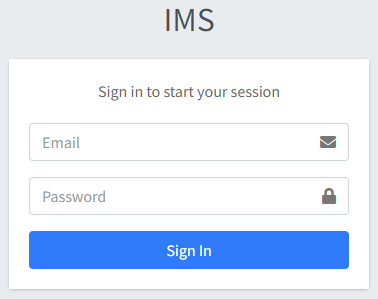
**Retype password**

* Constraints are the same as the password field.
* Password and retype password must be the same.

**Register button**

* Without giving all the information the button won’t be clicked.
* Registration with the same email twice won’t be possible.
* Show error message during any error and stay still on the registration page.

## **1.2. Sign in**

Before accessing this system, users must sign in first. After successfully signing in users can access their own features.

### 

### **1.2.1 Components**

**Email**

* It is a mandatory field.
* Input type should be email.
* It must be verified as a valid email address by regex.

**Password**

* It is a mandatory field.
* Input type must be password.
* Accept any alphanumeric & special character.
* Length must be greater than 5 and less than 13 characters.

**Sign in button**

* Without giving all the information the button won’t be clicked.
* After successfully logged in, users get their claims and access features.
* Show error message, if login failed and stay still on the login page.

# 2. Header

Contents:

**Collapse button:** There will be a collapse button on the left side. It will toggle between show or hide the left menu bar.

**Home button:** It will redirect to the company profile or landing page.

**New Purchase:** It will redirect to the new purchase page.

**New Sale:** It will redirect to the new sale page.

**Full screen button:**It will make full screen the whole webpage.

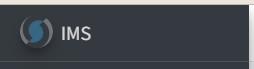
**Theme customisation button:** It will provide some option to customize page color, mode, etc.

**Sign in/ Sign out button:** If a user is signed in, it will show the sign out option. Otherwise it shows the name of user

# 3. Left Sidebar

## 3.1. Brand logo with name

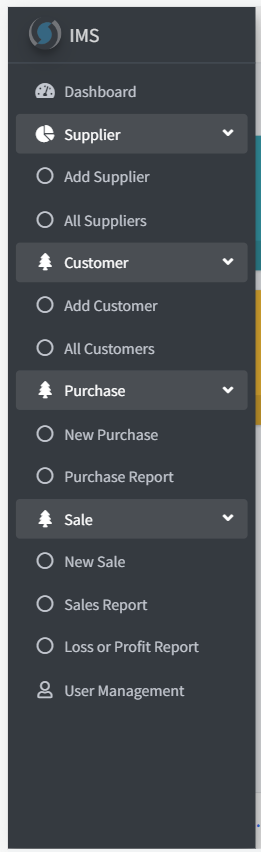
It has to be on the top of the left sidebar. Here will be a system logo and name.



## 3.2. Menus

When a user clicks on any menu or option, the corresponding page will be displayed.Here are the menus:

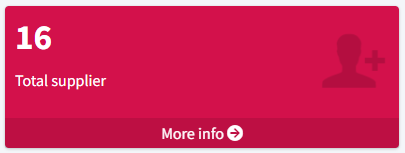
* Dashboard
* Product
  + Add Product
  + All Products
* Category
  + Add Category
  + All Categories
* Supplier
  + Add Supplier
  + All Suppliers
* Customer
  + Add Customer
  + All Customers
* Purchase
  + New purchase
  + Purchase Report
* Sale
  + New Sale
  + Sale Report
* Profit or Loss Report
* User Management

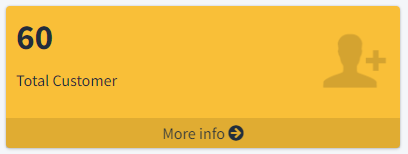


# 4. Dashboard

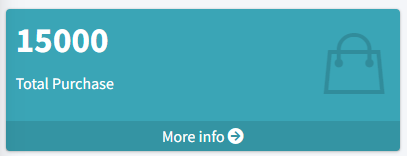
Dashboard will show a short summary of the full inventory system.There will be some elements or widget in the dashboard of Inventory Management System.

## 4.1. Cards

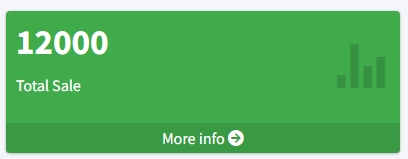
* **Supplier:** It shows the total supplier number. It will redirect to the supplier list page when being clicked.
* **Customer:** It shows the total customer number. It will redirect to the customer list page when being clicked.



* **Purchase:** It shows the total buying in taka and product count of all time . It will redirect to the buying reports page when being clicked.



