

# Project Report: "Give Hope" - A Charity Donation Website

Live Link (hosted on github pages):- <https://30debrup.github.io/GiveHope/>

## Table of Contents

1. Executive Summary
2. Project Description
3. Technology Stack
4. System Architecture
5. Design and User Interface
6. Features and Functionalities
7. Database Schema
8. Security Measures
9. Tax Deduction
10. Project Timeline
11. Future Enhancements
12. Conclusion

## Executive Summary

The "Give Hope" project is a charity donation website designed to provide an easy and user-friendly platform for individuals to make donations to their favorite charities while enjoying tax deductions. The project uses a tech stack consisting of HTML, CSS, PHP, and MySQL to create a secure and efficient web application. This report provides an in-depth view of the project's development, features, and future potential.

## Project Description

"Give Hope" aims to connect generous donors with reputable charities, making it easier for them to contribute to meaningful causes. The website offers a seamless and secure experience, including user registration, charity listing, tax deduction information.

## Technology Stack

The website is built using HTML, CSS for front-end design, PHP for server-side scripting, and MySQL for database management.

### System Architecture

The system architecture of the "Give Hope" website consists of both front-end and back-end components, each playing a crucial role in delivering a seamless user experience. The technologies involved in the architecture include HTML, CSS, SQL (for database management), and PHP (for server-side scripting). Here's a detailed breakdown of how these components interact and function together:

#### 1. Front-end (HTML and CSS):

- **HTML (Hypertext Markup Language):** HTML is used to structure the content of the web pages. It defines the layout and structure of the website, including the presentation of text, images, forms, and links.
- **CSS (Cascading Style Sheets):** CSS is employed for styling and design. It determines the visual appearance of the website, including fonts, colors, layout, and responsive design for various screen sizes.

#### 2. Back-end (PHP and SQL):

- **PHP (Hypertext Preprocessor):** PHP serves as the server-side scripting language. It handles user requests, processes data, interacts with the database, and generates dynamic web content. Key functions of PHP in this system architecture include:
  - User authentication and session management.
  - Donation processing and validation.
  - Communication with the SQL database for data retrieval and storage.
- **SQL (Structured Query Language):** SQL is used to manage the website's database. It stores and retrieves data related to users, charities, donations, and tax deduction information. The database structure includes tables for:
  - User profiles and authentication data.

- Charity information, such as names, descriptions, and donation history.
- Donation records, which link users to their contributions.
- Tax deduction data, including calculations and history.

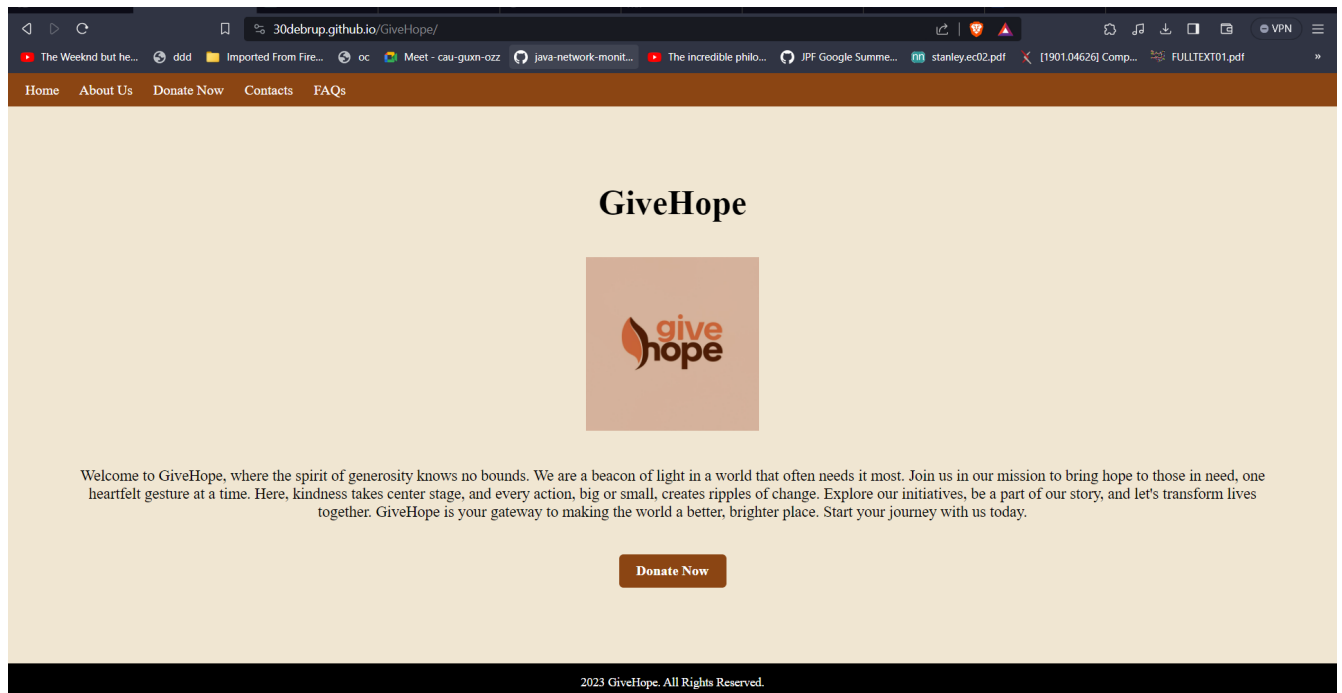
### 3. Interaction between Front-end and Back-end:

