**SOFTWARE ENGINEERING-U18ITI5304T**

**Recommendation-based online shopping system for electronics**

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**Abstract**

The growing popularity of online shopping has resulted in an overwhelming number of products and options available to consumers. For electronic products, such as smartphones, laptops, cameras, and other gadgets, it can be challenging for users to make informed decisions due to the sheer volume of choices. To address this issue and enhance the shopping experience, a Recommendation-Based Online Shopping System for Electronics is proposed.

The main objective of this system is to provide personalized and relevant product recommendations to users based on their preferences, past purchases, browsing behavior, and other relevant data. The system utilizes advanced machine learning algorithms and data analytics techniques to process vast amounts of user data and product information, ultimately offering tailored product suggestions to each individual user.

1. User Registration and Authentication

2. Product Catalogue and Search

3. Shopping Cart and Checkout.

4. Product Reviews and Ratings

5. Personalized Recommendations

6. Vendor Management

7. Social Media Integration

8. Order Tracking and Notifications

9. SEO-Friendly Architecture

10. Responsiveness

Modules:

1. User Registration and Authentication:

Allows users to create accounts and authenticate their identity for personalized experiences. It will include users and vendors and Admin authentication will be handled.

1. User Side:
   1. Home page:

In which users can search for a product, they can see their last viewed product.

It will display all product categories.

It will contain a menu to move around the application.

* 1. Account:

On this page, use can view and edit their account information.

There will be a wallet so that they can get cash back and use it to buy other products.

They can manage their cart and view their order they can track it.

* 1. Product view:

On this page, users can view product details and review.

They can compare two or more products.

They can add items to their cart.

Search and Filtering enables users to search for products and apply filters based on various criteria.

* 1. Cart:

On this page, user can view their cart and check out their product.

* 1. Notification:

All the notifications from the Recommendation Engine will be displayed

1. Vendor side:
   1. Add/update product:

Vendors can add their products with all details they want to display to users.

They can update stock items.

* 1. Delivery management:

The vendors can view their orders and can manage their delivery of goods.

They can update the status of the product in delivery time.

* 1. Profile:

On this page, vendors can edit their profiles and manage their accounts.

1. Recommendation Engine:

Utilizes machine learning algorithms to generate personalized product recommendations for each user.

This system will generate mail to user with Recommendation which is used to buy need.