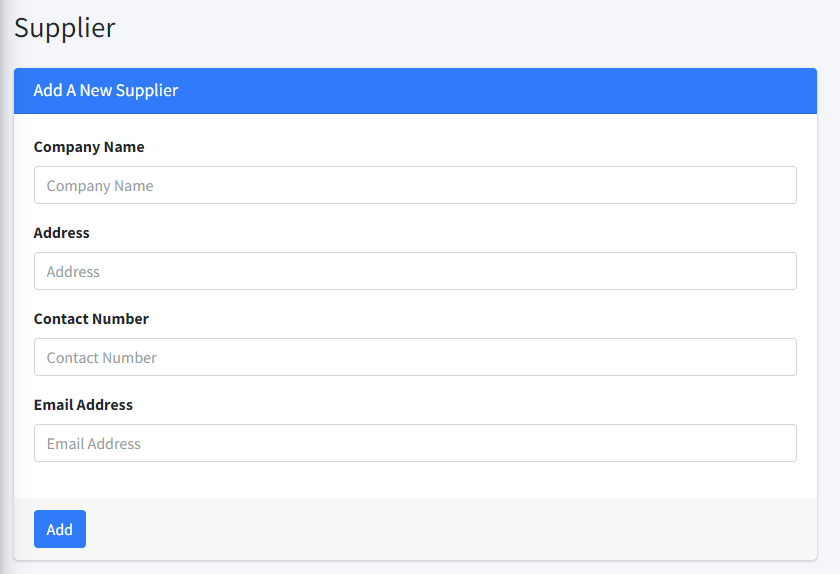
* **Sale:** It shows the total sale in taka and product count of all time . It will redirect to the selling reports page when being clicked.



# 5. Supplier

## 5.1. Add a new supplier

Using this feature, the admin can create a new supplier. After that, the admin can purchase products from the supplier. Purchasing isn’t possible from an anonymous person or company.



### **5.1.1. Components**

**Company Name**

* It is a mandatory field.
* Input type must be text.
* Won't accept special characters.
* Length must be greater than 2 and less than 101 characters

**Address**

* It is a mandatory field.
* Input type must be text.
* Length must be greater than 9 and less than 201 characters

**Contact No**

* It is a mandatory field.
* Input type should be text.
* It must be verified as a valid phone number by regex.

**Email**

* It is a mandatory field.
* Input type should be email.
* It must be verified as a valid email address by regex.

### **5.1.2. Buttons**

**Add**

* Without giving all the information the button won’t be clicked.
* Saving with the same company name twice won’t be possible.
* Show an error message during any error and stay still on the same page.

# 6. Customer

## 6.1. Add a new customer

Using this feature, the admin can create a new customer. After that, the admin can sell products to the supplier. Selling to an anonymous person or company is possible.

### **6.1.1. Components**

**Name**

* It is a mandatory field.
* Input type must be text.
* Won't accept numeric and special characters.
* Length must be greater than 2 and less than 101 characters.

**Address**

* It is a mandatory field.
* Input type must be text.
* Length must be greater than 9 and less than 201 characters.

**Contact No**

* It is a mandatory field.
* Input type should be text.
* It must be verified as a valid phone number by regex.

### **6.1.2. Buttons**

**Add**

* Without giving all the information the button won’t be clicked.
* Saving with the same name & contact number twice won’t be possible.
* Show an error message during any error and stay still on the same page.

# 7. Purchase

## 7.1. New Purchase

Product has to be purchased or added to inventory. Using this feature, users can do this.

## 7.2. Purchase Report

# 8. Sale

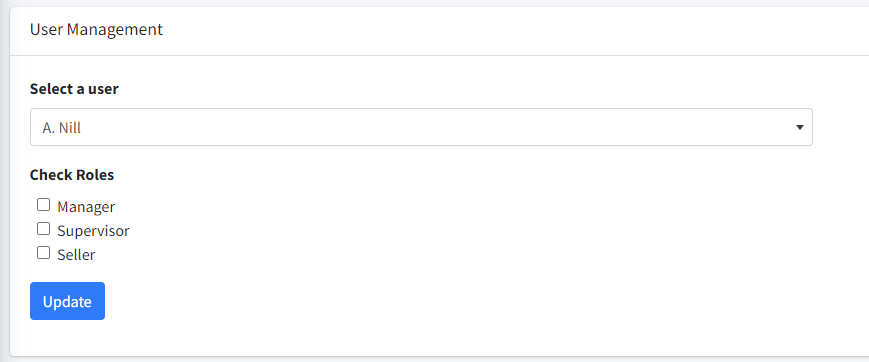
## 8.1. New Sale

## 8.2. SaleReport

# 9. Profit or Loss Report

# 10. User Management

This feature is used for updating roles of a user/admin. SA will access this feature. SA will find all users and roles. SA will assign or update roles to a user/admin.



