

Share Care – A Smart Donation App

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To Cite this Article: Dr. Santhosh T¹, Yashvardhan R. S², Chandana N. B³, Theertharaj B.S⁴, Vikas T.C.M⁵, “Share Care – A Smart Donation App”, Indian Journal of Computer Science and Technology, Volume 05, Issue 03 (September-December 2026), PP: 526-532.



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Abstract: Donation activities are often distributed across informal networks and separate organizational channels, making it difficult for donors to identify relevant needs, for recipients to locate available resources, and for organizations to maintain consistent records. This paper presents Share Care, a web-based donation management platform designed to centralize donation listings and requests through a common interface. The prototype uses Python with the Flask web framework, HTML5, CSS3 and Bootstrap 5 for the user interface, and SQLite for relational data storage. Its principal modules include user registration and login, donation listing and browsing, request submission, administrator oversight, organization verification workflows, donation-status updates, and resource matching based on listing information such as category and location. The application is intended to support in-kind donations including food, clothing, household items and requests that require coordination with authorized organizations. The presentation's documented test cases cover account registration, valid and invalid login, NGO registration, donation creation, searching and filtering, matching, status updates, receipt generation, and access-control checks; all ten reported test cases are marked as passed. These results demonstrate functional completion of the tested prototype workflows, but do not establish production-scale performance, security certification, or clinical suitability for medical donations. Share Care provides a foundation for more organized community resource exchange, while future work should strengthen verification, privacy protection, scalability, accessibility, and integration with authorized healthcare systems.

Key Word: Donation management, web application, Flask, SQLite, NGO verification, resource matching, community support.

I. INTRODUCTION

People may be willing to donate useful goods or support a community need but lack a simple way to find a trustworthy recipient. Local donation drives and informal communication can make it difficult to keep listings current, coordinate requests, and follow the status of a contribution. This creates avoidable work for donors and organizations and may leave available resources disconnected from current needs. Share Care is a web-based project that places donor listings and recipient requests in one application. The presentation identifies food, clothing, household essentials, and medical support among its categories. It proposes user registration, verified NGO and hospital participation, searchable listings, matching based on category and need, notifications, and donation-status tracking. These functions are intended to make coordination more visible and manageable. This paper describes the project's problem, design, implementation approach, and reported functional tests. It treats the system as a prototype: the presentation provides ten passing test cases but no controlled user study, operational deployment data, or measured reduction in waste. The paper also distinguishes routine goods redistribution from medical and organ donation, which must follow authorized health-service and legal processes.

II. SCOPE OF THE PROJECT

Share Care is a web application designed to organize donation activities. It connects contributors with individuals and organizations seeking support. Users can register and sign in to access platform features. Access can be arranged according to a user's role. Donors can publish offers describing available resources. Listings can include category, quantity, and location details. Recipients can submit requests that explain their needs. NGOs and hospitals can register to participate. Administrators can review organization information. Users can browse and search donation listings. The system can identify possible matches between offers and requests. Matches rely on the information users provide. Donation records can be updated as their status changes. Notifications can share relevant updates with participants. Flask handles the application's server-side functions.

III. EXISTING SYSTEM AND PROPOSED SYSTEM

Existing System: Existing donation processes often rely on local events, personal contacts, and separate communication channels. Donors may find it difficult to identify trustworthy recipients or verified organizations. Information about available items and current needs can be scattered across different sources. Listings may not be updated when resources are

no longer available. Recipients may have limited ways to communicate their requirements directly to donors. Tracking a contribution from listing to distribution can also be challenging. Managing several donation categories through separate methods adds coordination effort. Manual records can make it harder to review requests and maintain accurate information. These gaps may delay the distribution of useful resources. A centralized platform can help organize listings, requests, and status updates in one place.

Proposed System: The proposed Share Care system provides a web platform for coordinating donations and requests. Users can register and sign in according to their role. Donors can post resources with details such as category, quantity, and location. Recipients and organizations can submit requests for needed support. Users can search available listings and find resources that may fit a request. Administrators can review NGO and hospital registration information. The platform records donation progress through status updates. Notifications can inform participants when relevant information changes. Flask, Bootstrap, and SQLite support the application and its data management. Medical donations must be handled through authorized clinical and legal processes.

