



SOFTWARE REQUIREMENT SPECIFICATION



Group 01

Group Project-CCS/CSE 2002

24/07/2025

Computer Science / Software Engineering

Faculty of Computing

University of Sri Jayewardenepura

01.Project Title

A Web Platform Connecting Donors with People in Need

02.Intoduction

2.1 Background and Usage

Across Sri Lanka, an overarching focus on social upliftment is challenged by systemic issues of poverty, access to healthcare, education, and economic instability.

Although charitable types of giving are identified, they do not tend to provide donors with the kind of transparency, trust or connection needed to understand how to truly implement positive change. Consequently, there is a disconnect between desire to support and knowledge to truly collaborate.

Project Hope will close that gap- a digital platform that connects donors with individuals and families facing hardship. Rather than burdened by intermediaries and bureaucracy in existing charity systems, Project Hope better empowers users to give in a meaningful and direct manner.

2.2 Project-Client Background

Project Hope is being built from scratch as an academic software engineering project by a team of undergraduate students at the University of Sri Jayewardenepura. This platform is designed for many stakeholders including personal donors, NGOs, social responsibility corporations, and, primarily, users in need of support.

The target benefiting audiences are individuals and families living in extreme poverty and validated through responsible documentation. We aspire to be more than a platform, more than tomorrow's charity. We hope to create a purpose-driven place where technology meets humanity, and turn acts of kindness into tangible impact.



03.Motivation of the Project

Currently in Sri Lanka, there is not a safe digital site for donors to find and interact with verified individuals who need assistance. Typical charity structures can involve a lot of overheads, poorly verified and lack transparency — leaving donors knowing very little whether their donation is reaching the intended person.

Project Hope developed to address these challenges. Our goal is to build a transparent, sustainable, and human centered platform that removes barriers between goodwill and actionable goodness.

The spirit of this project centers on a few valuable schemas:

- Transparency: Making sure every donation is made with confidence by, only featuring verified recipient profiles.
- Equality: To offer an open, equitable opportunity to anyone in need to be seen and supported.
- Intentional giving: to allow donors to make informed decisions through browsing real stories and verified needs.
- Trust: create a credible space that has authenticity, integrity and dignity at the heart of every interaction.

By building the bridge from compassion to need Project Hope's objective is not only to alleviate immediate challenges but to also foster a more coherent and responsible culture of giving.

04.Objective of the Project

The main purpose of Project Hope is to develop and deploy a working, secure, and user-friendly web platform to connect donors with individuals in need. The platform will:

- Collect, present the recipient's profile based on submitter-provided verification documentation.
- Allow donors to peruse, filter, and connect with those presented in which the categories of needs and urgency for each verified individual.
- Act as a facilitation tool for personal interactions - not a payment transfer technology with high standards of security, privacy, and trust in all user interactions.

When complete, the project has the following features:

- ❖ A responsive web platform deployed locally
- ❖ An administration panel for verification of profiles and moderation of submitted content
- ❖ Donor and individual recipient dashboards
- ❖ Secure communications pathway to initiate a direct donor to recipient connection.

5.1 Functional Scope (Modules)

The solution will consist of the following core functional modules:

1. User Management

- Registration and login of both donors and recipients
- Admin account for verification management
- Profile creation, editing, and access control

2. Recipient Module

- Create new requests for assistance with documentation upload
- Track request status in real time
- Answer questions from donors through the inbuilt messaging system

3. Donor Module

- Browse/research verified recipient requests
- Filter requests by category, location, or urgency
- Contact recipients directly
- Save and manage follower profiles for future outreach

4. Admin Module

- Review and approve, or disapprove documents submitted by recipients for assistance requests
- Approve or reject the actual assistance of the request



- Manage all user accounts for all users, address reported abuse

5.2 Non-functional Scope

- Responsive web design compatible on both desktop/mobile devices
- Secure storage of data via PHP & MySQL based technology
- Clean, intuitive and user-friendly design
- Scalable architecture to support 1,000 concurrent users

5.3 Critical Functionalities

- Recipient verification system with document upload
- Filtering requests by urgency and location
- Messaging system or contact info sharing (email or phone)
- Admin moderation

5.4 Development Stages

Stage 1: Requirements Analysis & Design

- Collect functional and non-functional requirements from the stakeholders
- Produce wireframes and UI/UX mockups for all base interfaces
- Define the database schema and the overall system architecture

Stage 2: Backend & Database Development

- Host the MySQL database with references to proper normalization and constraints
- Create the API in PHP for User Authentication, handling requests and Admin specific verification of one system/API with respect to a single user

