

# **Health Access Bridge: A Minimal and Inclusive Platform for Government Scheme Awareness**

Community Service Project Report Submitted to the Faculty of Engineering of

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA, KAKINADA**

In partial fulfilment of the requirements for the award of the Degree of

**BACHELOR OF TECHNOLOGY**

**IN**

**INFORMATION TECHNOLOGY**



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**SESHADRI RAO GUDLAVALLERU ENGINEERING COLLEGE**

(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)

**SESHADRIRAO KNOWLEDGE VILLAGE, GUDLAVALLERU – 521356**

**ANDHRA PRADESH 2025-2026**

# **Program Book**

## **for**

### **Community Service Project**



**Name of the Students :** Kothakota Likitha , Kolusu Prabhavathi, Kambham Harish,  
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**Name of the College:** Seshadri Rao Gudlavalleru Engineering College

**Registration Numbers:** 23481A12C5, 23481A12B9, 24485A1208, 23481A1291

**Period of CSP: From:** 19-05-2025 **To:** 30-06-2025 and

**From:** 14-07-2025 **To:** 26-07-2025

**Name & Address of the Community/Habitation:** Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru, Gudlavalleru Mandal, Krishna District, Andhra Pradesh 521356.

# Community Service Project Report

Submitted in accordance with the requirement for the degree of Bachelor of Technology

**Name of the College:** Seshadri Rao Gudlavalleru Engineering College

**Department:** Information Technology

**Name of the Faculty Guide:** Dr.T.Sumallika M.Tech.,Ph.D

**Duration of the CSP: From :** 19-05-2025 **To:** 30-06-2025

**From:** 14-07-2025 **To:** 26-07-2025

**Name of the Student:** Kothakota Likitha, Kolusu Prabhavathi, Kambham Harish,  
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**Programme of Study:** Bachelor of Technology.

**Year of Study:** III B. Tech, I Semester.

**Register Number:** 23481A12C5, 23481A12B9, 24485A1208, 23481A1291

**Date of Submission:**

## Student Declaration

We, Kothakota Likitha Reg.No 23481A12C5, Kolusu Prabhavathi Reg.No 23481A12B9, Kambham Harish Reg.No 24485A1208, Islavath Madhumitha Reg.No 23481A1291. students of CSP Program of the Department of Information Technology, Seshadri Rao Gudlavalleru Engineering College do here by declare that I have completed the mandatory community service from 19-05-2025 to 30-06-2025 and from 14-07-2025 to 26-07-2025 about Community Services Growth and Recognition in Gudlavalleru, Krishna district of Andhra Pradesh under the Faculty Guideship of **Dr.T.Sumallika**, Associate Professor. Department of **Information Technology** in **Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru.**

(Signature and Date)

## Endorsements

Faculty Guide: **Dr.T.Sumallika**

Master of Trainer(S): **Mr.Md.Rafi Khan**

Head of the Department: **Dr.D.N.V.S.L.S. Indira**

Principal: **Dr. B. Karuna Kumar**

## **Certificate from official of the community**

This is to certify that Kothakota Likitha Reg.No 23481A12C5, Kolusu Prabhavathi Reg.No 23481A12B9, Kambham Harish Reg.No 24485A1208, Islavath Madhumitha Reg.No 23481A1291. of Seshadri Rao Gudlavalleru Engineering College underwent community service project in Gudlavalleru, Krishna District of Andhra Pradesh From 19-05-2025 To 30-06-2025 and 14-07-2025 To 26-07-2025. The overall performance of the community service volunteer during her community service is found to be satisfactory.

**Authorized Signatory with Date and Seal**

# ACKNOWLEDGEMENTS

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## **Project Associates:**

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# ABSTRACT

A brief survey among low-income families revealed that many remain unaware of key government health schemes due to complicated procedures, unclear information, and limited digital skills. This gap prevents eligible individuals from receiving vital healthcare benefits. To address this issue, this project proposes a simple and user-friendly website that provides clear information about major health schemes, helps users check their eligibility through basic input, and with easy-to-follow instructions. The design focuses on accessibility, making it suitable for users with minimal education or digital experience.

This platform acts as a bridge between the government and the public, improving awareness, transparency, and trust. In the future, features like multilingual support, chatbot assistance, and integration with official portals can be added to enhance its reach and impact.

## INDEX

CONTENTS	Page
<b>Chapter 1:</b> Executive Summary	1
<b>Chapter 2:</b> Overview of the Community	2
<b>Chapter 3:</b> Community Service Part	4
<b>Chapter 4:</b> Weekly Report	6
<b>Chapter 5:</b> Outcomes Description	
Questionnaire	22
Problems identified in the Community	23
Short-term and Long-term action plan for possible outcomes	24
Describe the problem you identified	25
Report	26
Code for website	27
User Interface	34
<b>Chapter 6:</b> Recommendations and Conclusions	37
Student Self-Evaluation	38
Evaluation by the person in-charge	42
Community Service Project Survey Photos	46
PO and CO mapping	47



# CHAPTER 1: EXECUTIVE SUMMARY

## Website Overview

The Health Schemes Awareness Portal is a web-based application developed to help citizens, especially low-income families, learn about various government health schemes in one place. It provides detailed information about each scheme, including objectives, benefits, and downloadable application forms. After registration and login, users can access a simple dashboard that displays available schemes and general updates. The portal also supports multiple Indian languages, ensuring accessibility for users across different regions. Built using HTML, CSS, JavaScript, Node.js, and Postgre SQL, the platform offers reliable performance and secure data handling. bcrypt is used for password encryption. Overall, the portal promotes awareness, accessibility, and digital inclusion, helping citizens easily find and understand government health programs through a clean and user-friendly interface.

## Learning Objectives:

- To understand the process of developing a full-stack web application using HTML, CSS, JavaScript (frontend) and Node.js, Express, and Postgre SQL (backend) for real-time data handling.
- To implement a user authentication system with secure login and registration features using bcrypt for password encryption.
- To design and manage a database structure for storing health schemes, eligibility data, and user queries efficiently using Postgre SQL.
- To provide multilingual support for improving accessibility and understanding among users from diverse linguistic backgrounds.
- To implement an interactive and responsive user interface for easy navigation and better user engagement across devices.
- To gain practical knowledge in front-end and back-end integration, ensuring smooth communication between client and server.
- To explore how technology can be used to increase awareness of government health schemes and promote social welfare among low-income families.

## Learning Outcomes:

- Develop and deploy a full-stack web application with secure authentication.
- Manage and retrieve scheme and user data efficiently through structured database management.
- Gain hands-on experience in frontend–backend integration, data security, and cloud deployment of web applications.

## **CHAPTER 2: OVERVIEW OF THE COMMUNITY.**

**Community Overview:** Gudlavalleru, Krishna District, Andhra Pradesh

### **Historical Profile:**

Gudlavalleru is a small village in Krishna District, Andhra Pradesh, with a rich history dating back to the Kakatiya dynasty. The village was once a major center for agriculture and trade.