IV. SYSTEM DESIGN

System design: Share Care uses a web interface, Flask application services, and an SQLite database to manage accounts, donation listings, requests, possible matches, and status updates.

System Architecture: Share Care - Smart Donation App

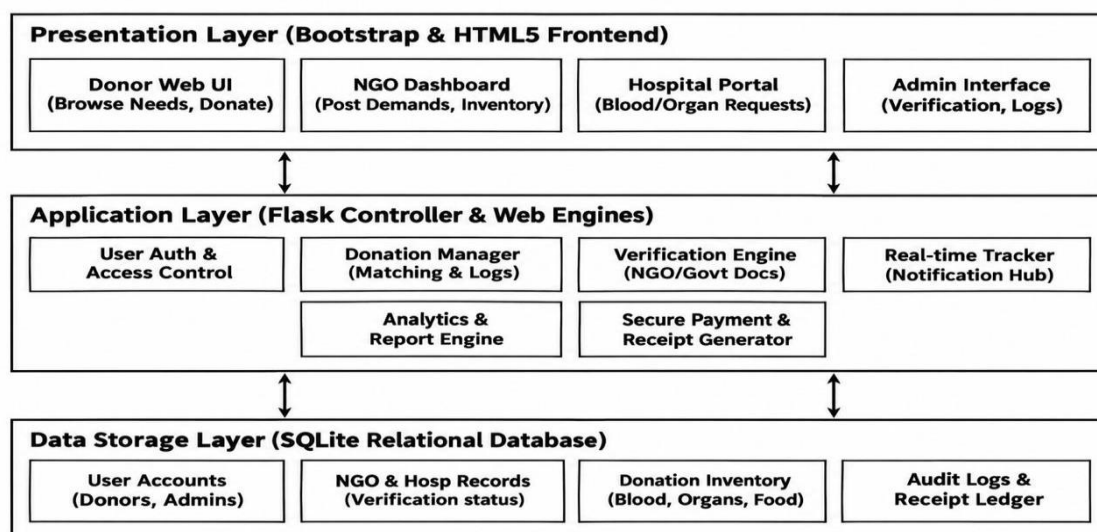


Figure no 1: System Design

1. Presentation layer: The browser interface gives users access to Share Care's features. It uses HTML, CSS, and Bootstrap to display account, donation, request, and update pages.
2. Donor module: A donor can publish an offer by entering details such as the item type, amount, description, and location. The donor can later check the listing's current status.
3. Recipient module: People or organizations can submit a request describing the support they need. Providing clear details helps others understand the request.
4. NGO and hospital module: NGOs and hospitals can register to participate. An administrator can review their submitted information as part of the registration process.
5. Administrator module: Administrators oversee user and organization records and review donation activity. Their role helps maintain accurate information on the platform.
6. Application layer: Flask, running with Python, processes actions from the website. It connects the interface with Share Care's functions and stored records.
7. Authentication module: Users create accounts and sign in with their credentials. Access can be organized by role so users see the functions relevant to them.
8. Donation management module: This module records donation offers and allows listing details or status to be updated as the process moves forward.
9. Matching and notification modules: The system can compare requests and listings using details such as category, quantity, location, and stated need. Notifications can share relevant matches or status changes with participants.
10. Data layer: SQLite holds the application's account, organization, donation, and request records. Blood, organ, and tissue donations require authorized medical oversight and applicable legal procedures; the app should not make clinical decisions or allocate organs.

V. RESULT

The Share Care prototype brings donation activities together in a single web application. Users can register and sign in to access the platform. Donors can add listings with details about the resources they offer. Recipients and organizations can submit requests for needed support. Users can browse listings and search for relevant donation categories. The system can compare requests with available listings to identify possible matches. Administrators can review NGO and hospital registration information. Donation status changes are recorded and reflected in the application. The platform includes notifications for relevant updates. A receipt generation function is included in the project's described workflow. The presentation reports that account registration worked in its test case. Login, invalid-login handling, and organization verification were also marked as passing. Search, matching, status updates, receipt generation, and access checks were reported as passing. All ten test cases shown in the presentation are marked "Pass." These results demonstrate tested functions, but do not measure real-world impact, performance, or scalability.

