

# Software Requirements Specification

Version 1.0

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**MASKM-Store** 

**E-Commerce Solution** 

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#### 1.0. Introduction

#### 1.1. Purpose

The purpose of this document is to present a detailed description of the MASKM-STORE E-Commerce Solution. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system.

#### 1.2. Scope of Project

MASKM-STORE E-Commerce Solution is an E-Commerce Solution for intended for educational purpose for Web Application Architecture in the Compro Master Program at Maharishi International University. This system intended to automate the buying and selling process by creating an online Ecommerce platform.

More specifically, the system will serve 3 main stakeholders:

- 1- Seller who will create his products on the system and can advertise his product by requesting the admin to make the product *Featured* which will allow these product to be presented in the main page.
- 2- Buyer place orders and add his payment details to allow him to do the payment (payment feature is not in this scope and can be integrated in future version with a 3<sup>rd</sup> party payment gateway)
- 3- Admin who will approve the sellers , and buyer's reviews . admins can also add category (in future admin can have more functionalities )



#### 1.3. Glossary

Term	Definition
Buyer	Any user who register in the system as a buyer and want to
	purchase products from the system
Seller	Any user who register as seller to be a supplier of goods or
	products in the system
Admin	The user who register with admin role to manage the
Admin	system
Backend	The system use spring-boat project on top of spring
	framework to handle the model, business and persistence
	layer
Frontend	The system uses React to handle the presentation layer and
Tionend	GUI
GUI	Graphical User Interface
Repository	Persistence layer
Model/Domain	Have the definition and attributes of all domains
Service	Business Layer
Controller	Is used to route the get, post, put and delete mapping
DTO	Is user to be the intermediate layer between the domain
	objects and the presentation layer
Authentication	Is where the system define the roles of the users in the
	system

#### 1.4. Overview of Document

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

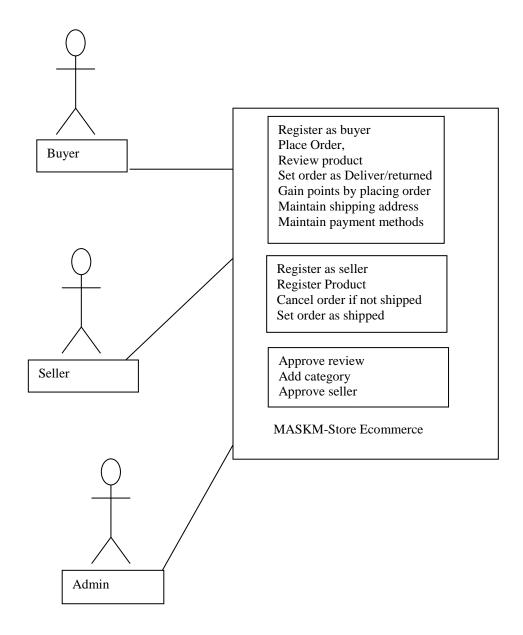
Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.



# 2.0. Overall Description

#### 2.1 System Environment

Figure 1 - System Environment



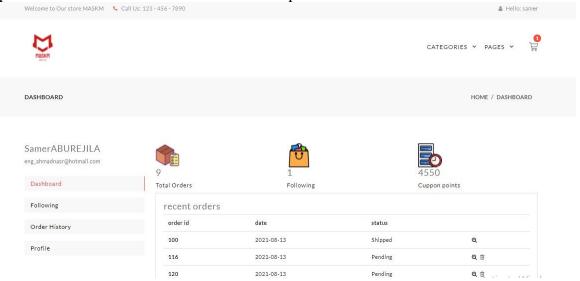
The MASKM-STORE E-Commerce Solution has three active actors.

The Seller, Buyer, or Admin accesses the online store. Seller and Admin interact in the system to make admin approves the seller. The Buyer accesses the system to place order and set a review for a product.

#### 2.2 Functional Requirements Specification

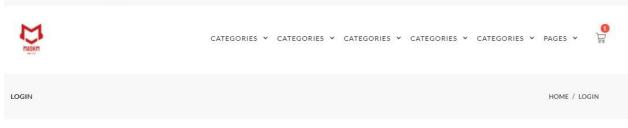
This section outlines the use cases for each of the active Buyers separately. The Buyer, the Seller and the Admin have only one use case apiece while the editor is main actor in this system.