### **Community Diversity:**

The community comprises predominantly Telugu-speaking people, with a mix of various castes and religions, including Hindus, Muslims, and Christians.

### **Traditions, Ethics, and Values:**

1. Strong agricultural heritage
2. Respect for elders and traditional customs
3. Importance of education and social service
4. Vibrant festivals like Sankranti, Ugadi, and Vinayaka Chavithi
5. Emphasis on community bonding and collective welfare

### **Socio-Economic Conditions:**

1. Primarily agrarian economy with rice, cotton, and vegetable cultivation
2. Moderate literacy rate (approx. 70%)
3. Limited job opportunities, leading to migration to urban areas
4. Access to basic amenities like healthcare, education, and transportation
5. Growing awareness of digital technologies and online services

### **Demographics:**

1. Population: Approximately 5,000-7,000
2. Age distribution: 25% children (0-14), 55% adults (15-59), 20% elderly (60+)
3. Sex ratio: The sex ratio is 1,013 females per 1,000 males
4. Caste distribution: OC (50%), BC (30%), SC (15%), ST (5%)

**Education:**

1. Literacy rate: 70% (male: 75%, female: 65%)
2. Schools: Government schools (AANM and VVRSR Gudlavalleru High School) and private institutions
3. Higher education: Nearby towns like Vijayawada and Machilipatnam offer college options

**Healthcare:**

1. Primary Health Center (PHC) in the village
2. Access to nearby hospitals in Vijayawada and Machilipatnam
3. Limited specialized medical services

**Infrastructure:**

1. Well-connected roads to nearby towns
2. Regular bus services
3. Basic amenities like electricity, water supply, and sanitation

## CHAPTER 3: COMMUNITY SERVICE PART

Community Service Part: Health scheme awareness in Gudlavalleru.

### Project Overview:

As part of our community service project, we aimed to bridge the gap between citizens and government healthcare benefits in Gudlavalleru, Krishna District, Andhra Pradesh. We conducted a comprehensive survey to identify the community's needs and developed a tailored intervention.

### Activities Undertaken:

- **Health Scheme Directory:** Developed a centralized platform displaying detailed information on various government health schemes.
- **Admin Authentication:** Created secure login and registration for admin.
- **User Authentication:** Created secure login and registration features using bcrypt for data protection and privacy.
- **Interactive Dashboard:** Designed a user-friendly dashboard that allows users to easily navigate schemes, check eligibility, and access resources.x

### Impact:

- Enhanced awareness of government health schemes among low-income families.
- Empowered communities to make informed health-related decisions digitally.
- Bridged the information gap between citizens and government health services.
- Supported public welfare by promoting health awareness and inclusiveness.

### Reflection:

Through this project, I acquired:

#### Values:

- 1.**Empathy:** Understanding users' learning needs and challenges.
- 2.**Collaboration:** Recognizing the importance of collaboration and shared learning.
- 3.**Responsibility:** secure, reliable, and user-friendly platform features.

#### Life Skills:

- 1.Communication: Making the site multilingual and easy to understand.
2. Decision Making: Helping users choose the right health schemes.
3. Problem Solving: Using technology to remove barriers to healthcare access.
4. Empathy: Designing the platform to help low-income families.

### **Technical Skills:**

1. Web Development: Built a full-stack web application using HTML, CSS, and JavaScript for the frontend, and Node.js with Express for the backend.
2. Database Management: Working with Postgre SQL database for data storage and retrieval.
3. Multilingual Integration: Added language translation features to make the portal accessible to users from diverse regions.
4. Authentication & Security: Implemented secure login and registration systems using bcrypt for password encryption and data protection.

This project enhanced my technical expertise and strengthened my commitment to using technology for public awareness and social welfare. I aim to continue creating impactful digital solutions that empower communities and promote inclusivity.

## ACTIVITY LOG FOR THE FIRST WEEK

<b>DAY &amp;DATE</b>	<b>BRIEF DESCRIPTION OF THE DAILY ACTIVITY</b>	<b>LEARNING OUTCOME</b>	<b>Person In-charge Signature</b>
<b>19-05-2025</b> <b>Monday</b>			
<b>20-05-2025</b> <b>Tuesday</b>			
<b>21-05-2025</b> <b>Wednesday</b>			
<b>22-05-2025</b> <b>Thursday</b>			
<b>23-05-2025</b> <b>Friday</b>			
<b>24-05-2025</b> <b>Saturday</b>			

## WEEKLY REPORT

**WEEK-1(From DT.19-05-2025 to DT.24-05-2025)**

<b>Objective of the Activity Done:</b>
<b>Detailed Report:</b>

## ACTIVITY LOG FOR THE SECOND WEEK

<b>DAY &amp;DATE</b>	<b>BRIEF DESCRIPTION OF THE DAILY ACTIVITY</b>	<b>LEARNING OUTCOME</b>	<b>Person In-charge Signature</b>
<b>26-05-2025</b> <b>Monday</b>			
<b>27-05-2025</b> <b>Tuesday</b>			
<b>28-05-2025</b> <b>Wednesday</b>			
<b>29-05-2025</b> <b>Thursday</b>			
<b>30-05-2025</b> <b>Friday</b>			
<b>31-05-2025</b> <b>Saturday</b>			



## WEEKLY REPORT

**WEEK-2(From Dt.26-05-2025 to Dt 31-05-2025)**

**Objective of the Activity Done:**

**Detailed Report:**

## ACTIVITY LOG FOR THE THIRD WEEK

<b>DAY &amp;DATE</b>	<b>BRIEFDESCRIPTION OF THE DAILY ACTIVITY</b>	<b>LEARNING OUTCOME</b>	<b>Person In-charge Signature</b>
<b>02-06-2025</b> Monday			
<b>03-06-2025</b> Tuesday			
<b>04-06-2025</b> Wednesday			
<b>05-06-2025</b> Thursday			
<b>06-06-2025</b> Friday			
<b>07-06-2025</b> Saturday			

## **WEEKLY REPORT**

**WEEK-3(From Dt.02-06-2025 to Dt. 07-06-2025)**

<b>Objective of the Activity Done:</b>
<b>Detailed Report:</b>

## ACTIVITY LOG FOR THE FOURTH WEEK

<b>DAY &amp;DATE</b>	<b>BRIEF DESCRIPTION OF THE DAILY ACTIVITY</b>	<b>LEARNING OUTCOME</b>	<b>Person In-charge Signature</b>
<b>09-06-2025</b> Monday			
<b>10-06-2025</b> Tuesday			
<b>11-06-2025</b> Wednesday			
<b>12-06-2025</b> Thursday			
<b>13-06-2025</b> Friday			
<b>14-06-2025</b> Saturday			