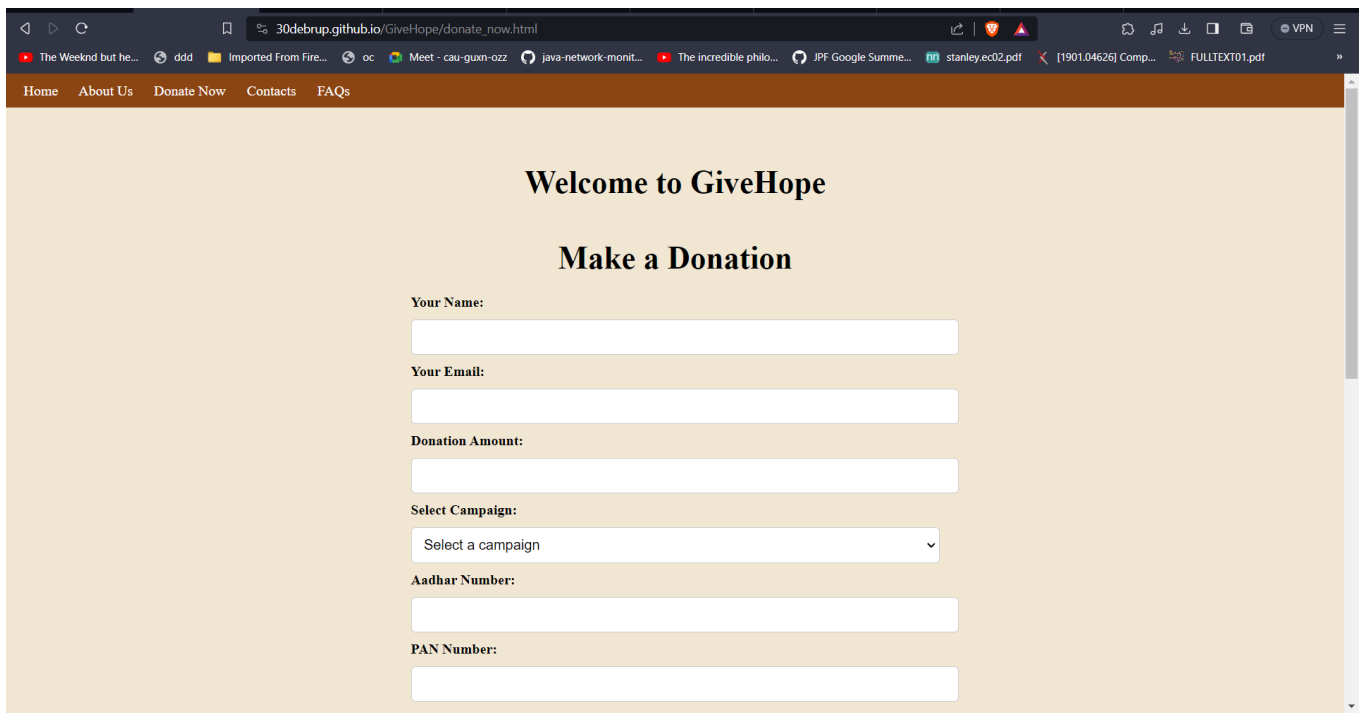
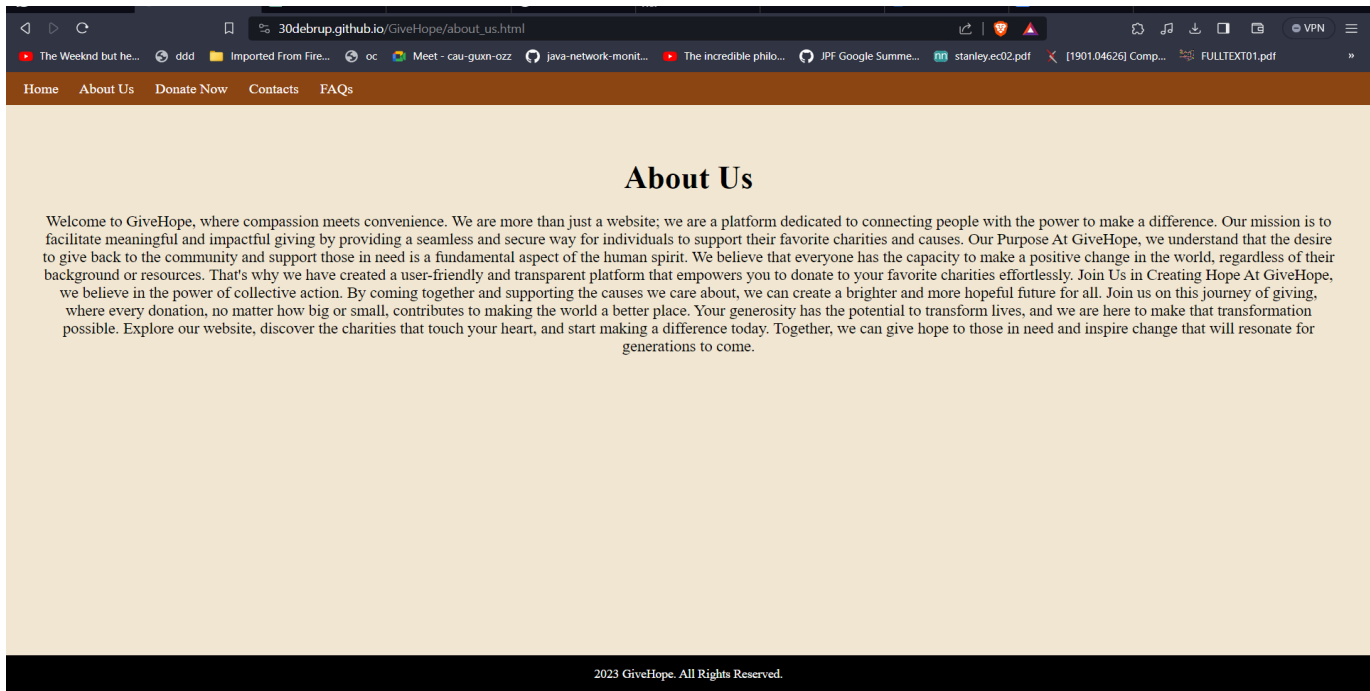
- User Interface (UI): The HTML and CSS of the front-end create the user interface, allowing users to interact with the website.
- User Requests: Users interact with the website by submitting forms, clicking buttons, and navigating web pages.
- PHP Handling: PHP scripts receive and process user requests, validate data, and interact with the SQL database.
- Database Interaction: SQL queries and transactions are used to retrieve and store data in the database.

