

# CAREBRIDGE: Senior Citizen Help Platform

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**Abstract:** *The rapid growth of the elderly population has created an increasing demand for reliable support systems that help senior citizens manage their daily activities. Many elderly individuals face difficulties in performing routine tasks such as purchasing groceries, collecting medicines, or using modern digital technologies due to limited mobility, health conditions, or the absence of immediate family support. These challenges often lead to reduced independence and social isolation among senior citizens. Therefore, there is a growing need for technology-based solutions that can provide convenient and accessible assistance to elderly individuals in their everyday lives.*

*This paper presents a Senior Citizen Help Platform, a web-based system designed to connect senior citizens with nearby volunteers who can provide support for essential services. The platform enables elderly users to register on the system, submit help requests, and receive assistance from volunteers within their community. Volunteers can view available requests and respond by accepting tasks based on their availability. The system also includes administrative features that allow effective management of users and service requests, ensuring that the platform operates efficiently and securely.*

*The proposed system is developed using web technologies and follows the principles of Management Information Systems (MIS) to organize user data, manage service requests, and facilitate communication between senior citizens and volunteers. By providing a centralized digital platform for assistance, the system promotes community participation, improves accessibility to essential services, and enhances the overall quality of life for senior citizens. The implementation of such a platform demonstrates how technology can play a significant role in addressing social challenges and building supportive communities for elderly individuals.*

**Keywords:** Management Information System, Senior Citizen Support, Web Application, Community Assistance, Volunteer Platform, Elderly Care System

## I. INTRODUCTION

### A. Background Study

The number of senior citizens is increasing globally due to improvements in healthcare facilities and longer life expectancy. As people age, they often face several challenges such as reduced mobility, health problems, and difficulty performing everyday tasks. Many elderly individuals live independently or alone, which can make daily activities more difficult to manage without assistance.

Senior citizens frequently require support for routine activities such as purchasing groceries, obtaining medicines, visiting healthcare facilities, or learning to use modern digital devices. Due to physical limitations or lack of nearby family members, these tasks can become challenging. In many cases, elderly individuals also experience social isolation, which can affect their overall well-being and quality of life.

The proposed Senior Citizen Help Platform is a web-based application designed to connect senior citizens with volunteers within their local community. The platform allows elderly users to submit help requests for essential services while volunteers can view these requests and provide assistance based on their availability. By using a digital platform, the system creates a structured and efficient way to manage help requests and volunteer participation.



This system aims to improve accessibility to essential services, promote community engagement, and provide a convenient support system for elderly individuals. By integrating web technologies and management information systems, the platform can help create a supportive environment that enhances the independence and quality of life of senior citizens.

### **B. Problem Statement**

Many senior citizens face difficulties in daily life due to physical limitations, health issues, and lack of nearby family support. They often struggle with tasks such as purchasing groceries and medicines, moving around easily, and getting immediate help for daily activities. Additionally, many elderly individuals experience social isolation. The absence of a centralized platform to request assistance highlights the need for a digital system that can connect senior citizens with volunteers who can provide timely help.

### **C. Objectives of System**

The main objectives of the proposed system are to develop a web-based platform that supports senior citizens and connects elderly individuals with volunteers who are willing to provide assistance. The system aims to offer a simple and user-friendly interface, ensuring ease of use for senior citizens. Additionally, it seeks to encourage and improve community participation through volunteering. Overall, the platform is designed to enhance the quality of life and promote independence among senior citizens.

### **D. Features of System**

The Senior Citizen Help Platform includes several important features that make the system easy and effective to use. It provides a user registration and login system that allows both senior citizens and volunteers to create accounts and access the platform. Senior citizens can submit help requests for their daily needs, while volunteers can view and accept these requests to provide assistance. The platform also includes a request tracking system so users can monitor the status of their requests. Additionally, it offers a user-friendly interface specially designed to be simple and accessible for elderly users. An admin dashboard is also provided to monitor users, manage requests, and ensure the smooth functioning of the system.

## **II. LITERATURE REVIEW**

Several studies have explored the use of technology to improve the quality of life for senior citizens by providing digital support systems and community-based assistance [1]. With the global increase in the aging population, researchers have focused on developing platforms that help elderly individuals perform daily activities and maintain independence [2]. Smart elderly care systems and digital platforms have been proposed to address challenges such as limited mobility, social isolation, and lack of immediate assistance [3]. These systems aim to integrate technology with community support to provide efficient services for elderly individuals.

Ying et al. proposed an Internet-based elderly volunteer service model that integrates volunteer services with digital platforms to improve the availability and efficiency of elderly care services [4]. The study highlights the importance of connecting volunteers and senior citizens through information systems that manage service requests and volunteer participation. The authors emphasized that online platforms can improve the coordination of community resources and provide timely assistance to elderly individuals.

Similarly, research on community-based elderly care platforms has focused on developing systems that support caregivers and older adults through digital services [5]. A study on a web-based care assistant system demonstrated that online platforms can help caregivers share information, manage care tasks, and improve communication between different stakeholders involved in elderly care. The results showed that such systems can reduce the burden on caregivers and improve the accessibility of elderly support services.



