

Task 5 : Web-based Application

Functional requirements:

Our web-based application can do all of the minimum requirements listed in the assignment spec. We implemented:

- A login & signup page that depending on the type of user will take you to different landing pages. Types of users:
 - Customer: if a previous customer you will go to your watchlist view page, this is where you have previously added products to your watchlist so that you may find it easily. It will also recommend our top rated products. If you are not a previous customer it will take you to a page where you can start searching for products to compare.
 - Retailer: you will go to a landing page where you can see all your products, search your products, add to your products and choose products to edit and delete products from the database.
 - Administrator: you will go to the administrator landing page where they have all the same functionality as retailers, but the administrator can also add/remove customers and retailers from the database.
- Watchlist view page:
 - This allowed customers to see the items they had added to their watchlist, they could also go look into the specific products on the product view page.
 - They could delete items in their watchlist here
- Product view page:
 - This allowed users to look at all the details of a product as well as see comparisons of the same product from other retailers, you can also go to those products.
 - You can add products to your wishlist.
- Product lookup page::
 - Can use filters and sort to search for products. Which will show you all products within the search parameters from our database.

Media management features:

The products display media such as their images and review counts, the images are displayed using their URLs.

User account and Profile management:

When a user signs up they are added to the database and the necessary details are stored. Upon logging in a user receives a session id and a session user_type, this user type controls the privileges that a user has and therefore the actions they can perform.

Sorting and filtering options:

A user can filter by category, and within a price range, and then sort according to price, ratings and number of reviews, in either ascending or descending order.

SQL injection prevention:

To prevent SQL injections we consistently used prepared statements with parameter binding. This ensures that user input is treated as data as opposed to an SQL command, thus separating SQL logic from user-supplied data values