

**SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY**



**KUNIYAMUTHUR, COIMBATORE-641008**

**(AN AUTONOMOUS INSTITUTION)**



# **MINI PROJECT - I**

## **PROJECT DIARY**

**M.Tech. COMPUTER SCIENCE AND ENGINEERING**

**Batch: 2021-2026**

### **PROJECT DETAILS**

**Name** : PRAVEEN N  
MOHAMMED RIZAD IBRAHIM M  
RAGAVI M

**Roll No** : 21EPCI037  
21EPCI030  
21EPCI039

**Project Title:** HUMANITARIAN EXCHANGE NETWORK  
WITH BLOCKCHAIN SECURITY

Dr. S. Jothi Lakshmi

Mr. Sreeraj S

**Guide**

**Project Coordinator**

**HOD**

# **ABSTRACT**

A digital platform designed to bridge surplus resources with those in need, prioritizing responsible resource management and societal impact. Employing advanced algorithms, the platform facilitates efficient matching between surplus item donations and resource requests, ensuring effective distribution. Blockchain technology is integrated to establish transparent and secure donation records, bolstering trust and deterring misuse. Robust cybersecurity measures, including fraud detection, safeguard user data and mitigate risks. The platform envisions a community-driven ecosystem, leveraging technology to foster goodwill and eliminate barriers for individuals in need. By providing a secure environment for resource exchange, the platform aims to promote sustainable practices and address pressing societal challenges. Through collaboration with verified NGOs and stakeholders, it seeks to maximize the positive impact on communities while empowering users to contribute to meaningful change. Ultimately, the platform aspires to harness the power of technology to create a more equitable and compassionate society, where surplus resources are efficiently redistributed to address the needs of vulnerable.

## **BASE PAPER & REFERENCE PAPER DETAILS**

- Hadi Saleh; Sergey Avdoshin; Azamat Dzhonov. (2-14 November 2019). “Platform for Tracking Donations of Charitable Foundations Based on Blockchain Technology”. DOI: 10.1109/APSSE47353.2019.00031

- Kumar Satyam;Ayush Sharma.(14-16 September 2023) "Implementing Blockchain Based Security in EHR Using Ganache" DOI: 10.1109/IC3I59117.2023.10397841
- Christina Varghese. (27-30 January 2021) "SeVa: A Food Donation App for Smart Living" DOI: 10.1109/CCWC51732.2021.9375945
- Tillemann, T., & Luo, A. (2017). "Blockchain for Social Impact: Moving Beyond the Hype." The World Bank. DOI: 10.1596/978-1-4648-1109-1

## MODULES:

**Resource Matching:** Utilizes advanced algorithms to efficiently match surplus item donations with resource requests.

**Blockchain Integration:** Integrates blockchain technology to ensure transparent and secure donation records.

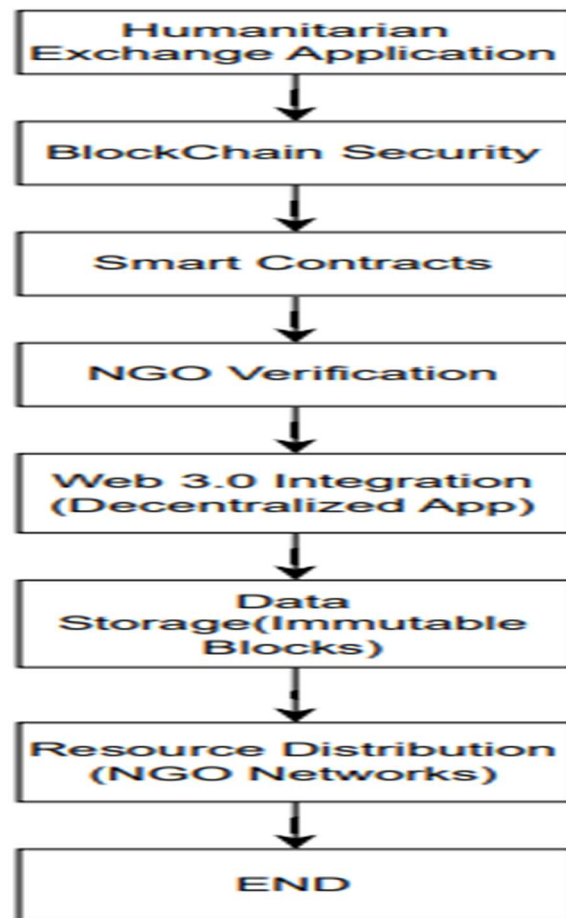
**Cybersecurity:** Implements robust cybersecurity measures, including fraud detection, to safeguard user data and mitigate risks.

**Community Engagement:** Fosters a community-driven ecosystem by leveraging technology to eliminate barriers for individuals in need and promote goodwill.