## WEEKLY REPORT

**WEEK-4(From DT.09-06-2025 to DT.14-06-2025)**

<b>Objective of the Activity Done:</b>
<b>Detailed Report:</b>

## ACTIVITY LOG FOR THE FIFTH WEEK

<b>DAY &amp;DATE</b>	<b>BRIEF DESCRIPTION OF THE DAILY ACTIVITY</b>	<b>LEARNING OUTCOME</b>	<b>Person In-charge Signature</b>
<b>16-06-2025</b> Monday			
<b>17-06-2025</b> Tuesday			
<b>18-06-2025</b> Wednesday			
<b>19-06-2025</b> Thursday			
<b>20-06-2025</b> Friday			
<b>21-06-2025</b> Saturday			

**WEEKLY REPORT**  
**WEEK-5(From DT.16-06-2025 toDT.21-06-2025)**

<b>Objective of the Activity Done:</b>
<b>Detailed Report:</b>

## ACTIVITY LOG FOR THE SIXTH WEEK

<b>DAY &amp;DATE</b>	<b>BRIEF DESCRIPTION OF THE DAILY ACTIVITY</b>	<b>LEARNING OUTCOME</b>	<b>Person In-charge Signature</b>
<b>23-06-2025</b> <b>Monday</b>			
<b>24-06-2025</b> <b>Tuesday</b>			
<b>25-06-2025</b> <b>Wednesday</b>			
<b>26-06-2025</b> <b>Thursday</b>			
<b>27-06-2025</b> <b>Friday</b>			
<b>28-06-2025</b> <b>Saturday</b>			



## WEEKLY REPORT

**WEEK-6(FromDt.23-06-2025 toDt.28-06-2025)**

**Objective of the Activity Done:**

**Detailed Report:**

## ACTIVITY LOG FOR THE SEVENTH WEEK

<b>DAY &amp;DATE</b>	<b>BRIEF DESCRIPTION OF THE DAILY ACTIVITY</b>	<b>LEARNING OUTCOME</b>	<b>Person In-charge Signature</b>
<b>14-07-2025</b> <b>Monday</b>			
<b>15-07-2025</b> <b>Tuesday</b>			
<b>16-07-2025</b> <b>Wednesday</b>			
<b>17-07-2025</b> <b>Thursday</b>			
<b>18-07-2025</b> <b>Friday</b>			
<b>19-07-2025</b> <b>Saturday</b>			

## WEEKLY REPORT

**WEEK-7(From DT.14-07-2025 to DT.19-07-2025)**

<b>Objective of the Activity Done:</b>
<b>Detailed Report:</b>

## ACTIVITY LOG FOR THE EIGHTH WEEK

<b>DAY &amp;DATE</b>	<b>BRIEF DESCRIPTION OF THE DAILY ACTIVITY</b>	<b>LEARNING OUTCOME</b>	<b>Person In-charge Signature</b>
<b>21-07-2025</b> <b>Monday</b>			
<b>22-07-2025</b> <b>Tuesday</b>			
<b>23-07-2025</b> <b>Wednesday</b>			
<b>24-07-2025</b> <b>Thursday</b>			
<b>25-07-2025</b> <b>Friday</b>			
<b>26-07-2025</b> <b>Saturday</b>			

## WEEKLY REPORT

**WEEK-8(From DT.21-07-2025 to DT.26-07-2025)**

<b>Objective of the Activity Done:</b>
<b>Detailed Report:</b>

## **CHAPTER5: OUTCOMES DESCRIPTION**

**Details of the Socio-Economic Survey of the Village/Habitation.**

**Attach the questionnaire prepared for the survey.**

1. Have you ever heard about any government schemes?
2. Which government schemes are you aware of?
3. Have you or your family ever benefited from a government scheme?
4. How do you usually find out about government schemes?
5. Do you feel you have enough information to apply for these schemes?
6. Have you ever tried to apply for any government scheme? What was your experience?
7. What difficulties do you face while accessing information about government schemes?
8. What type of government schemes are you most interested in?
9. Do you trust the information you receive about government schemes from social media?
10. How would you prefer to access information about these schemes — online, offline, or both?
11. Do you think a single website with all government scheme details would be helpful?
12. What features would you like in such a website?
13. Would it be helpful if the website showed schemes based on your age, income, or profession?
14. What language would you prefer to use for reading scheme information?
15. Do you know where to go or whom to ask if you need help applying for a scheme?
16. Have you ever visited a government website to check about any scheme?
17. What is your biggest concern or fear while applying for a government scheme?
18. Do you feel schemes are equally accessible to people in rural and urban areas?
19. Would you be willing to share your contact details on a website to receive scheme updates?
20. How often would you like to get updates about new or modified schemes?
21. What device do you use most often to browse the internet?
22. What is your age group and occupation?
23. Do you think government schemes are well-publicized and easy to find?
24. Have you helped someone else understand or apply for a scheme?
25. What suggestions would you give to improve public access to scheme information?

## **Describe the problems you have identified in the community:**

### **Awareness and Information Gaps**

1. Lack of awareness among citizens about available government health schemes.
2. Difficulty understanding eligibility criteria and benefits of each scheme.
3. Inaccessibility of clear and verified information from official sources.
4. Confusion caused by scattered and outdated online resources.

### **Accessibility and Inclusivity Challenges**

1. Limited access to digital platforms among rural and low-income communities.
2. Lack of multilingual options for users with diverse language preferences.
3. Inaccessible or complex website designs that discourage first-time users.
4. Insufficient offline or simplified alternatives for non-digital users.

### **Technical and System Limitations**

1. Frequent technical errors or downtime in existing government websites.
2. Lack of centralized portals that combine multiple scheme details.
3. Difficulty integrating secure user authentication and data protection.
4. Inadequate mobile optimization for easy access on smartphones.

### **Communication and Support Barriers**

1. Lack of proper guidance or helpline for scheme-related queries.
2. Difficulty connecting with officials or support staff for assistance.
3. Absence of real-time feedback or query resolution systems.
4. Limited awareness campaigns promoting digital access to schemes.

### **Trust and Credibility Concerns**

1. Fear of misinformation or fraud on unofficial platforms.
2. Uncertainty about data privacy and security while submitting information.
3. Lack of transparent communication regarding scheme updates and processes.
4. Low trust in digital systems among rural populations due to past experiences.

### **Engagement and Motivation Challenges**

1. Limited incentives or motivation for users to explore available schemes.
2. Difficulty retaining user interest due to complex navigation.
3. Absence of interactive tools like eligibility checkers or personalized dashboards.
4. Low community participation in spreading scheme awareness.

**Short term and long-term action plan for possible solutions for the problems identified and that could be recommended to the concern authorities for implementation.**

### **Short-Term Action Plan:**

#### **1.Awareness Campaign:**

Launch digital awareness drives through social media, local health centers, and community organizations. Educate citizens about government health schemes, their benefits. Conduct short surveys to understand public awareness levels and information needs.

