**System Requirements Document (SRD) Switch Me - A platform for exchanging objects**

Course: Computer Science Projects  
 Lecturer: Dr. Sharon Yalov Handzel   
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1. **Stakeholders**
   1. **End Users**  
      The end users are the primary customers of the platform and require an efficient solution for exchanging products they no longer need. They seek a user-friendly interface, a convenient user experience, and fair value assessment.
   2. **Community Interested in Sustainability and Reuse**  
      The platform promotes principles of sustainability and waste reduction, providing added value for organizations, groups, and individuals aiming to minimize the environmental impact of consumption.
   3. **Existing Competitors**  
      Competitors may take an interest in the platform's new developments to adapt their products and maintain their market position.



* 1. **The Developers and Entrepreneurs of the Project**  
     Developers and entrepreneurs are key stakeholders as they design, build, and launch the platform. This project allows them to pioneer innovative solutions, address market gaps, and establish themselves as leaders in a growing niche, contributing to both personal growth and industry advancement.

1. **Functional Requirements**
   1. **User Registration and Login:**
   * Ability to register via email or ID.
   * Creation of a personal profile with user information (name, phone number, location, gender, date of birth).
   * Login system with password authentication.
   1. **Product Upload:**
   * Ability to upload items including pictures, descriptions, condition of the item, and category.
   * Adding product details such as location, descriptions, and quality measures etc.
   * Option to set priority preferred categories.
   * Automatic Product Valuation via AI Algorithm:

* The system collects relevant details entered by the user about the product.
* These details are inserted into a predefined text template.
* The template is sent through an API to an AI-based valuation mechanism.
* The AI mechanism processes the input and returns a response in a fixed format, containing an estimated price range for the product.
* The system presents the estimated price range to the user, along with a recommendation to set the suggested price for better matching success.
  1. **Search and Match:**
  + Advanced search system with filters (category, condition, price range, location).
  + The system will display product swap suggestions based on intelligent matching algorithms that take into account the user's search history, preferred categories, age, gender, and other relevant factors.
  1. **Rating and Reviews:**
  + Ability for users to rate products and completed swaps .
  + Display of user and product reviews.
  1. **Swap Process:**
  + Transaction management system to review transaction details.
  + Option to accept or reject swap offers.
  + Ability for users to communicate for arranging swap details.
  1. **Admin Interface:**
  + **Inappropriate Product Removal:** Ability to remove products that violate platform guidelines or are deemed inappropriate.
  + **User Blocking:** Option to block users who violate the platform’s terms of service, engage in fraudulent activities, or misuse the platform in any other way.
  + **Usage Data Monitoring:** Access to platform usage data, including statistics on swaps, product uploads, and active users.

1. **Non-Functional Requirements**