## **JEEVAN**

## **An Engineering Project in Community Service**

**Final Individual Report** 

Submitted by

Priya Sharma(19BCY10077)

in partial fulfilment for the award of the degree

of

### **BACHELOR OF TECHNOLOGY**

in

COMPUTER SCIENCE AND ENGINEERING



SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

VIT BHOPAL UNIVERSITY

KOTHRIKALAN, SEHORE

MADHYA PRADESH – 466114

#### **BONAFIDE CERTIFICATE**

Certified that this project report titled "JEEVAN" is the bonafide work of "Priya **Sharma**(19BCY10077), Ritik Gupta (19BCE10095), AniketBarsainya (19BCE10078), Ayush Bajpai(19BAI10167), Divyanshu Tiwari(19BCE10073), **Harshit**(19BCG10063), **Gupta(19BCE10289)** Saloni Aman and Gupta(19BCY10007)"who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported heredoes not form part of any other project / research work on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

This project report (Phase II) is submitted for the Project Viva-Voce examination held on **22April 2022.** 

**Supervisor** 

Dr.Rizwan Ur Rehman

**Comments & Signature** ( **Reviewer 1**)

Dr. Soumya Sankar Ghosh

**Comments & Signature (Reviewer 2)** 

Dr. Nella Anveshkumar

# TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
1	INTRODUCTION  1.1 Introduction 1.2 Motivation 1.3 Objective of Project	4
2	LITERATURE SURVEY  2.1 Existing Work  2.2 Limitations of Existing work	5
3	SYSTEM ANALYSIS  3.1 Proposed Work  3.2 Working Principle	6
4	SYSTEM DESIGN AND IMPLEMENTATION  4.1 Software requirements  4.2 Hardware requirements	7
5	INDIVIDUAL WORK  5.1Database 5.2 Cyber Security Risk Assessment	8
6	CONCLUSION 6.1 Conclusion	11
7	REFERENCES 6.1 References	11
8	PLAGIARISM REPORT	12

### INTRODUCTION

### 1.1 Introduction

In finance, the shopping budget is that the vital step for funding and distribution selections. Of late, crowdfunding is growing as another way of shopping take into account start-united states and entrepreneurs. Many authors have attempted to stipulate crowdfunding. "Crowdfunding may be a solicitation of budget (small quantity) from quite one asset via a completely web based platform or social networking computing device for a selected project, enterprise reason or social issue." Crowdsourcing takes place when a profit-orientated corporation outsources precise obligations important for the market and sale of its product to the remaining public (the crowd) at periods the type of companion open choice over the net, with the aim of enlivening humans to shape a [voluntary] contribution to the corporation's manufacturing technique for gratis of price or for extensively but that contribution is rate to the corporation.

Crowdfunding is a companion trade way of elevating the budget for innovative, entrepreneurship, creative comes, start-ups, and social reasons that offer a budget at decreased cost and lesser time. The assignment has to be deliberate for its success. Funds unit raised from crowdfunding with the assistance of crowdfunding websites, which offer a web platform for traders and borrowers. Crowdfunding structures gadgets are accustomed to elevate coins inside the variability of equity, debt, or donations.

Whereas, the assignment "JEEVAN" is assigned for the noble reason and for the electorate of India. Today, India has reached as a honestly clever country in clinical facilities, nonetheless numerous Indians die of treatable illnesses due to the inconvenience of desiring coins for remedy on the proper time. consistent with TOI 27th of Indians die of treatable illnesses. Once the contamination is recognized and remedy goals of coins, composition that money takes up lots of time for humans with loss of assets and connections. During this time, our plan is to release a web platform anywhere the advert amount is accrued in calculable hours or days. so that when someone goals coins for their remedy it is prepared inside the smallest quantity of capacity time, the tiny print unit to be accrued from a person and want to be shared directly to the health center and found out on our net portal.

### 1.2 Motivation

The common cause appears the money. If we can provide them a medium through a website for raising immediate funds for treatment then a lot of lives can be saved. As there is no such website which collects money from the donors and give directly to the hospitals or organization.

