

The Cloth Recycling System

Abstract:

The Cloth Recycling System is a comprehensive platform developed using Django for backend functionalities and HTML, CSS, and JavaScript for the frontend. The system comprises three main modules: Admin, Merchant/Cloth Collector, and User. This innovative system aims to streamline the process of cloth recycling, fostering a sustainable environment. Users can submit a list of their clothing items, and Cloth Collectors or Merchants can review and approve the submissions, awarding points based on the quality and quantity of the donated items. These points act as a virtual currency that users can use to purchase recycled products listed by Merchants on the platform. The integration of Razorpay enables users to make purchases with real currency for items they desire. The Admin module oversees the entire system, maintaining control and ensuring smooth operations.

Introduction:

The Cloth Recycling System is designed to revolutionize the way clothing is recycled, promoting a circular economy and environmental sustainability. With a user-friendly interface and efficient backend processes, the system facilitates the entire lifecycle of cloth recycling – from user donations to the creation and sale of recycled products.

Module Descriptions:

- User Module:
 - Users can submit a list of clothing items for recycling.
 - Points are awarded based on the quality and quantity of the donated items.
 - Users can use these points to purchase recycled products from Merchants on the platform.

- Integration with Razorpay allows users to make purchases with real currency.
- Merchant/Cloth Collector Module:
 - Merchants and Cloth Collectors can review and approve user submissions.
 - Points are awarded to users upon approval.
 - Merchants can create new products using recycled materials.
 - Recycled products can be listed on the platform for users to purchase.
- Admin Module:
 - Admin has comprehensive control and oversight of the entire system.
 - Manages user accounts, points system, and product listings.
 - Ensures the smooth functioning of the platform and resolves any issues.

System Requirements:

- Backend: Django framework
- Frontend: HTML, CSS, JavaScript
- Database: PostgreSQL or MySQL
- Payment Integration: Razorpay
- Version Control: Git

Existing System:

Traditional cloth recycling methods lack a centralized platform for users, collectors, and merchants to collaborate efficiently. Donors often face difficulties in tracking the impact of their contributions. Moreover, the absence of a point-based reward system and direct user involvement in the recycling process hinders engagement.

Proposed System:

The proposed Cloth Recycling System resolves these issues by creating a user-friendly platform where donors can actively participate in the recycling process. The point system incentivizes users, and the integration of Razorpay provides a seamless purchase experience. Merchants and Cloth Collectors benefit from a streamlined approval process and a platform to showcase and sell their recycled products. Admin oversight ensures the system's integrity and sustainability. This innovative approach not only encourages recycling but also creates a community-driven ecosystem for a more sustainable future.