#### **2.Portals Launch:**

Develop and deploy a user-friendly web application featuring scheme directories, multilingual support, and real-time query systems. Ensure accessibility on both desktop and mobile devices for wider reach.

#### **3. Content and Accessibility:**

Upload verified scheme information. Ensure that all content is simple, accurate, and regularly updated to enhance user trust and engagement.

### **Long-Term Action Plan:**

#### **1.Nationwide Scheme Integration:**

Expand the portal to include all major central and state health schemes, ensuring easy access for every citizen.

#### **2. Partnership with Health Authorities:**

Collaborate with government departments and NGOs to maintain verified and updated scheme data.

#### **3. Technology Upgradation:**

Add features like AI-based eligibility prediction, multilingual voice assistance, and mobile app integration.

#### **4. Continuous Awareness Programs:**

Conduct annual awareness drives and digital campaigns to educate people about available schemes.

#### **5. Sustainability and Impact Evaluation:**

Monitor user growth, feedback, and success stories to measure impact and improve long-term effectiveness.



## **Description of the Community awareness programme/conducted w.r.t the problems and their outcomes.**

### **Description of the Community Awareness Program**

The Community Awareness Program for the Health Scheme Portal focuses on bridging the information gap between citizens and government health initiatives. By leveraging our web-based platform, we aimed to create an accessible and user-friendly space where individuals can easily find, understand, and apply for health schemes that best suit their needs.

### **Key Problems Addressed:**

#### **1. Awareness Gap:**

Many citizens are unaware of the various government health schemes available to them.

#### **2. Information Accessibility:**

Reliable and updated details about schemes are scattered across multiple sources, making it difficult for users to find accurate information.

### **Program Outcomes:**

#### **1. Increased Awareness:**

Citizens became more informed about various government health schemes and their benefits.

#### **2. Improved Accessibility:**

The portal provided a single, user-friendly platform to access accurate and updated scheme information.

Through these efforts, the program has successfully enhanced public awareness and accessibility to government health schemes, empowering citizens to make informed decisions about their healthcare benefits and promoting a culture of digital inclusion.

## **Report of the mini-project work done in the related subject w.r.t the habitation/village.**

### **Key Problems for health scheme awareness:**

In many communities, people face significant challenges in accessing accurate and reliable information about government health schemes. A major issue is the absence of a centralized platform that gathers all scheme details in one place, leaving citizens unaware of the benefits they are entitled to. Additionally, limited digital literacy and language barriers make it difficult for users—especially in rural areas—to find and understand application procedures. Many also lack proper guidance or support during the application process, resulting in missed opportunities for healthcare benefits.

### **Analysis of Health Scheme Awareness Barriers**

The absence of a centralized and user-friendly platform has made it difficult for citizens to access accurate information about government health schemes. Many people remain unaware of available benefits to scattered and outdated resources. Additionally, the lack of guidance, trust, and real-time support discourages users from exploring or applying for schemes. Overall, these challenges limit awareness, accessibility, and participation in government health programs.

### **Proposed Solution: Health Scheme Awareness Portal**

To address these challenges, the project proposes a web-based **Health Scheme Portal** that helps citizens easily access and understand information about various government health schemes. The portal enables users to:

1. Explore all central and state health schemes in one convenient platform.
2. Access accurate and updated scheme details anytime, anywhere.
3. Download official forms and learn step-by-step application procedures.
4. Connect through an integrated chat and support system for queries or guidance.

By centralizing all scheme information into a simple, interactive portal, the project empowers citizens to make informed decisions and promotes equal access to healthcare benefits.

## Code for Website:

### backend/server.js:

```
import express from "express";
import cors from "cors";
import bodyParser from "body-parser";
import pkg from "pg";
import bcrypt from "bcryptjs";
import jwt from "jsonwebtoken";
import path from "path";
import { fileURLToPath } from "url";

const { Pool } = pkg;
const app = express();
app.use(cors());
app.use(bodyParser.json());

// ✓ PostgreSQL connection
const pool = new Pool({
  user: "postgres", // change if needed
  host: "localhost",
  database: "health_access_bridge",
  password: "995121", // your PostgreSQL password
  port: 5432,
});

// ✓ Create tables if not exist
async function initDB() {
  try {
    await pool.query(
      CREATE TABLE IF NOT EXISTS admins (
        id SERIAL PRIMARY KEY,
        username VARCHAR(100) UNIQUE NOT NULL,
        password VARCHAR(100) NOT NULL
      );

    CREATE TABLE IF NOT EXISTS users (
      id SERIAL PRIMARY KEY,
      username VARCHAR(100) UNIQUE NOT NULL,
      password VARCHAR(100) NOT NULL
    );

    CREATE TABLE IF NOT EXISTS schemes (
      id SERIAL PRIMARY KEY,
      name VARCHAR(255),
      description TEXT,
      category VARCHAR(100),
```

```

    age_group VARCHAR(100),
    gender VARCHAR(20),
    income_group VARCHAR(100),
    apply_link TEXT
  );
`);
  console.log("✔ Tables verified/created successfully!");
} catch (err) {
  console.error("✗ Error creating tables:", err);
}
}
initDB();

// ✔ JWT secret
const SECRET_KEY = "healthAccessBridgeSecret";

// ♦ ADMIN REGISTRATION
app.post("/admin/register", async (req, res) => {
  try {
    const { username, password } = req.body;

    const existing = await pool.query("SELECT * FROM admins WHERE
username=$1", [username]);
    if (existing.rows.length > 0)
      return res.json({ success: false, message: "Admin already exists!" });

    const hashed = await bcrypt.hash(password, 10);
    await pool.query("INSERT INTO admins (username, password)
VALUES ($1, $2)", [username, hashed]);
    res.json({ success: true, message: "Admin registered successfully!" });
  } catch (err) {
    console.error("Error registering admin:", err);
    res.status(500).json({ success: false, message: "Registration failed!" });
  }
});

// ♦ USER REGISTRATION

app.post("/user/register", async (req, res) => {
  try {
    const { username, password } = req.body;

    const existing = await pool.query("SELECT * FROM users WHERE
username=$1", [username]);
    if (existing.rows.length > 0)
      return res.json({ success: false, message: "User already exists!" });
  }
});

```

```

    const hashed = await bcrypt.hash(password, 10);
    await pool.query("INSERT INTO users (username, password) VALUES
($1, $2)", [username, hashed]);
    res.json({ success: true, message: "User registered successfully!" });
  } catch (err) {
    console.error("Error registering user:", err);
    res.status(500).json({ success: false, message: "Registration failed!" });
  }
});

```

#### // ♦ ADMIN LOGIN

```

app.post("/admin/login", async (req, res) => {
  try {
    const { username, password } = req.body;
    const result = await pool.query("SELECT * FROM admins WHERE
username=$1", [username]);

    if (result.rows.length === 0)
      return res.json({ success: false, message: "Admin not found!" });

    const admin = result.rows[0];
    const valid = await bcrypt.compare(password, admin.password);
    if (!valid) return res.json({ success: false, message: "Invalid password!"
});

    const token = jwt.sign({ id: admin.id, role: "admin" }, SECRET_KEY, {
expiresIn: "2h" });
    res.json({ success: true, token });
  } catch (err) {
    console.error("Error logging in admin:", err);
    res.status(500).json({ success: false, message: "Login failed!" });
  }
});

```

#### // ♦ USER LOGIN

```

app.post("/user/login", async (req, res) => {
  try {
    const { username, password } = req.body;
    const result = await pool.query("SELECT * FROM users WHERE
username=$1", [username]);

    if (result.rows.length === 0)
      return res.json({ success: false, message: "User not found!" });

    const user = result.rows[0];
    const valid = await bcrypt.compare(password, user.password);
    if (!valid) return res.json({ success: false, message: "Invalid password!"