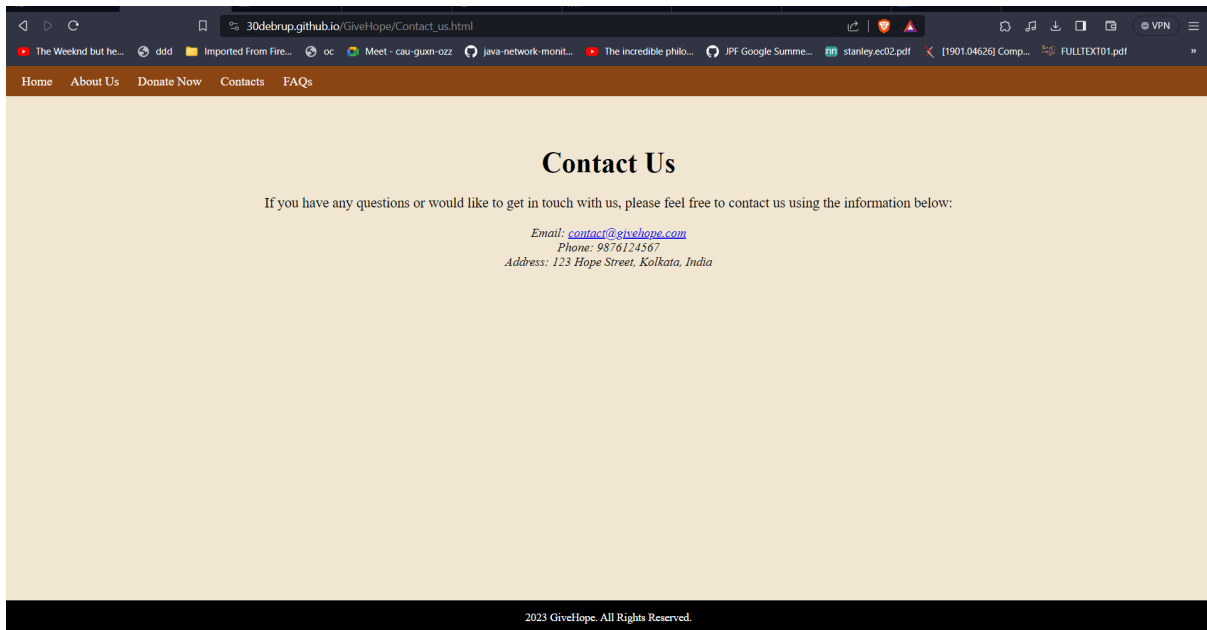
## Design and User Interface

The website's design focuses on user-friendliness and a pleasant user experience. It is designed to be intuitive and visually appealing.

### *Screenshots of our UI*







## Features and Functionalities

"Give Hope" offers features including user registration, charity browsing, donation management, tax deduction calculations, secure payment processing, and user profiles.

## Database Schema

The MySQL database is structured to store user data, charity information, donation records, and tax deduction information securely, including the three tables: **donate**, **personaldetails**, and **paymentinfo**.

The screenshot displays the phpMyAdmin interface for a MySQL database named 'donation'. The 'Table: donate' structure is shown, listing four columns: 'donor\_name' (text), 'email' (varchar(100)), 'amount' (decimal(10,0)), and 'campaign' (enum). The 'email' column is highlighted as the primary key. The interface includes a left sidebar with a tree view of the database structure, showing 'donation' and 'donate' tables. The main panel shows the 'Table structure' tab with a table of column details. Below the table, there are sections for 'Indexes' (showing a primary key index on 'email') and 'Partitions' (showing no partitioning defined). The bottom status bar indicates the server is 'localhost/phpmyadmin/index.php?route=/table/structure&db=donation&table=donate'.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	donor_name	text	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
2	email	varchar(100)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
3	amount	decimal(10,0)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
4	campaign	enum(National Defence Fund, Prime Minister's N...)	utf8mb4_general_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
<a href="#">Edit</a> <a href="#">Rename</a> <a href="#">Drop</a>	email	BTREE	Yes	No	email	15	A	No	

Partitions

No partitioning defined

## donate table

The screenshot shows the phpMyAdmin interface for the 'donate' table. The table structure is as follows:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	donor_name	text	utf8mb4_general_ci		No	None			Change Drop More
2	email	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
3	amount	decimal(10,0)			No	None			Change Drop More
4	campaign	enum(National Defence Fund, Prime Minister's N...)	utf8mb4_general_ci		No	None			Change Drop More

The 'email' column is highlighted as the primary key. The 'Indexes' section shows a primary key index on the 'email' column.

The screenshot shows the phpMyAdmin interface displaying the data of the 'donate' table. The table contains 15 rows of data. The columns are donor\_name, email, amount, and campaign.

donor_name	email	amount	campaign
Meow	30debrup@gmail.com	6000	
Rik roy	arntro113@gmail.com	600	
Debrup Mitra	da12s@gmail.com	5600	
dm	das@gmail.com	600	
Debjit B	debj@gmail.com	700	
Debjit B	debjb@gmail.com	700	
Isan Banerjee	iab@gmail.com	500	
Koulik K	kko@gmail.com	700	
Koulik K	klk@gmail.com	700	
Koulik K	kkko@gmail.com	700	
Koulik K	kio@gmail.com	700	
Antra Majumdar	majumdar13@gmail.com	6000022	
Debrup Mitra	mitradebroop@gmail.com	60000	
Meow	rp1@gmail.com	6000	
K Roy	rr@gmail.com	600	

## paymentinfo table

The screenshot shows the phpMyAdmin interface with the 'paymentinfo' table structure displayed. The table has five columns: amount (decimal), tdd (varchar), taxid (int), orgname (varchar), and comm (text). The 'Indexes' section shows 'No index defined'. The 'Partitions' section shows 'No partitioning defined'.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	amount	decimal(10,0)			No	None			Change Drop More
2	tdd	varchar(10)	utf8mb4_general_ci		No	None			Change Drop More
3	taxid	int(10)			No	None			Change Drop More
4	orgname	varchar(50)	utf8mb4_general_ci		No	None			Change Drop More
5	comm	text	utf8mb4_general_ci		No	None			Change Drop More