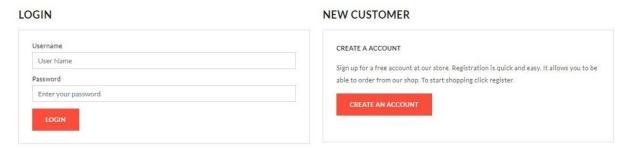
2.2.0 Buyer Dash Board system will have a buyer Dash Board in which he can see his points his follow sellers and recent orders he placed



#### 2.2.1 Register Buyer



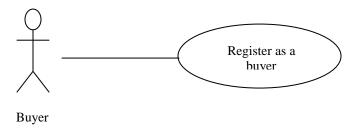




Use case: Register A Buyer

Welcome to Our store MASKM 📏 Call Us: 123 - 456 - 7890

#### Diagram:



#### **Brief Description**

The Buyer register in MASKM-Store and add his details.

#### **Initial Step-By-Step Description**

Before this use case can be initiated, the Buyer has already accessed the buyer section of the MASKM-Store.

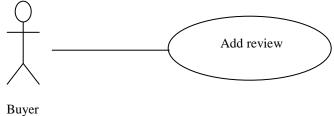
#### The Buyer

- 1- Add his personal details (first name and last name, username and password)
- 2- Shipping Address
- 3- Billing Address
- 4- Email will be used to get email notification after placing order
- 5- Payment Methods etc...

#### 2.2.2 Buyer Use Case

Use case: add review for the product





#### **Brief Description**

The Buyer accesses the MASKM-Store and add review for a product.

#### **Initial Step-By-Step Description**

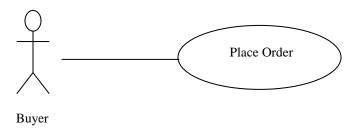
Before this use case can be initiated, the Buyer has already accessed the buyer section of the MASKM-Store .

- 1- The Buyer chooses a product
- 2- Add a review for this product.
- 3- Added review will be pending approval from admin

#### 2.2.3 Buyer Use Case

Use case: Place Order/edit/delete/retrieve

# Diagram:



#### **Brief Description**

The Buyer accesses the MASKM-Store and add review for a product.

#### **Initial Step-By-Step Description**

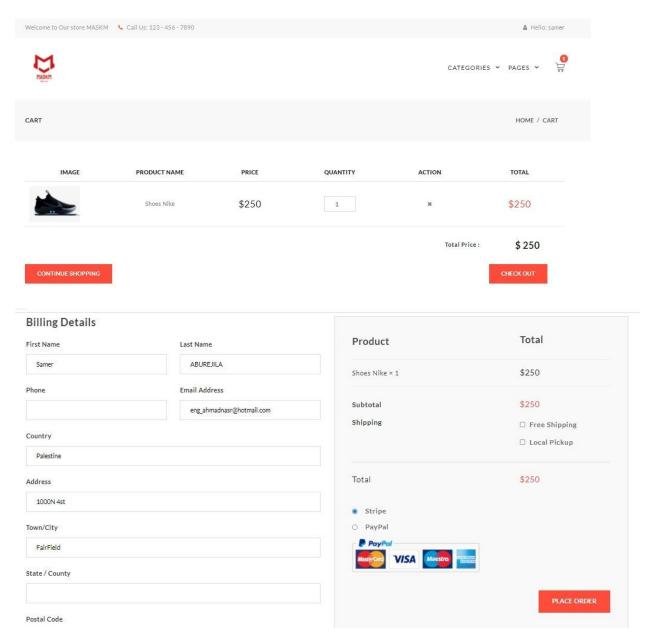
Before this use case can be initiated, the Buyer has already accessed the buyer section of the MASKM-Store.

- 1- The Buyer place order
- 2- By default order will take order creation date as system date
- 3- Order will have a default status Pending
- 4- The Buyer gets points for each order placed
- 5- Buyer can change the order status to delivered when received



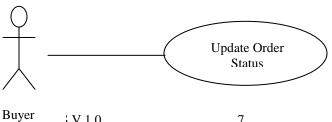
6- Buyer can change the order status to returned and when it is returned it he will lose the points he gain when he placed that order

7- Buyer also can review update, and delete his order.



#### 2.2.4 Buyer Use Case

# Use case: **Update Order Status (Delivered/Returned) Diagram:**



MA Buyer V 1.0 7 August 13, 2021



# **ASKM** Brief Description

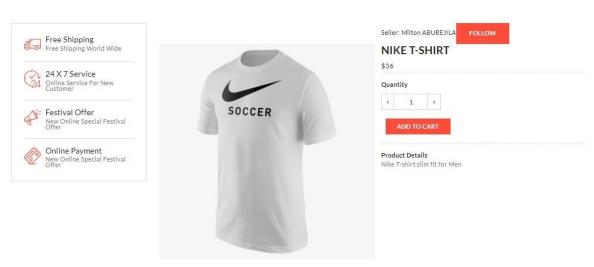
The Buyer login to accesses the MASKM-Store update the order status to Delivered when received or Returned in case he want to return an order .