### 1.3 Objective of Project

The project involves creating a website for the people of India who needs financial support for their medical

treatment. Every year the people have to go through different types of medical treatment, for that they face difficulties in arranging the money for they medical treatments. Specially the backward and poor people, this is a major problem as they do not know anything about the government facilities and NGO's

The project will cover the below mentioned features:

- Creating the profile of the person who needs financial help for treatment.
- The fund raised is directly transferred to the hospital.
- To provide the maximum possible financial support to the serious patients.
- The amount collected most of the times goes higher than the amount needed, therefore the amount is transferred to the responsible hospital and the remaining amount goes to the emergency fund of the platform.

### LITERATURE SURVEY

### 2.1 Existing work

Till now, there are some websites like:

Ketto

Ketto (Pronunciation - "kay-toe") is an Indian online crowdfunding platform, where any individual/organ across the country can raise funds for causes ranging from medical healthcare to disaster relief.Individual, entrepreneurs and NGOs can raise funds to achieve personal goals, pay medical bills, make a movie or support their favourite local sports team or gymkhana. The company headquarters located in Mumbai, Maharashtra, India, with social worker representatives spread all across the country.

#### https://keto.org

#### MedGift

MedGift allows you to create your own personal support page so you can share with your friends and loved ones where you are on your journey and how they can help. You can share updates on progress, post photos, and receive encouragement and support from your community. Keep this private or with share your social network if you like. You also have calendaring to organize help for day-to-day life.

#### https://medgift.org

#### Impact Guru

Impact Guru is a donation based crowdfunding platform that offers global crowdfunding solutions for NGOs, social enterprises, startups and individuals. It was launched by Maneka Gandhi, Union Cabinet Minister for Women & Child Development, Government of India in September 2015.

https://www.impactguru.com

### 2.2 Limitations of existing work

- The money is directly transferred to the person's account.
- The transaction limit is set but sometimes the amount goes higher than that.
- No verification of person is done before uploading his/her details to the website.
- These sites are prone to cyber security attacks and data leakage

### **SYSTEM ANALYSIS**

### 3.1 Proposed Work

- The website will provide a mechanism for people to create their login id which will contains their details and the amount collected from the donors.
- The information on website will get updated time to time by the automation software.
- The amount collected will be directly transferred to the organization or hospital who will treat the
  person and not the person's account which will minimize the chances of fraud.

### 3.2 Working Principle

The project involves web designing i.e, a website for people of India who needs financial support for their medical treatment. The website will provide people a medium to raise the funds which can help them for the treatment.

- The information on website will get updated time to time by the AI ML software which predicts whether the disease is fake or real.
- The amount collected will be directly transferred to the organization and not the person's account which will minimize the chances of fraud.
- The website fully secured and passed the cyber security risk assessment.

## **SYSTEM DESIGN AND IMPLEMENTATION**

### 4.1 Software Requirements:

#### 1. Database:

Database includes various applications to be installed like MySQL or Excel for easy access and retrieval of data. Therefore requesting the installed server for MySQL and its workbench to work upon.

### 2. Hosting:

Hosting provides the services needed for the website to view it on the internet for the easy access over the web. It also provides a storage space to keep the webpages of the hosted site on its server.

#### 3. Domain name for the website:

A domain name is basically the website name(unique) or address where a user can access the website.

## 4. Payment Gateway

To accept the payment from the donors.

#### 5. Cloud Service

To deploy our Disease Prediction using Machine Learning Software.

## 4.2 Hardware requirements:

Building a website has become much more feasible task for an average user without much deeper technical knowledge and without solving programming errors. With the software available, a few hardware components are too required.

#### 1. A system (with Minimum Requirement):

Processor : Intel Pentium 4 or later

Memory : 2 GB minimum, 4 GB recommended

Screen Resolution : 1280 X 1024 or larger Application window size : 1024 X 680 or larger

#### 2. Internet Connection:

A high speed and stable internet connection is required for accessing the website with ease.

### INDIVIDUAL WORK

In this project, my main focus was the implementation of database and also do cyber security risk assessment.