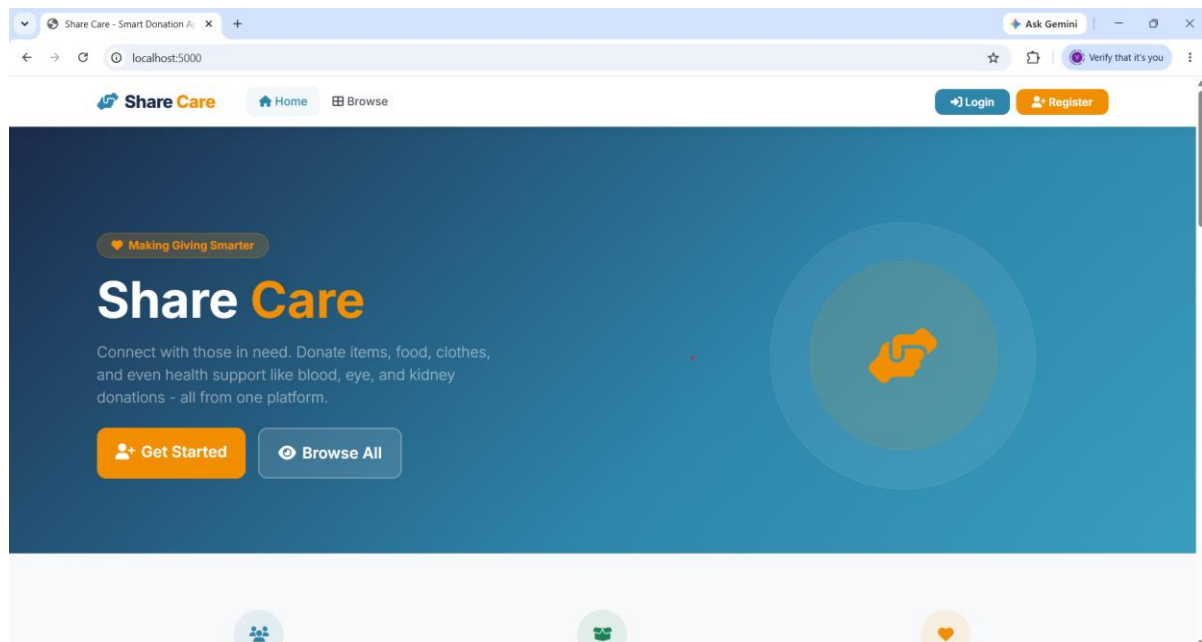


Figure 1: Home Page of Share Care

The Share Care homepage lets users browse donation listings or create an account to offer support. It brings items such as food and clothing, along with health-related donation information, into one online platform.