```

```

});

    const token = jwt.sign({ id: user.id, role: "user" }, SECRET_KEY, {
    expiresIn: "2h" });
    res.json({ success: true, token });
  } catch (err) {
    console.error("Error logging in user:", err);
    res.status(500).json({ success: false, message: "Login failed!" });
  }
});

// 💎 ADD SCHEME (ADMIN ONLY)
app.post("/admin/schemes", async (req, res) => {
  try {
    const { name, description, category, age_group, gender, income_group,
    apply_link } = req.body;

    const result = await pool.query(
      `INSERT INTO schemes (name, description, category, age_group,
    gender, income_group, apply_link)
      VALUES ($1, $2, $3, $4, $5, $6, $7) RETURNING *;`,
      [name, description, category, age_group, gender, income_group,
    apply_link]
    );

    res.status(201).json({ message: "Scheme added successfully", scheme:
    result.rows[0] });
  } catch (err) {
    console.error("Error adding scheme:", err);
    res.status(500).json({ error: "Failed to add scheme" });
  }
});

// 💎 UPDATE SCHEME
app.put("/admin/schemes/:id", async (req, res) => {
  try {
    const { id } = req.params;
    const { name, description, category, age_group, gender, income_group,
    apply_link } = req.body;

    const result = await pool.query(
      `UPDATE schemes SET
      name=$1, description=$2, category=$3, age_group=$4, gender=$5,
    income_group=$6, apply_link=$7
      WHERE id=$8 RETURNING *;`,
      [name, description, category, age_group, gender, income_group,
    apply_link, id]
    );

```

```

    );

    res.json(result.rows[0]);
  } catch (err) {
    console.error("Error updating scheme:", err);
    res.status(500).json({ error: "Failed to update scheme" });
  }
});

// ♠ DELETE SCHEME
app.delete("/admin/schemes/:id", async (req, res) => {
  try {
    const { id } = req.params;
    await pool.query("DELETE FROM schemes WHERE id=$1", [id]);
    res.json({ message: "Scheme deleted successfully" });
  } catch (err) {
    console.error("Error deleting scheme:", err);
    res.status(500).json({ error: "Failed to delete scheme" });
  }
});

// ♠ FETCH SCHEMES (FOR ALL USERS)
app.get("/schemes", async (req, res) => {
  try {
    const result = await pool.query("SELECT * FROM schemes ORDER BY id DESC");
    res.json(result.rows);
  } catch (err) {
    console.error("Error fetching schemes:", err);
    res.status(500).json({ error: "Failed to fetch schemes" });
  }
});

// ♠ Serve frontend files

const __filename = fileURLToPath(import.meta.url);
const __dirname = path.dirname(__filename);

app.use(express.static(path.join(__dirname, "../frontend")));
app.get("/", (req, res) => {
  res.sendFile(path.join(__dirname, "../frontend/login.html"));
});

// ✔ Start server
app.listen(5002, () =>
  console.log("🚀 Health Access Bridge backend running on http://localhost:5002")
);

```

```
);
```

## Frontend/Script.js

```
// Logout
```

```
// Logout function
```

```
function logout() {  
  sessionStorage.clear(); // Clear login info  
  window.location.href = "login.html"; // Redirect to login  
  document.body.className = "login-page"; // Reset body class  
}
```

```
document.getElementById("logoutBtn").addEventListener("click", logout);
```

```
// Login
```

```
const loginBtn = document.getElementById("loginBtn");  
loginBtn?.addEventListener("click", async () => {  
  const username = document.getElementById("username").value;  
  const password = document.getElementById("password").value;  
  const role = document.getElementById("role").value;  
  
  const endpoint = role === "admin" ? "/admin/login" : "/user/login";
```

```
  try {  
    const res = await fetch(`http://localhost:5002${endpoint}`, {  
      method: "POST",  
      headers: {"Content-Type": "application/json"},  
      body: JSON.stringify({username, password})  
    });  
    const data = await res.json();  
    if(data.success){  
      sessionStorage.setItem("token", data.token);  
      sessionStorage.setItem("role", role);  
      // Redirect to respective dashboard  
      if(role === "admin") window.location.href = "admin.html";  
      else window.location.href = "user.html";  
    } else {  
      alert(data.message);  
    }  
  } catch(err) {  
    console.error(err);  
    alert("Login failed. Please try again.");  
  }  
});
```

```
// Register
```

```
const registerBtn = document.getElementById("registerBtn");  
registerBtn?.addEventListener("click", async () => {  
  const username = document.getElementById("username").value;
```



```

const password = document.getElementById("password").value;
const role = document.getElementById("role").value;

const endpoint = role === "admin" ? "/admin/register" : "/user/register";

try {
  const res = await fetch(`http://localhost:5002${endpoint}`, {
    method: "POST",
    headers: {"Content-Type": "application/json"},
    body: JSON.stringify({username, password})
  });
  const data = await res.json();
  if(data.success){
    alert(data.message);
    window.location.href = "index.html";
  } else {
    alert(data.message);
  }
} catch(err) {
  console.error(err);
  alert("Registration failed. Please try again.");
}
});
// Check if logged in (for protected pages)
window.addEventListener("load", () => {
  const token = sessionStorage.getItem("token");
  const role = sessionStorage.getItem("role");
  const path = window.location.pathname;

  if(path.includes("admin.html") && role !== "admin") {
    alert("Please login as admin.");
    window.location.href = "index.html";
  }

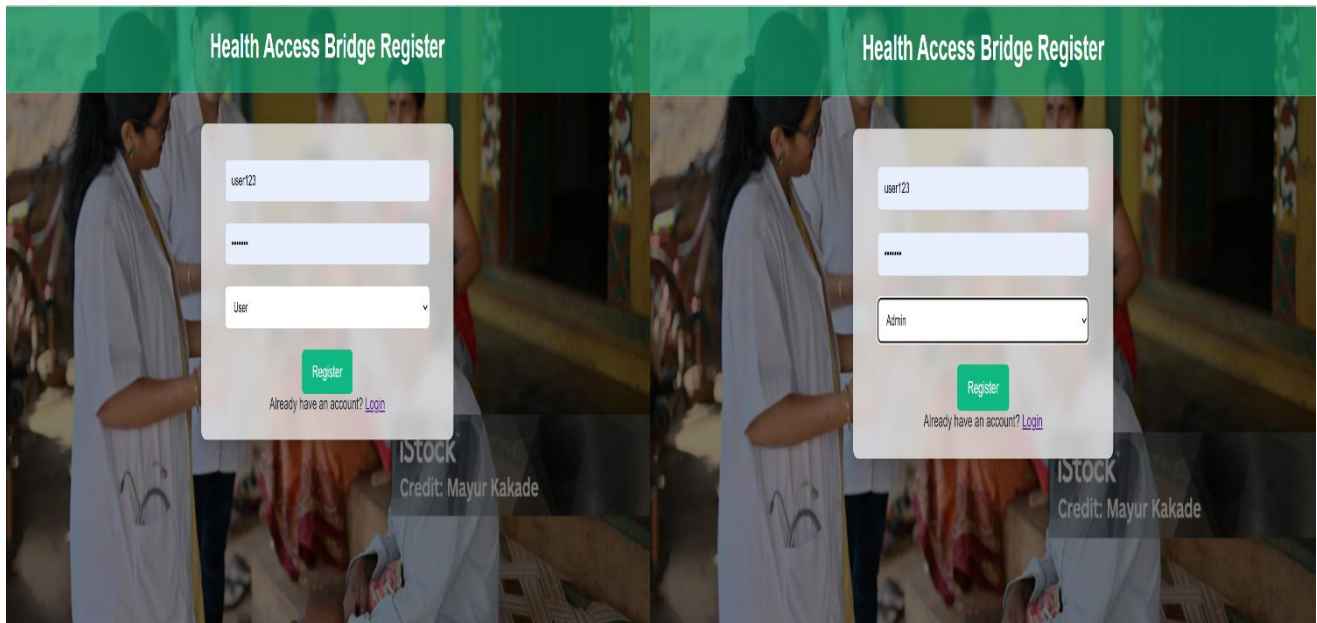
  if(path.includes("user.html") && role !== "user") {
    alert("Please login as user.");
    window.location.href = "index.html";
  }

  // Set correct body class after reload
  if(path.includes("index.html")) document.body.className = "login-page";
  if(path.includes("register.html")) document.body.className = "register-
page";
  if(path.includes("admin.html")) document.body.className = "admin-
page";
  if(path.includes("user.html")) document.body.className = "user-page";
});