#### 5.1 Database

So, in order to implement database, I used MySQL. For storing the data there are two tables , so first table is "signvol" table which will be storing the data of the volunteer and in this table there are seven attributes named fname (First Name) , Lname (Last Name) , city, state ,zip ,email and password . The second table named "signuser" stores the data of the fundraiser and this table has attributes named Fname (Fname) , Lname (Last Name) ,city ,state, zip , email , password , disease , amount (The amount which will be needed for the treatment) , and report(For confirmation and proof for the disease) . I am also attaching the screenshot below for the same:

fname	lname	city	state	zip	email	password
Priya	Sharma	Aligarh	Uttar Pradesh	202001	priya@gmail.com	12345
S	sd	d	dd	sd		sd
Priya	Sharma	Aligarh	Uttar Pradesh	202001	priya123@gmail.com	123456789
laaaa	Baaaa	cccccccc	Dddddddddd	Eeeeeeeee	f@jdsjk.sdj	djsnjdnsjfn
riya	Sharma	Aligarh	d	as	ddsds	dssd
riya	ds	sa	cds	dcs	ds	ds
riya	Sharma	4	Uttar Pradesh	d	saddsadcf	sad
ds	sda	sad	sda	sad	sdasad	saa
a	as	SSSSSSS	SS	ds	dsa	sda
riya	Sharma	Aligarh	Uttar Pradesh	202001	admin@gmail.com	56526
riya	asa	sdsd	as	233	adsd	sas

name						password		amount
a	b	C			f	+   i	+	
aa -	bb	СС			ff	j gg	hh	ii
aaa	bbb	ccc	1	eee	fff	ggg	hhh	iii
sad	fdsddds	sds	XSX	ds	dsa	sxdc	sa	sa
SSS	S	DD	DD	AA	aa	SA	AS	sa
Priya	adass	sa	sa	as	as	a	a	a

### 5.2 Cyber Security Risk Assessment

As a part of Cyber Security risk assessment, my main focus were SQL Injection and Directory Traversal:

#### **SQL** Injection

In the login page, it is observed that if we put a crafted SQL query - example@gmail.com' UNION ALL SELECT TABLE\_NAME FROM information\_schema.TABLES where table\_schema=database()--', in the email field and some random password the login page will give out the details of the database. In MySQL, the system table information\_schema.TABLES contains information of all tables related to table objects. Further, the TABLE\_NAME field contains the name of each table in the database. By running the above query, the attacker can extract the table names.

Below is the Screenshot of code before mitigation:

In order to effectively mitigate against SQL Injection attacks, we used prepared statements (also known as parameterized queries) when building SQL queries based on user input. Prepared statements prevent SQL Injection attacks by defining placeholder variables to safely pass parameters inside a SQL statement, which are automatically escaped at runtime. Also blacklisting and whitelisting of special characters is defined.

Below is the Screenshot of code after mitigation:

```
$stmt = mysqli_prepare($dbc, "SELECT * FROM users WHERE email = ? AND password = ?");
mysqli_stmt_bind_param($stmt, "s", $email);
mysqli_stmt_bind_param($stmt, "s", $password);
mysqli_stmt_execute($stmt);
$row = mysqli_stmt_fetch($stmt);
```

#### **Directory Traversal**

In the home page, the url contains a parameter called filename. This parameter originally contains an image to support the webpage. But due to poor implementation the parameter can be changed to a more sensitive command that can extract a lot of information. In the url we changed the parameter filename value. We changed it to ../../../etc/passwd. This attack allowed the attacker to access and explore the server's file system, extracting the sensitive information.

Below is the Screenshot of attack before mitigation:

```
:-$ curl -s --path-as-is "http://localhost:8080/icons/.%2e/%2e%2e/%2e%2e/%2e%2e/etc/passwd"
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
apt:x:100:65534::/nonexistent:/usr/sbin/nologin
```

To mitigate this the application should perform strict input validation against parameters that are intended to be used for file system operations. These include path validation and absolute path checking of user-supplied data.

Below is the Screenshot of attack after mitigation:

# **Not Found**

The requested URL was not found on this server.

Apache/2.4.53 (Debian) Server at localhost Port 80

### **Conclusion**

The proposed project i.e, a website for the people of India who needs financial support for their medical treatment. As there is no such specific website for this situation in India. Every year the people have to go though different types of medical treatment, for that they face difficulties to arrange the money for they medical treatments. Specially the backward and poor people, this is a great problem as they do not know anything about the government facilities and NGO's.

By using the standard resources and tools, the students would be able to view the web pages no matter what browser is used. The pages would load faster with ease.