## 10.1. Components

**Select a user**

* It is a select field
* All existing users are binded to it.
* It must be selected by a user.

**Check roles**

* All roles are binded with an individual check button.
* Multiple roles can be checked for a single user.

## 10.2. Buttons

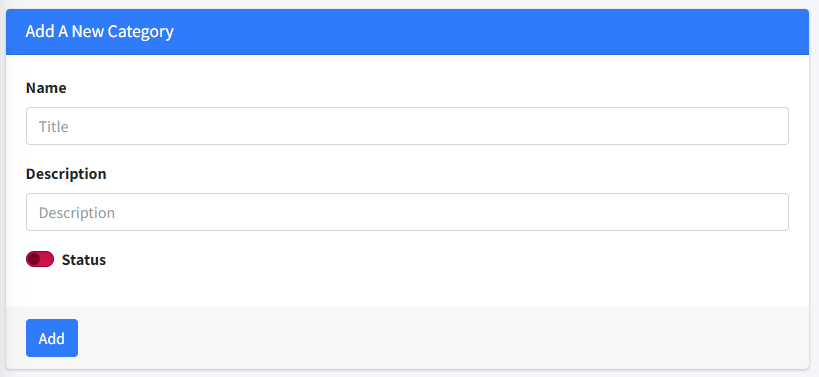
**Update**

* It is hidden if the user is not selected.
* After clicking on it, users' roles have to be updated.
* Show an error message during any error and stay still on the same page.

# 11. Category

## 11.1. Add a new category

Category has to be created by SA/Manager.



### 11.1.1. Components

**Name:**

* It is a mandatory field.
* Input type must be text.
* Won't accept special characters.
* Length must be not less than 3 and greater than 50 characters.

**Description:**

* It’s an optional field.
* Input type must be text.
* Alphanumeric and special characters are accepted.
* Length must not be greater than 200 characters.

**Status:**

* Input type must be boolean.
* It toggles between true and false.

### 11.1.2. Buttons

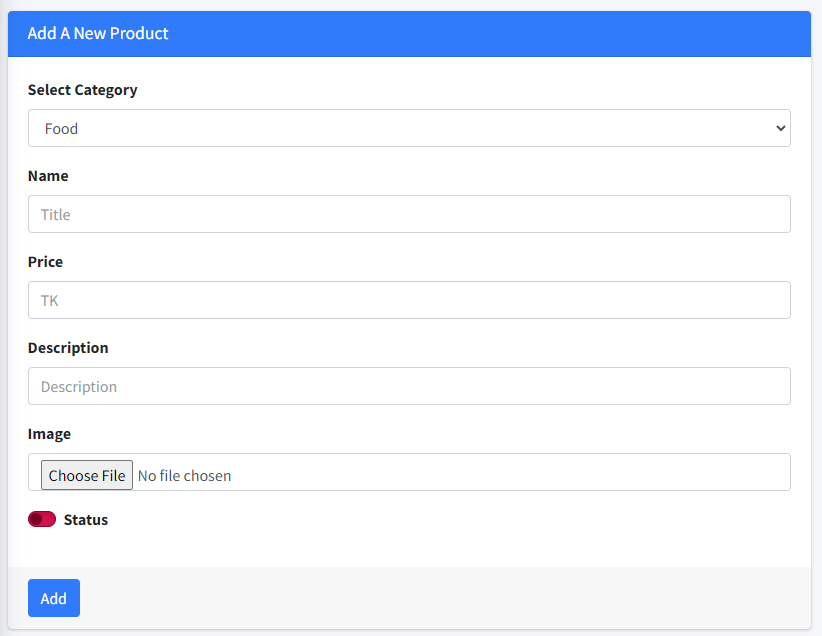
**Add**

* It is hidden if the user is not selected.
* After clicking on it, a new category has to be created.
* Show an error message during any error and stay still on the same page.

## 11.2 All Category

# 12. Product

## 12.1. Add a new Product

Product has to be created by SA/Manager

### 11.1.1. Components

**Select Category:**

* It is a select field.
* All categories are binded with this field
* User must select category to create a product

**Name:**

* It is a mandatory field.
* Input type must be text.
* Won't accept special characters.
* Length must be not less than 3 and greater than 50 characters.

**Price:**

* It is a mandatory field.
* Input type must be a number.

**Description:**

* It’s an optional field.
* Input type must be text.
* Alphanumeric and special characters are accepted.
* Length must not be greater than 200 characters.

**Status:**

* Input type must be boolean.
* It toggles between true and false.

### 11.1.2. Buttons

**Add**

* It is hidden if the user is not selected.
* After clicking on it, a new product to be added.
* Show an error message during any error and stay still on the same page.

## 12.2 All Products