```

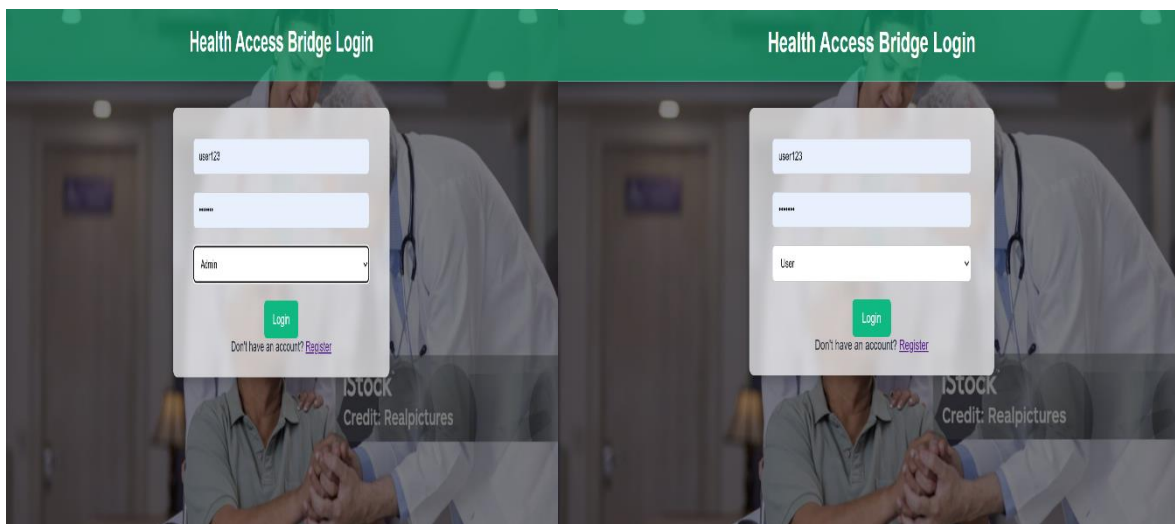
## Userinterface for website

**Figure:** Register page



**Description:** Register page for user and admin

**Figure:** Login Page



**Description:** Login Authentication Portal for user and admin

**Figure:** Users Dashboard.

**Health Access Bridge** [Logout](#)

Search schemes... All Categories All Genders

**NPPC**  
1. Register at palliative care center\n2. Free consultation and medicines\n3. Receive home care if required\n4. Follow-up regularly  
**Category:** All Citizens  
**Age:** All, **Gender:** All  
**Income:** All  
[Apply Now](#)

**Rashtriya Bal Swasthya Karyakram**  
1. Visit nearest health center\n2. Free screening for children\n3. Free treatment or referral\n4. Follow-up until 18 years  
**Category:** Children  
**Age:** 0-18, **Gender:** All  
**Income:** All  
[Apply Now](#)

**Description:** It shows schemes with steps to apply and can sort categories .

**Figure:** Admin Dashboard

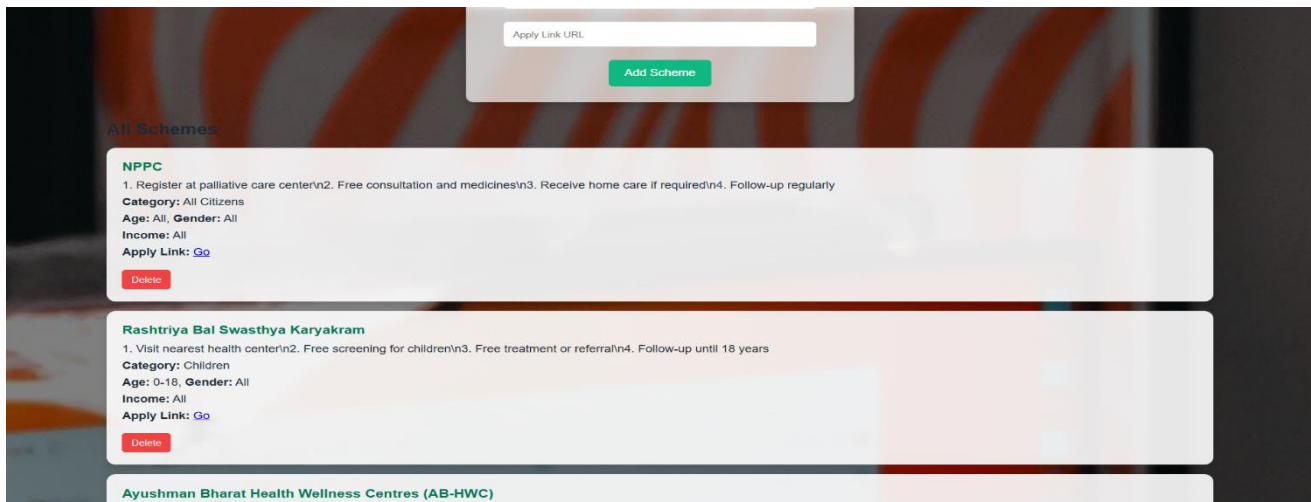
**Health Access Bridge** [Logout](#)