The screenshot shows the phpMyAdmin interface with the 'paymentinfo' table data displayed. The table has five columns: amount, tdd, taxid, orgname, and comm. The data is shown in a grid view with 15 rows. The 'Showing rows' section indicates 'Showing rows 0 - 14 (15 total, Query took 0.0003 seconds)'. The 'Extra options' section shows 'Number of rows: 25' and 'Filter rows: Search this table'.

amount	tdd	taxid	orgname	comm
600	yes	1240	DMG	none
6000022	yes	2147483647	IEM	nope
500	yes	2147483647	NIT	welcome
600	yes	2147483647	JU	No
700	yes	2000000000	IEM	nil
700	yes	2000000000	IEM	nil
700	yes	2000000000	IEM	none
700	yes	2000000000	IEM	none
700	yes	2000000000	IEM	none
700	yes	2000000000	IEM	none
60000	yes	2147483647	IEM	thanks
5600	yes	2147483647	IEM	none
600	yes	2000000000	IEM	no
6000	yes	2147483647	JU	adadsasa
6000	yes	2147483647	JU	adadsasa



## personaldetails table

The image shows two screenshots of the phpMyAdmin interface. The top screenshot displays the 'Table structure' view for the 'personaldetails' table. The bottom screenshot displays the 'Table data' view for the same table.

**Table structure view:**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	email	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
2	aadhar	bigint(12)			No	None			Change Drop More
3	PAN	varchar(10)	utf8mb4_general_ci		No	None			Change Drop More
4	Income	decimal(10,0)			No	None			Change Drop More
5	Gender	text	utf8mb4_general_ci		No	None			Change Drop More
6	Age	int(3)			No	None			Change Drop More

**Table data view:**

Showing rows 0 - 14 (15 total, Query took 0.0003 seconds)

```
SELECT * FROM `personaldetails`
```

Number of rows: 25 Filter rows: Search this table

email	aadhar	PAN	Income	Gender	Age
das@gmail.com	6555	223	6000	Male	22
majumdar13@gmail.com	234250213555	4012405599	100000000	Male	21
iab@gmail.com	500002500234	6000267802	60000	Male	30
in@gmail.com	500002500234	6000267802	60000	Male	21
debj@gmail.com	500002500234	4012405599	60000	Female	60
debj@gmail.com	500002500234	4012405599	60000	Female	60
kik@gmail.com	500002500234	4012405599	60000	Male	24
kiko@gmail.com	500002500234	4012405599	60000	Male	24
klo@gmail.com	500002500234	4012405599	60000	Male	24
kko@gmail.com	500002500234	4012405599	60000	Male	24
mitradebroop@gmail.com	234250213555	6000267802	700000	Male	20
da12s@gmail.com	500002500234	4012405599	200000	Male	24
aritr0113@gmail.com	500002500234	6000267802	6000	Male	60
fp1@gmail.com	234250213555	4012405599	60000	Male	20
30debrup@gmail.com	234250213555	4012405599	60000	Male	20

## Tax Deduction

Incorporating information on how much users can claim tax deductions for their charitable contributions in compliance with Section 80G of the Income Tax Act is a valuable addition to our website.

## Project Timeline

The project was initiated on 14/08/2023 and completed on 17/10/2023.

## Future Enhancements

### 1. Mail Merge Integration:

- **Personalized Communication:** A mail merge feature has been added to allow the platform to send personalized messages, emails, or newsletters to donors and charities. This enhances communication and engagement.
- **Customizable Templates:** Users can create and customize templates for communication, making it easy to convey specific messages or updates to recipients.
- **Scheduled Communication:** Scheduled mail merge ensures timely communication with donors, charities, and stakeholders, strengthening relationships and providing updates on charitable activities.

*(Note:- Mail Merge has already been integrated in our system but since it is hosted on githubpages so it cannot run our backend php scripts as this platform can host only static sites however we have tried and implemented it in our localhost system)*

### 2. Secure Payment Gateway:

- **Online Payment Processing:** The addition of a secure payment gateway ensures that all financial transactions on the platform are handled with the utmost security and efficiency.
- **Payment Options:** Donors have the option to make payments using a variety of methods, including credit/debit cards, online wallets, and other popular payment methods.
- **Data Encryption:** All payment data is encrypted, providing a secure environment for financial transactions.
- **Transaction History:** Users can access their transaction history, which includes details of their donations, making it easier to track their contributions for tax purposes.

## Conclusion

In conclusion, "Give Hope" is a significant contribution to the world of online charitable donations. It offers an accessible platform for users to support their chosen charities while enjoying tax deductions.