The website if highly interactive and efficient with less maintenance requiredfrom the admin even at subsequent visits.

### **REFERENCES**

- 1. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2909998/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2909998/</a>
- **2.** <a href="https://www.nber.org/papers/w29227">https://www.nber.org/papers/w29227</a>
- **3.** <a href="https://www.who.int/news-room/fact-sheets/detail/free-health-care-policies">https://www.who.int/news-room/fact-sheets/detail/free-health-care-policies</a>
- **4.** <a href="https://timesofindia.indiatimes.com/india/27-of-deaths-in-india-for-want-of-medical-attention/articleshow/49474537">https://timesofindia.indiatimes.com/india/27-of-deaths-in-india-for-want-of-medical-attention/articleshow/49474537</a>
- 5. <a href="https://indianaccounting.org/downloads/currentissues/01.pdf">https://indianaccounting.org/downloads/currentissues/01.pdf</a>
- **6.** <a href="https://en.wikipedia.org/wiki/Crowdfunding">https://en.wikipedia.org/wiki/Crowdfunding</a>

### **PLAGIARISM REPORT**

Date: April, 22 2022



### PLAGIARISM SCAN REPORT









Excluded Url: None

## **Content Checked For Plagiarism**

INTRODUCTION 1.1 Introduction In finance, the shopping budget is that the vital step for funding and distribution selections. Of late, crowdfunding is growing as another way of shopping take into account start-united states and entrepreneurs. Many authors have attempted to stipulate crowdfunding. Crowdsourcing takes place when a profit-orientated corporation outsources precise obligations important for the market and sale of its product to the remaining public (the crowd) at periods the type of companion open choice over the net, with the aim of enlivening humans to shape a [voluntary] contribution to the corporation's manufacturing technique for gratis of price or for extensively but that contribution is rate to the corporation. Crowdfunding is a companion trade way of elevating the budget for innovative, entrepreneurship, creative comes, start-ups, and social reasons that offer a budget at decreased cost and lesser time. The assignment has to be deliberate for its success. Funds unit raised from crowdfunding with the assistance of crowdfunding websites, which offer a web platform for traders and borrowers. Crowdfunding structures gadgets are accustomed to elevate coins inside the variability of equity, debt, or donations. Whereas, the assignment "JEEVAN" is assigned for the noble reason and for the electorate of India. Today, India has reached as a honestly clever country in clinical facilities, nonetheless numerous Indians die of treatable illnesses due to the inconvenience of desiring coins for remedy on the proper time, consistent with TOI 27th of Indians die of treatable illnesses. Once the contamination is recognized and remedy goals of coins, composition that money takes up lots of time for humans with loss of assets and connections. During this time, our plan is to release a web platform anywhere the advert amount is accrued in calculable hours or days. so that when someone goals coins for their remedy it is prepared inside the smallest quantity of capacity time, the tiny print unit to be accrued from a person and want to be shared directly to the health center and found out on our net portal. 1.2 Motivation The common cause appears the money. If we can provide them a medium through a website for raising immediate funds for treatment then a lot of lives can be saved. As there is no such website which collects money from the donors and give directly to the hospitals or organization, 1,3 Objective of Project The project involves creating a website for the people of India who needs financial support for their medical treatment. Every year the people have to go through different types of medical treatment, for that they face difficulties in arranging the money for they medical treatments. Specially the backward and poor people, this is a major problem as they do not know anything about the government facilities and NGO's The project will cover the below mentioned features: • Creating the profile of the person who needs financial help for treatment. • The fund raised is directly transferred to the hospital. • To provide the maximum possible financial support to the serious patients. • The amount collected most of the times goes higher than the amount needed, therefore the amount is transferred to the responsible hospital and the remaining amount goes to the emergency fund of the platform. LITERATURE SURVEY 2.1 Existing work Till now, there are some websites like: Ketto Individual, entrepreneurs and NGOs can raise funds to achieve personal goals, pay medical bills, make a movie or support their favourite local sports team or gymkhana. https://keto.org MedGift https://medgift.org Impact Guru https://www.impactguru.com 2.2 Limitations of existing work • The money is directly transferred to the person's account. • No verification of person is done before uploading his/her details to the website. • These sites are prone to cyber security attacks and data leakage SYSTEM ANALYSIS 3.1 Proposed Work • The website will provide a mechanism for people to create their login id which will contains their details and the amount collected from the donors. • The information on website will get updated time to time by the automation software. • The amount collected will be directly transferred to the organization or hospital who will treat the person and not the person's account which will minimize the chances of fraud. 3.2 Working Principle The project involves web designing i.e, a website for people of India who needs financial support for their medical treatment. The website will provide people a medium to raise the funds which can help them for the treatment. The information on website will get updated time to time by the AI ML software which predicts whether the disease is fake or real. • The amount collected will