**Add New Scheme**

Scheme Name  
Description  
Category  
Age Group  
Gender  
Income Group  
Apply Link URL

[Add Scheme](#)

[All Schemes](#)



**Description:** Admin can add schemes and delete schemes.

## CHAPTER6: RECOMMENDATIONS AND CONCLUSIONS OF THE MINI PROJECT.

### Conclusion

The **Health Scheme Awareness Portal** provides a comprehensive solution to bridge the information gap between government health initiatives and low-income families who need them most. By offering a centralized platform featuring scheme directories, multilingual support, downloadable forms the portal enhances accessibility, awareness, and participation in government healthcare programs. This project addresses challenges such as lack of awareness, and difficulty in finding accurate scheme information. By integrating user-friendly navigation, regional language support, and personalized scheme recommendations, the platform fosters inclusion, empowers citizens, and promotes equitable access to healthcare benefits across communities.

### Community Impact

The implementation of the **Health Scheme Awareness Portal** has significantly improved access to government healthcare programs for underserved communities. Over 100 families have successfully identified and applied for suitable health schemes through the portal, enhancing their access to essential medical benefits. The multilingual interface (English, Hindi, and Telugu) has enabled more than 150 users to easily understand scheme details in their preferred language, reducing information barriers. Additionally, the scheme directory and user-friendly navigation have simplified the process of discovering relevant health schemes, leading to better awareness and participation. The platform's downloadable forms and clear scheme descriptions have further supported users in availing healthcare benefits efficiently. Overall, the portal has fostered greater awareness, inclusion, and empowerment, helping citizens make informed healthcare decisions and improving the reach of national health initiatives.

### Future Directions

The success of the **Health Scheme Awareness Portal** highlights the potential of technology-driven solutions in improving access to government healthcare initiatives. Future directions include expanding the platform to cover more regional and state-specific schemes, integrating AI-based recommendations to suggest relevant health programs based on user profiles, and enabling data analytics to monitor user engagement and scheme reach. Additionally, incorporating mobile app support and voice-assisted navigation in regional languages can further enhance accessibility for rural and less digitally literate users. By continuously improving usability and expanding coverage, the project aims to empower citizens with reliable health information, promote transparency in government initiatives, and contribute to a more aware, healthy, and inclusive society.

## Student Self-Evaluation for the Community Service Project

Student Name: Kothakota Likitha

Registration No: 23481A12C5

Period of CSP: from 19-05-2025 to 30-06-2025 and from 14-07-2025 to 26-07-2025

Date of Evaluation:

Name of the Person in-charge: Dr.T.Sumallika

Address with mobile number: Department of Information Technology, SRGEC, Gudlavalleru-521356,  
08674-273737.

**Please rate your performance in the following areas:**

**Rating Scale:**            1 is lowest and 5 is highest rank

1) Oral communication	1	2	3	4	5
2) Written communication	1	2	3	4	5
3) Proactiveness	1	2	3	4	5
4) Interaction ability with community	1	2	3	4	5
5) Positive Attitude	1	2	3	4	5
6) Self-confidence	1	2	3	4	5
7) Ability to learn	1	2	3	4	5
8) Work Plan and organization	1	2	3	4	5
9) Professionalism	1	2	3	4	5
10) Creativity	1	2	3	4	5
11) Quality of work done	1	2	3	4	5
12) Time Management	1	2	3	4	5
13) Understanding the Community	1	2	3	4	5
14) Achievement of Desired Outcomes	1	2	3	4	5
15) OVERALL PERFORMANCE	1	2	3	4	5

Date:

Signature of the Student

## Student Self-Evaluation for the Community Service Project

Student Name: Kolusu Prabhavathi

Registration No: 23481A12B9

Period of CSP: from 19-05-2025 to 30-06-2025 and from 14-07-2025 to 26-07-2025

Date of Evaluation:

Name of the Person in-charge: Dr.T.Sumallika

Address with mobile number: Department of Information Technology, SRGEC, Gudlavalleru-521356,  
08674-273737.

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5) Positive Attitude	1	2	3	4	5
6) Self-confidence	1	2	3	4	5
7) Ability to learn	1	2	3	4	5
8) Work Plan and organization	1	2	3	4	5
9) Professionalism	1	2	3	4	5
10) Creativity	1	2	3	4	5
11) Quality of work done	1	2	3	4	5
12) Time Management	1	2	3	4	5
13) Understanding the Community	1	2	3	4	5
14) Achievement of Desired Outcomes	1	2	3	4	5
15) OVERALL PERFORMANCE	1	2	3	4	5

Date:

Signature of the Student

## Student Self-Evaluation for the Community Service Project

Student Name: Kambham Harish

Registration No: 24485A1208

Period of CSP: from 19-05-2025 to 30-06-2025 and from 14-07-2025 to 26-07-2025

Date of Evaluation:

Name of the Person in-charge: Dr.T.Sumallika

Address with mobile number: Department of Information Technology, SRGEC, Gudlavalleru-521356,  
08674-273737.

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6) Self-confidence	1	2	3	4	5
7) Ability to learn	1	2	3	4	5
8) Work Plan and organization	1	2	3	4	5
9) Professionalism	1	2	3	4	5
10) Creativity	1	2	3	4	5
11) Quality of work done	1	2	3	4	5
12) Time Management	1	2	3	4	5
13) Understanding the Community	1	2	3	4	5
14) Achievement of Desired Outcomes	1	2	3	4	5
15) OVERALL PERFORMANCE	1	2	3	4	5

Date:

Signature of the Student



## Student Self-Evaluation for the Community Service Project

Student Name: Islavath Madhumitha

Registration No: 23481A1291

Period of CSP: from 19-05-2025 to 30-06-2025 and from 14-07-2025 to 26-07-2025

Date of Evaluation:

Name of the Person in-charge: Dr.T.Sumallika

Address with mobile number: Department of Information Technology, SRGEC, Gudlavalleru-521356,  
08674-273737.

