SHOPPING APPLICATION USING ANGULAR REQUIREMENT DOCUMENT

Introduction :

Purpose :

The Online shopping web application is intended to provide complete solution of virtual-shopping for users using internet. It will allow users to do online shopping where user need not to visit the store physically just by browsing in website and order their products from home.

This document describes the features of online shopping that are accessible to user such as adding product to cart, visiting cart to place order.

Project Scope :

The scope of this project is a web-based system that supports the marketing of various products directly to users. There will be no scope for some features like tracking, payment, bill generation as of now.

Functional-Requirements :

- Roles (Admin & User)- Access
- Admin
- Add Product
- Delete Product
- Update Product
- User
- View Products (Products- Price, Picture, Description)
- Select Product
- Adding to cart/ Buy Product
- Search Products (criteria)
- Search by Product Category (Category List)
- Find / match the category against the category list
- If found iterate through the element within the category and create a collection.
- if not found return - no product
- Search by Product Name (Product name list)
- Find / match the product against the product list
- If found iterate through the element within the product and create a collection.
- If not found return - no product
- Add Product to Cart
- Buy Product
- Payment Options (cash, Credit/Debit, any)
- Bill Generation

<u>**Non-Functional Requirements :**</u>

1) 24*7 availability
2) Serve side error handling
3) Database error handling

TECHNICAL REQUIREMENTS:

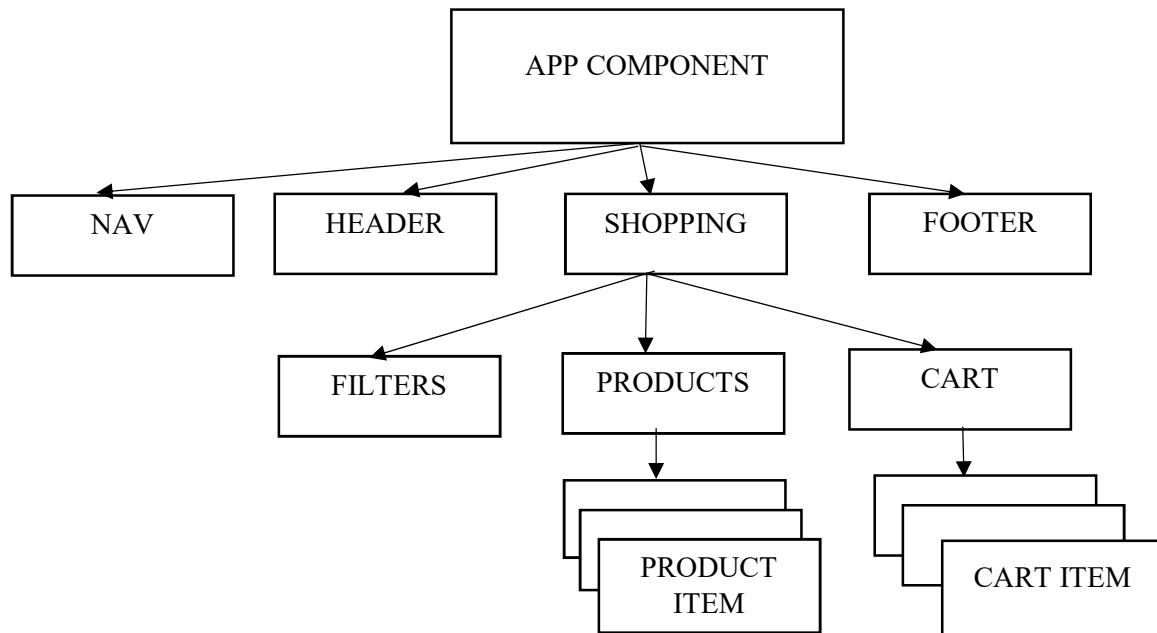| SOFTWARE USED	VISUAL STUDIO CODE
PROGRAMMING LANGUAGES REQUIRED	ANGULAR, BOOTSTRAP, HTML, CSS
SYSTEM RAM	4-16 GB
SYSTEM ROM	1TB (PREFERABLE)

<u>**Expected Folder Structure :**</u>

1) Components

   1.1) Shared

      1.1.1) Nav
      1.1.2) Header
      1.1.3) Footer

   1.2) Shopping

      1.2.1) Filters

      1.2.2) Product List

         1.2.2.1) Product Item

      1.2.3) Cart

         1.2.3.1) Cart Item

<u>**Folder Structure Explaination:**</u>

When angular project is created by using ng new project name by default 3 folders will be created. In that app component is heart of the project execution. It will be difficult to manage entire project with one component so in order to overcome that we need to create our user defined components based on our requirement. In our project there two sub folders required in app folder named shared and shopping. In shared there will be three components named nav, header and footer and in shopping folder there will be three major and two minor or sub components named filters, product list and cart as major and product item and cart item as minor components respectively.

FLOW CHART OF FOLDER STRUCTURE:

```
                        ┌──────────────────┐
                        │  APP COMPONENT   │
                        └──────────────────┘
         ┌────────────┬──────────┴──────────┬────────────┐
   ┌─────────┐  ┌──────────┐         ┌──────────┐  ┌──────────┐
   │   NAV   │  │  HEADER  │         │ SHOPPING │  │  FOOTER  │
   └─────────┘  └──────────┘         └──────────┘  └──────────┘
                      ┌──────────────┼──────────────┐
                ┌──────────┐  ┌──────────┐   ┌──────────┐
                │ FILTERS  │  │ PRODUCTS │   │   CART   │
                └──────────┘  └──────────┘   └──────────┘
                                    │              │
                              ┌──────────┐   ┌──────────┐
                              │ PRODUCT  │   │CART ITEM │
                              │  ITEM    │   │          │
                              └──────────┘   └──────────┘
```

FLOW CHART OF WEB PAGE:

Navigation bar

Header

Filters	Product Item	Product Item	Product Item	Cart
	Product Item			Cart Item / Cart Item / Cart Item

Footer