### PLAGIARISM SCAN REPORT









Excluded Url: None

### **Content Checked For Plagiarism**

SYSTEM DESIGN AND IMPLEMENTATION 4.1 Software Requirements; 1. Database; Database includes various applications to be installed like MySQL or Excel for easy access and retrieval of data. Therefore requesting the installed server for MySQL and its workbench to work upon. 2. Hosting: Hosting provides the services needed for the website to view it on the internet for the easy access over the web. It also provides a storage space to keep the webpages of the hosted site on its server. 3. Domain name for the website: A domain name is basically the website name (unique) or address where a user can access the website. 4. Payment Gateway To accept the payment from the donors. 5. Cloud Service To deploy our Disease Prediction using Machine Learning Software. 4.2 Hardware requirements: Building a website has become much more feasible task for an average user without much deeper technical knowledge and without solving programming errors. With the software available, a few hardware components are too required. 1. A system (with Minimum Requirement): Processor: Intel Pentium 4 or later Memory: 2 GB minimum. 4 GB recommended Screen Resolution: 1280 X 1024 or larger Application window size: 1024 X 680 or larger 2. Internet Connection: A high speed and stable internet connection is required for accessing the website with ease. INDIVIDUAL WORK In this project, my main focus was the implementation of database and also do cyber security risk assessment. 5.1 Database So, in order to implement database, I used MySQL. For storing the data there are two tables , so first table is "signvol" table which will be storing the data of the volunteer and in this table there are seven attributes named fname (First Name), Lname (Last Name), city, state ,zip ,email and password. The second table named "signuser" stores the data of the fundraiser and this table has attributes named Fname (Fname) , Lname (Last Name) ,city ,state, zip , email , password , disease , amount (The amount which will be needed for the treatment), and report(For confirmation and proof for the disease). I am also attaching the screenshot below for the same: In the login page, it is observed that if we put a crafted - example@gmail.comwhere , in the email field and some random password the login page will give out the details of the database. In MySQL, the system table contains information of all tables related to table objects. Further, the ield contains the name of each table in the database. By running the above query, the attacker can extract the table names. Below is the Screenshot of code before mitigation: In order to effectively mitigate against SQL Injection attacks, we used prepared statements (also known as parameterized queries) when building SQL queries based on user input. Prepared statements prevent SQL Injection attacks by defining placeholder variables to safely pass parameters inside a SQL statement, which are automatically escaped at runtime. Also blacklisting and whitelisting of special characters is defined. Below is the Screenshot of code after mitigation: In the home page, the url contains a parameter called filename. This parameter originally contains an image to support the webpage. But due to poor implementation the parameter can be changed to a more sensitive command that can extract a lot of information. In the url we changed the parameter filename value. We changed it to . This attack allowed the attacker to access and explore the server's file system, extracting the sensitive information. Below is the Screenshot of attack before mitigation: To mitigate this the application should perform strict input validation against parameters that are intended to be used for file system operations. These include path validation and absolute path checking of user-supplied data. Below is the Screenshot of attack after mitigation: CONCLUSION Conclusion The proposed project i.e, a website for the people of India who needs financial support for their medical treatment. As there is no such specific website for this situation in India. Every year the people have to go though different types of medical treatment, for that they face difficulties to arrange the money for they medical treatments. Specially the backward and poor people, this is a great problem as they do not know anything about the government facilities and NGO's. By using the standard resources and tools, the students would be able to view the web pages no matter what browser is used. The pages would load faster with ease. The website if highly interactive and efficient with less maintenance required from the admin even at subsequent visits.

#### 10% Plagiarized

Directory Traversal - Secure Coding Handbook - GitBook

https://vladtoie.gitbook.io/secure-coding/server-side/directory-traversal