**Ecart - online retail store**

**Purpose of the project**

This project deals with developing an e-commerce website for online shopping. It provides the user with a catalog of different product available for purchase in the store. In order to facilitate online purchase a shopping cart is provided to the user. The system is implemented using a 3-tier approach, with a MongoDb database , NodeJS server and Angular as the front end. Consumer is provided with a view products ,add items to cart and can buy from the store with a payment method provided.

**Objectives**

• The searching product can be done by product category, manufacturer as well as latest product, view it purchase it become a convenient way for customer.

• Customer can add product to cart to purchase, delete the product from cart before selecting the final submission.

• A user can view the complete specification of the product with various images.

• User can update password from his account.

• User can change shipping information.

• User can add his credit/debit card information on the checkout page.

• User can change shipping information.

**Technical specifications:**

There are three main parts of this application which are handled by different technologies:

**1.Angular – FrontEnd development:**

Angular is a front end frame work which helps to build complex and dynamic front end applications. The architecture of angular is divided into modules which in turn divide into components and these components consists of a html file, css file and typescript file. Typescript is the superset of javascript language which adds up optional static typing functionality to it.

**2.Nodejs – Server side or middleware:**

Nodejs is a javascript framework for the server side interaction with the database. Its key features are non - blocking and async operations on the server for the faster retrival rate.

**3.MongoDB – NoSQL Database:**

It is the backend database used for storing and retriving the data which uses a document based approach for storing the data, each tuple in sql can be considered as a document in mongodb. It is has only four operations to perform with out having complex queries as in case of RDMS systems.

**Modules:**

**1 .Administrator**

The administrator is the super user of this application. Only admin have access into this admin page. Admin may be the owner of the shop. The administrator has all the information about all the users and about all products.

This module is divided into different sub-modules

a. Manage Products

b. Manage Users

**MANAGE PRODUCTS**

Add Products: The shopping cart project contains different kind of products. The products can be classified into different categories by name. Admin can add new products into the existing system with all its details including an image.

Delete Products: Administrator can delete the products.

Search products: Admin will have a list view of all the existing products. He can also search for a product by name.







**MANAGE USER**

View Users :The admin will have a list view of all the users registered in the system. Admin can view all the details of each user in the list except password.

Add Users: Admin has privileges to add a user directly by providing the details.

Delete Users : Administrator has a right to delete user.







**2. USERS**

Registration: A new user will have to register in the system by providing essential details in order to view the products in the system.

Login: A user must login with his user name and password to the system after registration. If they are invalid, the user not allowed to enter the system.

View Products :User can view the list of products based on their names after successful login. A detailed description of a particular product with product name, products details, product image, price can be viewed by users.

Search Product :Users can search for a particular product in the list by name.

Add to cart: The user can add the desired product into his cart by clicking add to cart option on the product. He can view his cart by clicking on the cart button. All products added by cart can be viewed in the cart. User can remove an item from the cart by clicking remove.

Submit Cart: After confirming the items in the cart the user can submit the cart by providing a delivery address. On successful submitting the cart will become empty.

Edit Profile: The user can view and edit the profile.













MANAGE ORDERS

View Order : Administrator can view the Orders which is generated by the users. He can verify the details of the purchase.

Delete order: Admin can delete order from the orders list when the product is taken for delivery.