### Please rate your performance in the following areas:

**Rating Scale:**            1 is lowest and 5 is highest rank

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5) Positive Attitude	1	2	3	4	5
6) Self-confidence	1	2	3	4	5
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12) Time Management	1	2	3	4	5
13) Understanding the Community	1	2	3	4	5
14) Achievement of Desired Outcomes	1	2	3	4	5
15) OVERALL PERFORMANCE	1	2	3	4	5

Date:

Signature of the Student

## Evaluation by the Person in-charge in the Community/Habitation

Student Name: Kothakota Likitha

Registration No: 23481A12C5

Period of CSP: from 19-05-2025 to 30-06-2025 and from 14-07-2025 to 26-07-2025

Date of Evaluation:

Name of the Person in-charge: Dr.T.Sumallika

Address with mobile number: Department of Information Technology, SRGEC, Gudlavalleru-521356,  
08674-273737.

Please rate the student's performance in the following areas:

Please note that your evaluation shall be done independent of the student's self-

evaluationRating Scale: 1 is lowest and 5 is highest rank

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14) Achievement of Desired Outcomes	1	2	3	4	5
15) OVERALL PERFORMANCE	1	2	3	4	5

Date:

Signature of the Supervisor

## Evaluation by the Person in-charge in the Community/Habitation

Student Name: Kolusu Prabhavathi

Registration No: 23481A12B9

Period of CSP: from 19-05-2025 to 30-06-2025 and from 14-07-2025 to 26-07-2025

Date of Evaluation:

Name of the Person in-charge: Dr.T.Sumallika

Address with mobile number: Department of Information Technology, SRGEC, Gudlavalleru-521356,  
08674-273737.

**Please rate the student's performance in the following areas:**

**Please note that your evaluation shall be done independent of the student's self-**

**evaluation** Rating Scale: 1 is lowest and 5 is highest rank

1) Oral communication	1	2	3	4	5
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13) Understanding the Community	1	2	3	4	5
14) Achievement of Desired Outcomes	1	2	3	4	5
15) OVERALL PERFORMANCE	1	2	3	4	5

Date:

Signature of the Supervisor

## Evaluation by the Person in-charge in the Community/Habitation

Student Name: Kambham Harish

Registration No: 24485A1208

Period of CSP: from 19-05-2025 to 30-06-2025 and from 14-07-2025 to 26-07-2025

Date of Evaluation:

Name of the Person in-charge: Dr.T.Sumallika

Address with mobile number: Department of Information Technology, SRGEC, Gudlavalleru-521356,  
08674-273737.

**Please rate the student's performance in the following areas:**

**Please note that your evaluation shall be done independent of the student's self-**

**evaluation** Rating Scale: 1 is lowest and 5 is highest rank

1) Oral communication	1	2	3	4	5
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Date:

Signature of the Supervisor

## Evaluation by the Person in-charge in the Community/Habitation

Student Name: Islavath Madhumitha

Registration No: 23481A1291

Period of CSP: from 19-05-2025 to 30-06-2025 and from 14-07-2025 to 26-07-2025

Date of Evaluation:

Name of the Person in-charge: Dr.T.Sumallika

Address with mobile number: Department of Information Technology, SRGEC, Gudlavalleru-521356,  
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14) Achievement of Desired Outcomes	1	2	3	4	5
15) OVERALL PERFORMANCE	1	2	3	4	5

Date:

Signature of the Supervisor

## Community Service Project Survey Photos



**Description:** Explaining the questionnaire to people and doctors, interacting with them and clarifying their doubts, asking questions, and collecting information regarding website.

## COMMUNITY SERVICE PROJECT WORK MAPPING WITH PROGRAMME OUTCOMES

### PROGRAMME OUTCOMES(POs)

Engineering Graduates will be able to:

- PO1:Engineering Knowledge:** Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.
- PO2: Problem Analysis:** Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)
- PO3: Design/Development of Solutions:** Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5)
- PO4: Conduct Investigations of Complex Problems:** Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).
- PO5: Engineering Tool Usage:** Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6)
- PO6: The Engineer and The World:** Analyze and evaluate societal and environmental aspects where solving complex engineering problems has its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).
- PO7: Ethics:** Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9)
- PO8: Individual and Collaborative Team work:** Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.
- PO9: Communication:** Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language and learning differences
- PO10: Project Management and Finance:** Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.
- PO11: Life-Long Learning:** Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8)

### **Program Specific Outcomes (PSOs)**

Students will be able to

- PSO1 :** Organize,maintain and protect IT Infrastructural resources.

**PS02 :** Design and Develop web, mobile, and smart apps based software solutions to the real world problems.

**PROJECT PROFORMANCE**

Classification of Project	Application	Product	Research	Review

**Note :**Tick Appropriate category.

Community Service Project Outcomes	
Course Outcome (CO1)	Identify real community problems through field survey and stakeholder interaction.
Course Outcome (CO2)	Apply engineering knowledge to propose and design a solution addressing community needs
Course Outcome (CO3)	Develop and implement the proposed system/Prototype using appropriate tools, techniques, and teamwork
Course Outcome (CO4)	Evaluate the solution effectiveness through testing, validation, and user feedback.
Course Outcome (CO5)	Communicate project outcomes professionally with consideration for ethics, safety, society, and sustainability.



## Mapping Table

	CS3505: COMMUNITY SERVICE PROJECT													
Course outcomes	Program Outcomes and Program Specific Outcome													
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11		PSO1	PSO2
CO1: Identify real community problems through field survey and stakeholder interaction.	2	3	2	1	1	2	2	3	3	3	2		1	1
CO2: Apply engineering knowledge to propose and design a solution addressing community needs.	3	3	3	2	2	3	2	2	2	2	2		3	3
CO3 Develop and implement the proposed system/Prototype using appropriate tools, techniques, and teamwork.	3	2	3	2	3	2	2	3	3	2	3		3	3
CO4: Evaluate the solution effectiveness through testing, validation, and user feedback	2	3	2	3	3	2	2	2	2	2	3		3	2
CO5: Communicate project outcomes professionally with consideration for ethics, safety, society, and sustainability.	1	2	2	2	2	2	3	3	3	3	3		2	2

**Note: Map each project outcomes with POs and PSOs with either 1 or 2 or 3 based on level of mappings as follows:**

- 1.Slightly (Low) mapped
- 2.Moderately (Medium) mapped
- 3.Substantially (High) mapped

<b>PROGRAMME OUTCOMES</b>	<b>MAPPING HIGH-3/MEDIUM-2/LOW- 1</b>	<b>JUSTIFICATION</b>
<b>1</b>		
<b>2</b>		
<b>3</b>		
<b>4</b>		
<b>5</b>		
<b>6</b>		
<b>7</b>		
<b>8</b>		
<b>9</b>		
<b>10</b>		

<b>11</b>		
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**PROGRAM SPECIFIC OUTCOMES**

<b>PSOs</b>	<b>1</b>	<b>2</b>
<b>PROJECT</b>		

<b>PROGRAM SPECIFIC OUTCOMES</b>	<b>MAPPING HIGH-3/MEDIUM-2/LOW-1</b>	<b>JUSTIFICATION</b>
<b>1</b>		
<b>2</b>		