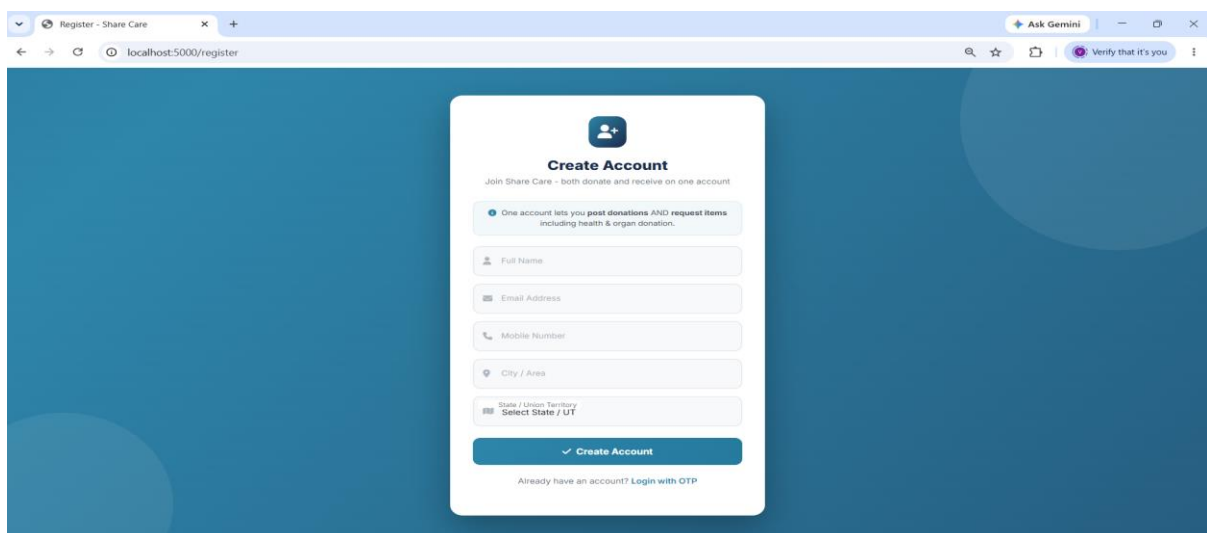


Figure 2: Registration page of Share Care

The Registration Page allows new users to create an account on the Share Care platform. Users enter details such as name, email, mobile number, city, and state to register. After creating an account, users can donate items or request essential resources through the platform.

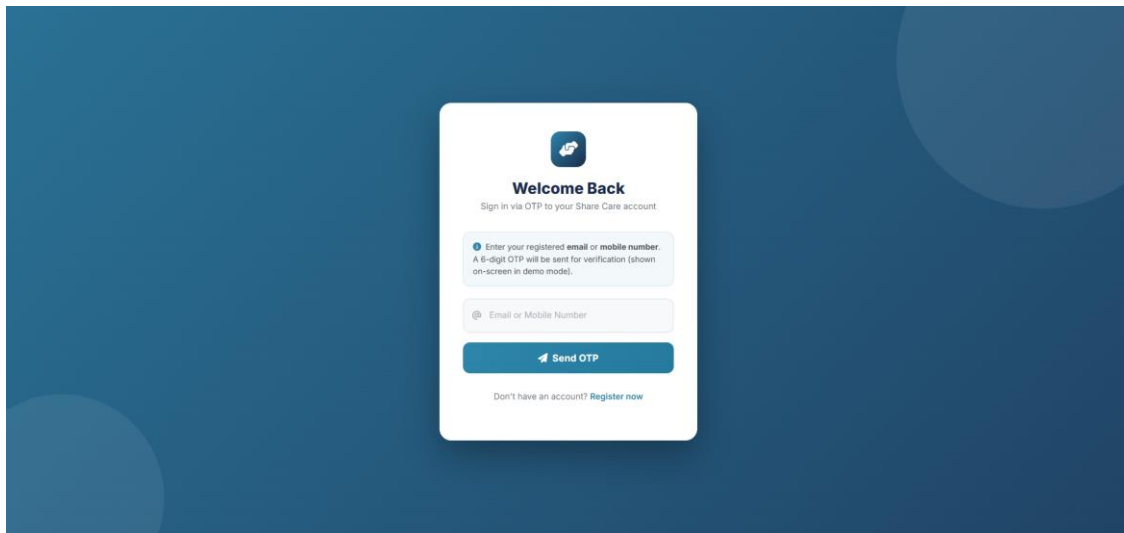


Figure 3: Login page of Share Care

The Login Page allows registered users to securely access their Share Care account. Users can enter their registered email or mobile number to receive a One-Time Password (OTP). After OTP verification, users can access the platform and use its donation.