Stage 3: Frontend Development

- Design the responsive HTML/CSS as screens/pages with Javascript where interaction may apply
- Ensure the interaction works across devices and introduce basic navigation or UX

Stage 4: Integration & Testing

- Integrate Front-end with back-end API and database
- Test systems testing and user testing with validation and bug fixing; carried out security and performance tests

Stage 5: Documentation & Deployment

- Prepare users manual and set of technical documentation
- Deploy platform on local host (XAMPP) or online serve
- Conduct final presentation/demonstration for project evaluation

06. Functional Requirements

- FR1: Registered user/donor and receiver login/registration.
- FR2: Admin review of recipients post.
- FR3: Donor browsing and contact with verified users
- FR4: Ability to upload files for verified proof documents that is accessible for others to view.
- FR5: Users Profile Details Management

07. Non-Functional Requirements

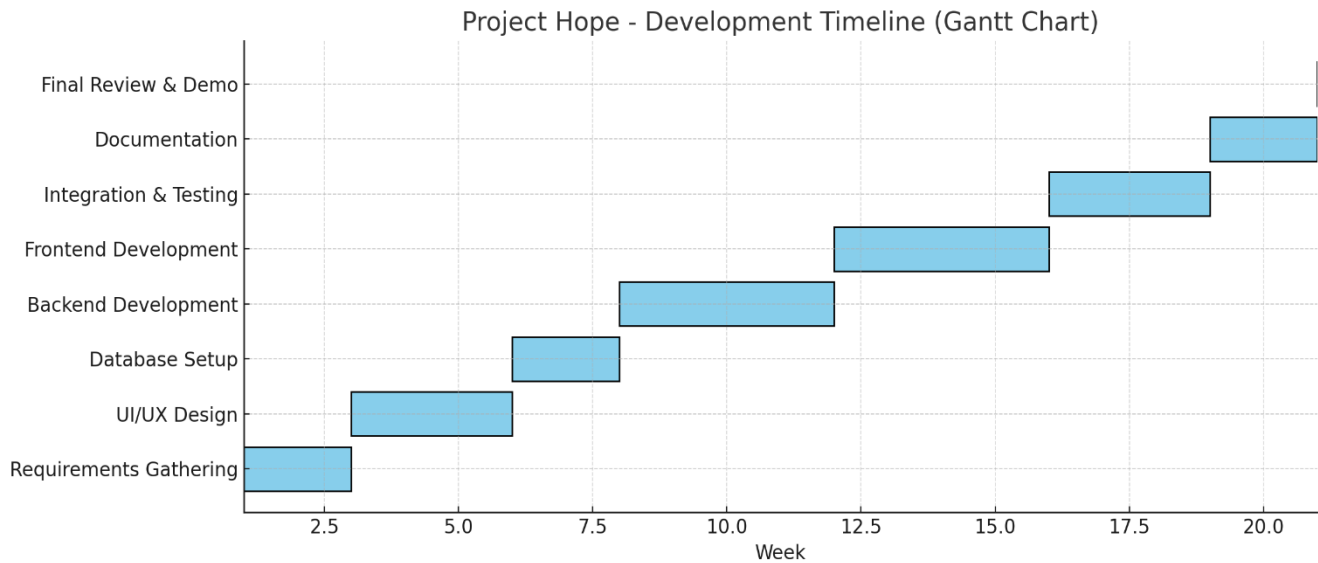
- NFR1: Response time to execute any action must not exceed 3 seconds
- NFR2: Data must be kept securely and must have access limitations.
- NFR3: Interface should be simple and accessible to all ages.
- NFR4: Uptime during demonstration should be 100%.

08. Development Timeline

Phase	Duration
Requirements Gathering	2 weeks
UI/UX Design	3 weeks
Database Setup	2 weeks
Backend Development	4 weeks
Frontend Development	4 weeks
Integration & Testing	3 weeks
Documentation	2 weeks
Final Review & Demo	1 week
Total Duration	21 weeks



Gantt Chart



9. Project Team

Name	Reg. no	Role
EDIRISINGHE M.D.S.H.	fc221012	Project Manager / Analyst
JAYASINGHE J.M.H.S.	fc222021	Designer / Support Developer
YASHODA K.D.S.	fc221024	Tech Lead / Support Developer
LIVISARANI P.I.	fc222046	Frontend Developer
PERERA M.T.S.	fc221041	Backend Developer
BOTEJU W.I.A.	fc222035	Database Manager / Support Developer
MENDIS W.J.N.	fc222007	Tester
NISANTHAN V.	fc110593	Documenter / Support Developer

