Implementation Report for Application Functionalities

Introduction

This document outlines the development and implementation of various functionalities within the project. The tasks were divided between the two team members, Dilmac Cemil-Andrei and Opran Andrei, as detailed below.

Functionalities Implemented

1. **User Types (0.5 points)**

   - Four user types were defined: unregistered, registered, collaborator, and administrator.
   - **Complete Implementation:** Dilmac Cemil-Andrei.

2. **Functionalities for Collaborators and Administrators (1.0 point)**

   - Collaborators can add products to the store by submitting requests to the administrator. The administrator can approve or reject these requests. Approved products become visible in the store.
   - **Complete Implementation:** Opran Andrei.

3. **Product Categories (1.0 point)**

   - Products are organized into categories that can be dynamically created, edited, and deleted by the administrator directly from the application interface.
   - **Complete Implementation:** Opran Andrei.

4. **Product Structure (1.0 point)**

   - Each product includes: title, description, image, price, stock, rating (1-5 stars), and reviews (text comments).
   - Users can give ratings (optional) and leave text reviews (optional). The product's final score is calculated based on all existing ratings.
   - **Complete Implementation:** Opran Andrei.

5. **Editing and Deleting Products by Collaborators (1.0 point)**

- Collaborators can edit and delete the products they added. Edited products require re-approval from the administrator.
- **Complete Implementation:** Opran Andrei.

6. **Unregistered User Workflow (0.5 points)**

   - Unregistered users can view products and their associated comments.
   - If an unregistered user tries to add a product to the cart, they are redirected to the registration process.
   - **Implementation:** Viewing products and comments by Opran Andrei; redirection by Dilmac Cemil-Andrei.

7. **Registered User: Orders and Reviews (1.5 points)**

   - Registered users can place orders (add products to the cart), leave reviews and ratings, and edit or delete them later.
   - When an order is placed (simulated), the product stock is reduced according to the quantity purchased.
   - **Implementation:**
     - Order management, cart updates, and deletion: Dilmac Cemil-Andrei.
     - Editing and deleting reviews: Opran Andrei.

8. **Search Engine (1.0 point)**

   - Products can be searched by name, including partial name fragments.
   - **Complete Implementation:** Opran Andrei.

9. **Additional Functionalities for Administrators (1.0 point)**

   - Administrators can edit and delete products and comments.
   - They can also activate or revoke user rights.
   - **Implementation:** Product and comment management by Opran Andrei; user rights management by Dilmac Cemil-Andrei.

Contributions by Each Member

- **Dilmac Cemil-Andrei**

  – Implemented the system for four user types (unregistered, registered, collaborator, administrator).

  – Focused primarily on backend functionalities such as orders, carts, users, and cart products.

  – Managed the redirection of unregistered users to registration and the deletion of orders.

- **Opran Andrei**

  – Developed product-related functionalities, including categories, reviews, and comments.

  – Implemented the approval workflow for editing and publishing products by collaborators.

  – Created the search engine for product searches by name.

  – Developed functionalities for administrators to edit and delete products and comments, as well as activate or revoke user rights.

Conclusion

Throughout the project, both team members divided responsibilities equally, consulting each other frequently and jointly determining design elements. Dilmac Cemil-Andrei focused more on backend tasks (orders, carts, users) and managing user rights, while Opran Andrei handled product management, categories, reviews, and administrative functions. Together, they ensured effective collaboration and integration of all functionalities, meeting the project requirements comprehensively.