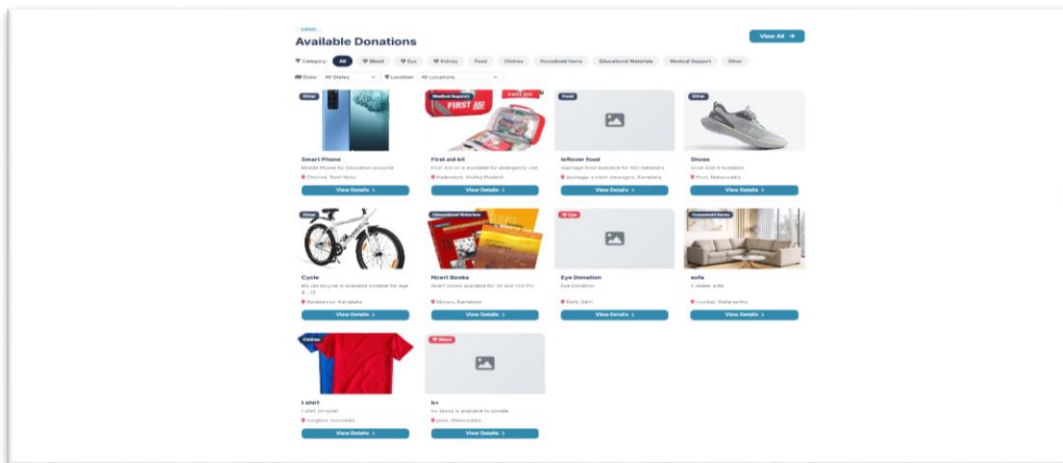


Figure 4: Available donations of Share Care

The Available Donations Page displays various items that users can donate or request through Share Care. Users can browse and filter donations by categories such as food, clothes, books, medical support, household items. Each donation provides basic details and a “View Details” option to help users select the required resource.

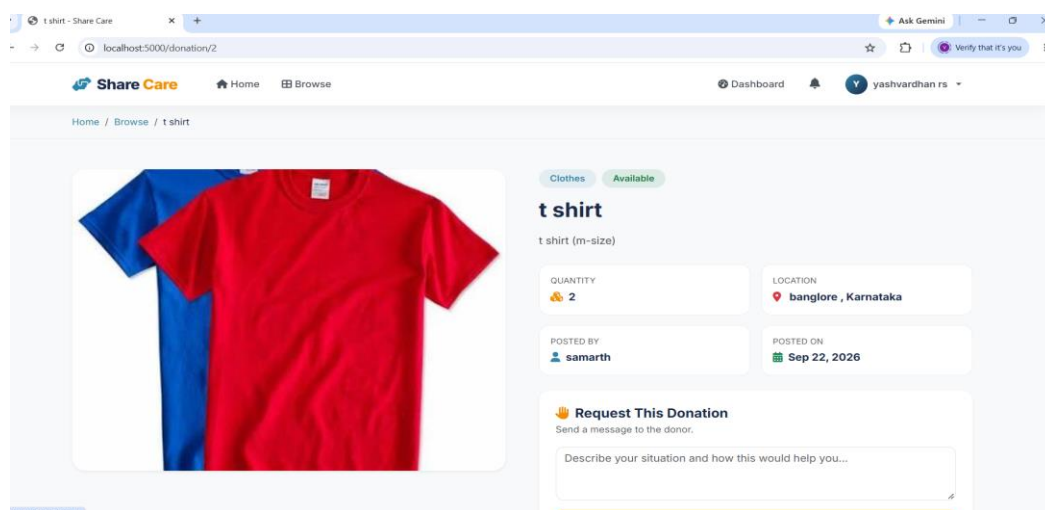


Figure 5: Details of the Donation (T Shirts)

This Donation Details Page displays complete information about a donated T Shirts, including its description, quantity, location, and donor details. Users can view when the item was posted and check its availability. To request the donation, users must Log in or register on the Share Care platform.

