Amazing E-Commerce Website Requirements Specification

# Introduction

## 1.1 Purpose of document

This document serves as the requirements specification of the project, and aims to lay out the functions, requirements and constraints for the development of the project.

## 1.2 Project scope

The goal of this project is to create an e-commerce web application called Amazing, with functions similar to those of the Amazon online store. Features include user authentication, product listings management system, browse and search feature for product listings, shopping cart function and checkout procedure.

# Project overview

## 2.1 Product functions

The main purpose of Amazing is to facilitate buying and selling of products between administrator and customer. It has a number of functions for store managers and users to achieve this goal.

Administrator are users that are authorized to sell products. They can:

* Manage product.
* Manage account.
* Manage placed order.

Customers are people who are looking to purchasing products. They can:

* Create an account.
* Log in, view and edit account details.
* Browse all product listings or search for specific product listings.
* Add items to cart.
* Remove items from cart.
* View and update items in cart.
* Checkout, select payment method and enter shipping information before placing order.

## 2.2 Assumptions and dependencies

* The web application should be functional and accessible from any device and OS with a browser and internet connection.
* The database should be maintained to store and access product and user information.

## 2.3 Interfaces

## 2.3.1 Software interfaces:

* Front end: React.js
* Back-end: Node.js, MongoDB

## 2.3.2 Hardware interfaces:

* Any device and OS with browser and internet connection.

## Requirements description

## 3.1 Users

## 3.1.1 Authentication system

User classes:

* Administrator (limited, need authorization).
* Customer (unlimited, open creation).

Create user account:

* Required fields: unique username, valid email address and password.
* Account information added to the database.

Login:

* Required fields: username, password.
* Login successfully if account information is found in the database.

Logout:

* Prompt to confirm logout.
* Log out of account and redirect to the home page.

View and edit account details:

* View profile after logging in.
* Edit account password.

## 3.1.2 Browse product listings

View product listings:

* Display all product listings on a single page.

Search product:

* Display all matching results on a single page.

View product details:

* Display all product attributes: name, price, description, rating, status.

## 3.1.3 Shopping cart

Adding products to cart:

* Select quantity and add products to cart if not out of stock.

View shopping cart:

* Display all items in cart with quantity.

Edit shopping cart:

* Edit items quantity.
* Remove items from cart.

Select checkout if cart is not empty.

## 3.1.4 Checkout

Enter shipping details:

* Required fields: full name, address, city, postal code and country.

Select payment method:

* Select check box for payment method.

Place order

* Show message.

## 3.2 Managers

3.2.1 CRUD functions

## Create product listings

* Required fields: product ID, name, price, description, status.

## View product listings

* Display all product listings.
* Display option to edit each product listing.

## Update product listings:

* Allow editing product information.
* Prompt to confirm update.
* Update product information in database.

## Remove product listings

* Confirm removal.
* Delete from database.