**Sustainable Practices:** Promotes sustainable practices by providing a secure environment for resource exchange and addressing pressing societal challenges.

**Collaboration:** Facilitates collaboration with verified NGOs and stakeholders to maximize positive impact on communities and empower users to contribute to meaningful change.

## PROPOSED SYSTEM AND ARCHITECTURE:



### Humanitarian Resource Exchange Application

- A cutting-edge digital platform leveraging advanced algorithms and blockchain technology to efficiently match surplus resources with those in need.
- With robust cybersecurity measures in place, it ensures transparent and secure donation records, fostering trust and deterring misuse.
- Envisioning a community-driven ecosystem, it promotes sustainable practices and addresses societal challenges, collaborating with verified NGOs and stakeholders.
- Ultimately, it aims to create a more equitable society by harnessing technology to redistribute surplus resources to vulnerable individuals efficiently.

## Project team member and Guide details

### Project Team member Details:

S.No.	Register No.	Name of the Student	Mobile Number
1	21EPCI037	PRAVEEN N	9488826432
2	21EPCI030	MOHAMMED RIZAD IBRAHIM M	8072524479
3	21EPCI039	RAGAVI M	6379442688

### Project Guide Details:

Name of the Guide	Designation	Mobile Number
Dr. S. Jothi Lakshmi	Assistant Professor	9965760854

Tutor / Project Coordinator	Designation	Mobile Number
Mr. S. Sreeraj	Assistant Professor	8838418508

## Project Details

<b>Project Title</b>	HUMANITARIAN EXCHANGE NETWORK WITH BLOCKCHAIN SECURITY
<b>Abstract</b>	<p>A cutting-edge digital platform leveraging advanced algorithms and blockchain technology to efficiently match surplus resources with those in need. With robust cybersecurity measures in place, it ensures transparent and secure donation records, fostering trust and deterring misuse.</p> <p>Envisioning a community-driven ecosystem, it promotes sustainable practices and addresses societal challenges, collaborating with verified NGOs and stakeholders.</p> <p>Ultimately, it aims to create a more equitable society by harnessing technology to redistribute surplus resources to vulnerable individuals efficiently.</p>
<b>Project Domain</b>	BLOCKCHAIN
<b>Base paper Details</b>	<p>Christina Varghese. (27-30 January 2021)</p> <p>"SeVa: A Food Donation App for Smart Living" DOI:</p> <p>10.1109/CCWC51732.2021.9375945</p>

**Signature of the Students**

**Guide**

**Project Coordinator**

Project Review Details			
S.No	Date	Review Details	Remarks

Project Assessment Sheet				
Register Number	21EPCI037	21EPCI030	21EPCI039	
Name	PRAVEEN N	MOHAMMED RIZAD IBRAHIM M	RAGAVI M	
Review Marks				
Review (25)				
Review (25)				
Review (25)				
Review (25)				
Review Mark Average (20)				
Implementation and Documentation (10)				
Project Guide (10)				
Total (40)				

**Signature of the Students**

**Guide**

**Project Coordinator**

**HOD-M.Tech CSE**

## Project Review Details

**Date** :

**Topic Discussed** : Discussing about problem statement

**Work Assigned** : Explore problem statements

**Project work Status** : Selecting problem statement

**Remarks** :

**Members Present** : PRAVEEN N  
MOHAMMED RIZAD IBRAHIM M  
RAGAVI M

**Signature of the Students**

**Signature of the Guide**



## Project Discussion Report

**Date** :

**Topic Discussed** : About the domain – BLOCKCHAIN

**Work Assigned** : To explore the features of  
existing systems

**Project work Status** : Learning the concepts of  
BLOCKCHAIN

**Remarks** :

**Members Present** : PRAVEEN N

MOHAMMED RIZAD IBRAHIM M

RAGAVI M

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**Signature of the Guide**

## Project Discussion Report

**Date** :

**Date** :

**Topic Discussed** : Implementing the Blockchain

**Work Assigned** : Implementation of module

**Project work Status** : 50% completed.

**Remarks** :

**Members Present** : PRAVEEN N

MOHAMMED RIZAD IBRAHIM M

RAGAVI M

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**Signature of the Guide**

## Project Discussion Report

**Date** :

**Topic Discussed** : Working on POW(proof of work)

**Work Assigned** : Implementing the modules.

**Project work Status** :Storing the data in the Blockchain

**Remarks** :

**Members Present** : PRAVEEN N  
MOHAMMED RIZAD IBRAHIM M  
RAGAVI M

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**Signature of the Guide**

**Publication Details:**

<b>S. No.</b>	<b>Date</b>	<b>Paper Title for Conference/Journal</b>	<b>Name of the Conference/Name of the Scopus Journal</b>	<b>Members</b>

**Signature of the Students**

**Signature of the Guide**