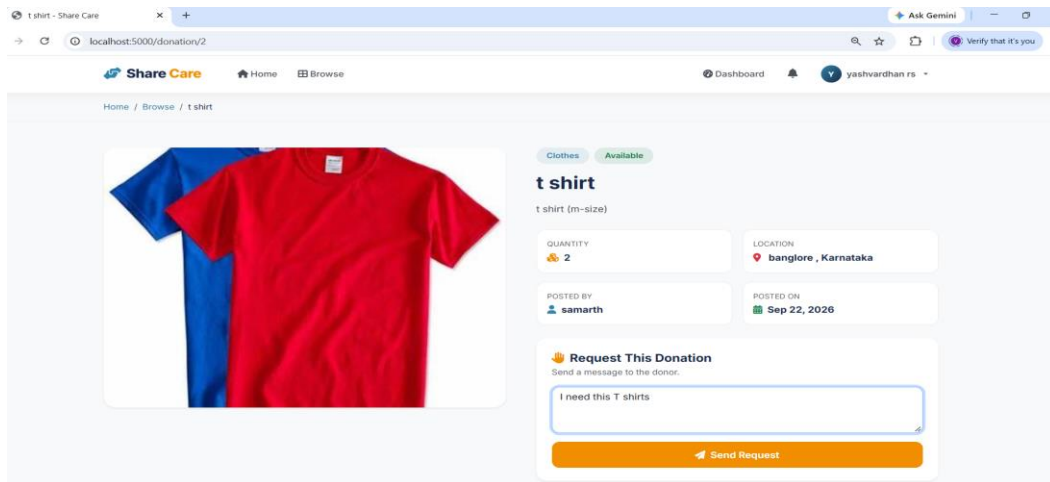


Figure 6: Requesting for donation

The Share Care platform allows users to donate and request useful items. This page shows a donated T-shirt in M-size, with a quantity of two, available in Bangalore, Karnataka. The item was posted by Samarth on September 22, 2026. Users can enter a message explaining their need and click “Send Request” to request the donation from the donor.

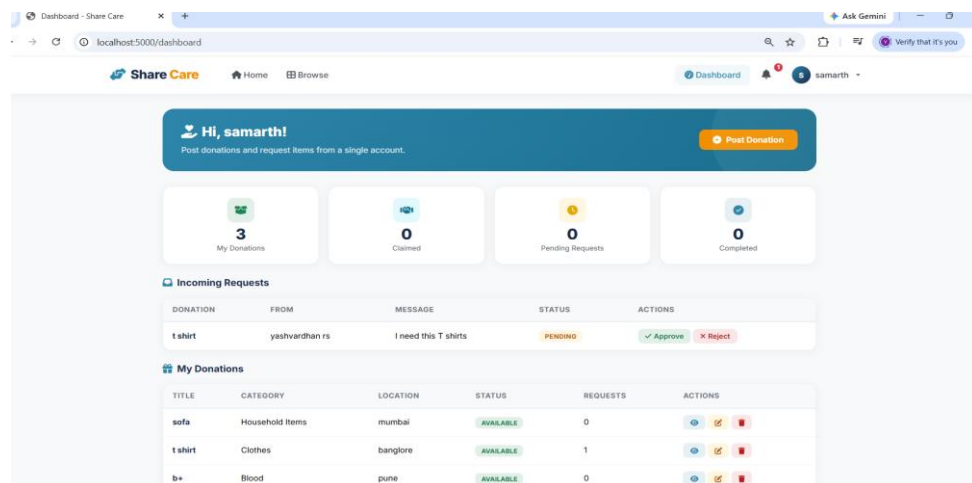


Figure 7: User Dashboard of the Share Care Donation Platform

The User Dashboard provides a centralized interface for donors to manage their donation activities and incoming requests. It displays the number of donations, claimed items, pending requests, and completed donations.

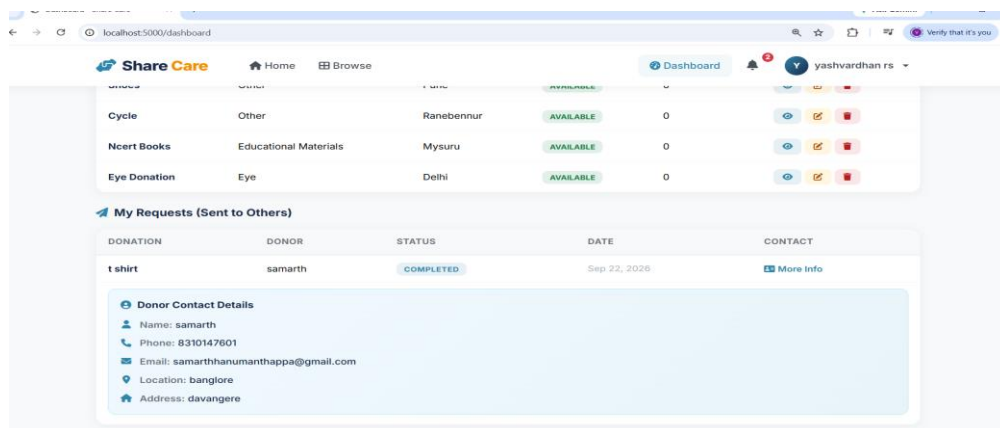


Figure 8: My Requests and Donor Contact Details

This figure shows the My Requests section of the Share Care dashboard.. More Info option provides the donor's contact details, including name, phone number, email, location, and address. This helps the requester communicate directly with the donor and coordinate the collection of the donated item.