#### **Initial Step-By-Step Description**

Before this use case can be initiated, the Buyer has already accessed the buyer section of the MASKM-Store.

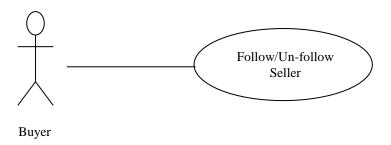
- 1- The Buyer can update the order status to delivered when he received the order
- 2- The buyer also can change the order status to returned and when it is returned he lose the points he gains from this order.

#### 2.2.5 Buyer Use Case



Use case: Follow/Un-follow Seller

#### Diagram:



#### **Brief Description**

The Buyer need to login and can follow and un-follow seller and the sellers will be added to the buyer's followed list.

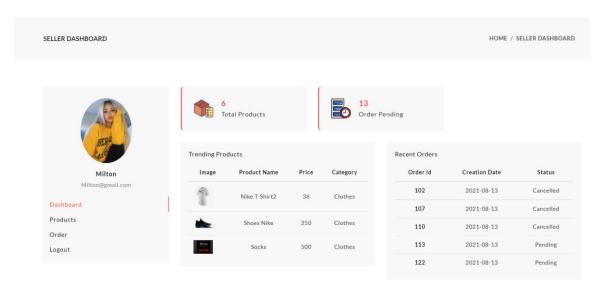
#### **Initial Step-By-Step Description**



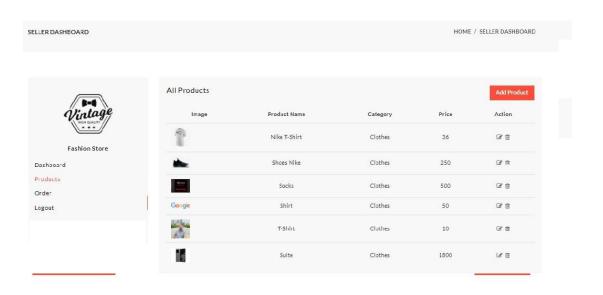
Before this use case can be initiated, the Buyer has already accessed the buyer section of the MASKM-Store.

- 1- The Buyer can follow a seller
- 2- The Buyer can un-follow a seller

#### 2.2.6.0 Seller Dash Board



# 2.2.6.0 Seller List All seller's product



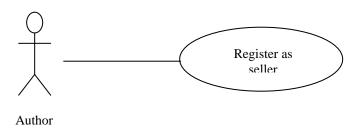
#### 2.2.6 Seller Use Case

In case of new seller he needs to register as a seller in the MASKM-Store.



Use case: Register a Seller

Diagram:



#### **Brief Description**

The Seller register as seller/supplier.

#### **Initial Step-By-Step Description**

Before accessing the functionality of the system seller has to register as a Seller in the MASKM-Store.

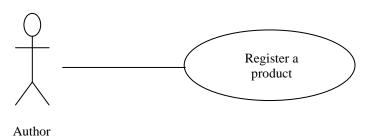
1. The Seller register as seller to be able to submit his products

#### 2.2.7 Seller Use Case

Before this use case can be initiated, the Seller has already connected to the MASKM-Store.

Use case: register a product for approval

#### Diagram:



#### **Brief Description**

The Seller registers a new product.

#### **Initial Step-By-Step Description**

Before this use case can be initiated, the Seller has already connected to the MASKM-Store.

1. The Seller register a new product and it will be pending Admin approval

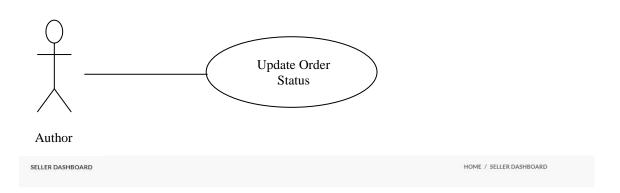


#### 2.2.8 Seller Use Case

Before this use case can be initiated, the Seller has already connected to the MASKM-Store.