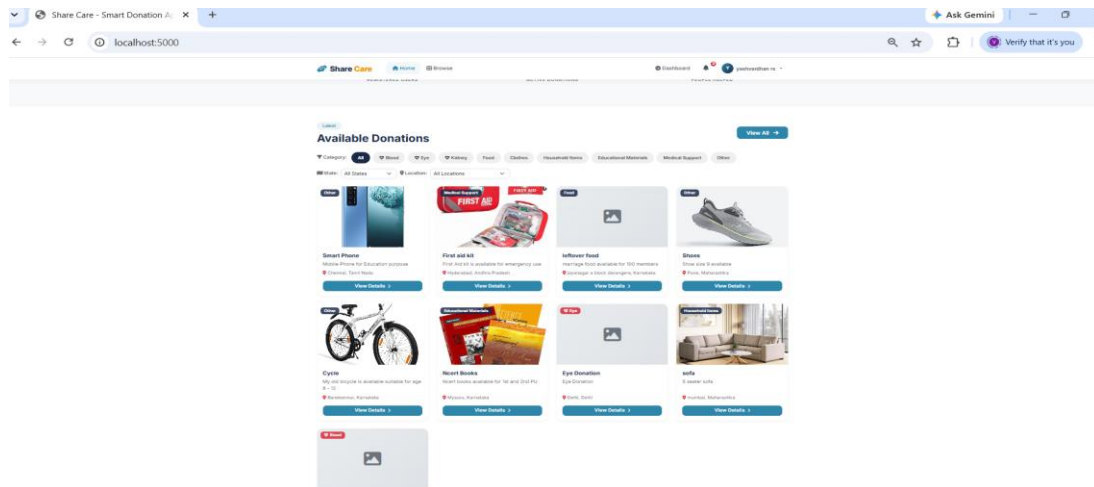


Figure 9: Available Donations and T Shirt is removed

Figure shows donations and T shirt is removed once its donation completed. Filter donations by category, such as Blood, Eye, Food, Clothes, Household Items, Educational Materials, and Medical Support. View individual donation details using the “View Details” option.

VI. DISCUSSION

Share Care brings donation offers and requests into one web application, giving participants a shared place to coordinate community support. The homepage introduces the service and provides clear options to browse available donations or register for an account. Donors can publish information about resources they are willing to provide, including details such as category, amount, and location.

Recipients and organizations can submit requests that describe the resources they need. Having offers and requests in one system may make relevant information easier to find than scattered messages or records. Search functions help users browse listings by category and identify resources that may fit a request. Matching depends on the accuracy and completeness of the information entered by users.

A suggested match still needs confirmation from the people or organizations involved. The system includes account registration and login to support access to platform features. Role-based functions can help separate what donors, recipients, organizations, and administrators are able to do. Administrators can review NGO and hospital details before these organizations participate in relevant activities.

Status updates give participants a way to follow a listing as it moves through the donation process. The presentation reports ten functional test cases as passing, covering registration, login, listings, search, matching, and related tasks. These reported checks show that the specified workflows were exercised in the project environment.

The project also identifies limitations such as dependence on internet access, manual organization verification, and the need for further scalability work. A larger deployment would require stronger privacy and security review, ongoing data maintenance, and evaluation with actual donors and recipient organizations. Medical donations, including blood, organs, and tissues, require authorized clinical oversight and legal safeguards; the application should not make medical decisions or allocate organs.

VII. CONCLUSION

Share Care presents a centralized web application for coordinating donations and requests. It connects donors with individuals and organizations seeking support. Users can create listings, submit requests, and browse available resources. The system includes account access and administrative review of participating organizations. Search and matching features help identify potentially suitable donations. Status updates allow users to follow the progress of contributions. Flask, Bootstrap, and SQLite provide the core application technologies. The project's presentation reports successful results for ten functional test cases. Further evaluation is needed to assess real world use, security, and scalability. Medical donations must follow the applicable clinical, safety, and legal requirements.

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