Use case: Update order status Shipped / Cancelled

#### Diagram:





Order Id	Creation Date	Price	Payment	Status	Action
102	2021-08-13	536	No	Cancelled	
107	2021-08-13	394	No	Pending	⊗ 🗷
110	2021-08-13	536	No	Cancelled	
113	2021-08-13	86	No	Pending	<b>⊗ ≅</b>
122	2021-08-13	536	No	Pending	<b>⊗ ⊠</b>
125	2021-08-13	536	No	Pending	⊗ 🗷
128	2021-08-13	536	No	Cancelled	
141	2021-08-13	536	No	Pending	<b>⊘ </b>
100	2021-08-13	500	No	Shipped	

#### **Brief Description**

The Seller can update his the status of the orders belongs to him

# **Initial Step-By-Step Description**

Before this use case can be initiated, the Seller has already connected to the MASKM-Store.

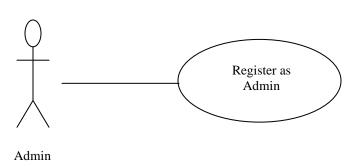
2. The Seller register a new product and it will be pending Admin approval

#### 2.2.9 Admin Use Case

Use case: Register as admin

Diagram:





#### **Brief Description**

The Admin register in the system as admin to be able to access the admin functionalities.

#### **Initial Step-By-Step Description**

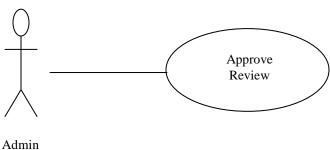
Before using the application as admin he need to register first and add admin role.

1. The Admin need to register as admin and get the admin roles.

# 2.2.10 Admin Use Case

Use case: Approve Review

## Diagram:



#### **Brief Description**

The admin needs to login as admin and then he can approve a review of a product.

#### **Initial Step-By-Step Description**

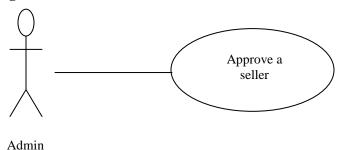
Before this use case can be initiated, the Admin has already connected to the Online Journal Website.

- 1. The Admin login to the system
- 2. The Admin will get all the un approved review
- 3. The Admin will approve/reject a product review



2.2.11 Admin Use Case Use case: Approve Seller

#### Diagram:



#### **Brief Description**

The admin needs to login as admin and then he can approve a seller.

#### **Initial Step-By-Step Description**

Before this use case can be initiated, the Admin has already connected to the Online Journal Website.

- 1. The Admin login to the system
- 2. The Admin will get all the un approved seller
- 3. The Admin will approve/reject a seller

#### 2.3 User Characteristics

The Buyer is expected to be able to browse all product's categories and drill down to see the products per category"

The Seller is expected to list his products add a new product and can list all the orders that is related to him and can cancel the order if it is not shipped or update the order status to be shipped

The Admin are expected to be able to approve reviews, approve sellers and add product category.



#### 2.4 Non-Functional Requirements

 The system should use Spring boot as backend and react for the frontend and the GUI

- The backend code should be structured. It will consist of model(domain)layer,
  service (business) layer and Persistence (repository Layer)
- All backend API will be displayed in swagger
- The frontend is going to be developed by React

# 3.0. Requirements Specification

#### 3.1 features

### **Admin**

- a. If the seller registers to the web site, he/she need to get approval from Admin in order to post products.
- b. The admin should approve the reviews that are made from the Buyers.

#### Seller

- a. Register as Seller
- b. Product (CRUD). If a product has already been purchased, it cannot be deleted.
- c. Seller cannot buy products from the website
- d. Maintain orders
  - a) Cancel Order, the status of order on buyer's part should also changed
  - b) Change Order status (Shipped-On the way-Delivered)

# **Buyer**

- a. Register as Buyer
- b. Follow and Unfollow Seller
- c. Cannot sell items on this website
- d. Can place an order
  - a) Maintain Shopping Cart (CRUD)



- b) Maintain Shipping and Billing Address
- c) Maintain Payment
- d) Place order
- e) Every successful purchase (not returned), gain points from the website. You can use points to buy products (something like coupons)
- e. Maintain Orders
  - a) Check Order History
  - b) Can cancel order before shipping, after shipping cannot
  - c) Download/Print receipt as PDF or Excel
  - d) Write Product Review. Review must be approved by Admin before live.

#### General

Login/Logout

Security with JWT (Users should not be able to access other pages links)

Process verifications etc. (user get email of purchase, gets a message)

Validation is required for all form submission. Otherwise, you'll not get full credit on different feature part.

# **Technical aspects**

Neat code and organization

Managed packages, folders, and files