Another study proposed a digital elderly care service system based on human-computer interaction technologies to provide personalized and efficient services for elderly users [6]. The research emphasized that interactive digital platforms can enhance elderly care services by improving accessibility and enabling better communication between users and service providers. The findings indicated that elderly users are more likely to adopt digital care systems when they are designed with simple interfaces and user-friendly features.

In addition, recent research has examined the role of online communities and digital support networks in providing assistance to elderly individuals and caregivers [7]. These studies show that web-based support systems can help reduce social isolation and provide convenient access to community resources. Such platforms allow users to share information, request assistance, and receive support from volunteers or caregivers, making them an effective solution for community-based elderly care services.

Although several studies have proposed smart elderly care systems, many existing solutions primarily focus on healthcare monitoring, smart home technologies, or caregiver support systems [8]. There is still a need for a simple and accessible platform that directly connects senior citizens with community volunteers for everyday assistance. The proposed Senior Citizen Help Platform addresses this gap by providing a web-based system that allows elderly individuals to request help for daily tasks while enabling volunteers to provide timely support.

### **III. METHODOLOGY**

The development of the Senior Citizen Help Platform follows a systematic approach based on the Software Development Life Cycle (SDLC). This approach ensures that the system is designed, developed, and implemented in an organized manner. The methodology consists of several phases including requirement analysis, system design, development, testing, and deployment.

#### **A. Requirement Analysis**

The requirement analysis phase focuses on identifying the needs and expectations of the system users. The primary users of the system include senior citizens, volunteers, and administrators. Senior citizens require a simple interface to register and request assistance for daily activities such as grocery shopping, medicine delivery, or technology support. Volunteers require a platform where they can view and respond to help requests based on their availability. The administrator is responsible for managing user accounts, monitoring help requests, and ensuring smooth system operation. The requirements collected during this phase help define the functional and non-functional specifications of the system.

#### **B. System Design**

In the system design phase, the architecture and structure of the platform are developed. The system is divided into several modules, including user registration and authentication, help request management, volunteer response system, and administrative management. A database structure is also designed to store user information, request details, and volunteer responses securely. This phase ensures that the system architecture is well organized, scalable, and capable of handling multiple users efficiently.

#### **C. System Development**

The development phase involves the implementation of the designed system using web technologies. The platform is developed using HTML for webpage structure, CSS for interface design, and JavaScript for interactive functionality. These technologies enable the creation of a responsive and user-friendly interface. The backend system and database components are implemented to manage user data, process help requests, and store system records. The development phase results in a functional prototype of the proposed platform.



#### **D. System Testing**

System testing is performed to ensure that the developed platform operates correctly and meets the specified requirements. Functional testing is conducted to verify that each module, such as registration, request submission, and volunteer response, works properly. Usability testing is also performed to ensure that the interface is simple and easy to use, particularly for senior citizens. Performance testing is carried out to evaluate the system's reliability and responsiveness under different conditions.

#### **E. System Deployment**

The final phase of the methodology is system deployment. In this phase, the developed platform is hosted on an online server, allowing users to access the system through a web browser. Deployment enables real-world usage of the platform by senior citizens and volunteers. After deployment, regular monitoring and maintenance are performed to ensure smooth operation and to incorporate improvements based on user feedback.

### **IV. SYSTEM ARCHITECTURE**

It is the overall structure of a system that defines how different components interact and work together to perform specific functions. The system architecture consists of three major components they are Senior citizen Module, Volunteer Module and Admin Module.

#### **A. Senior Citizen Module**

This module enables elderly users to easily interact with the platform and receive assistance when needed. They can first register on the platform by providing their basic details. After registration, users can submit help requests for tasks such as purchasing groceries, medicines, or other daily needs. The system also allows them to track the status of their requests, ensuring they know when help has been accepted and is being provided.

#### **B. Volunteer Module**

This module enables volunteers to participate in assisting senior citizens through the platform. Volunteers can first register and create their profiles by providing their basic information. After registration, they can view help requests submitted by senior citizens. Based on their availability, volunteers can accept tasks and complete them to provide the required assistance. This module helps connect volunteers with seniors who need support in their daily activities.

#### **C. Admin Module**

This module allows the administrator to manage and control the overall functioning of the platform. The administrator monitors users to ensure proper use of the system. They also manage and oversee help requests submitted by senior citizens and accepted by volunteers. In addition, the administrator is responsible for maintaining system security and handling data management to ensure the platform operates smoothly and safely.

### **V. RESULTS AND DISCUSSION**

The prototype of the Senior Citizen Help Platform demonstrates that digital systems can effectively connect elderly individuals with volunteers in their communities. The platform allows senior citizens to easily request help for their daily needs and receive timely assistance from volunteers who are willing to support them. This helps reduce the difficulties faced by elderly people who may live alone or have limited mobility. The system also encourages community participation and strengthens social engagement by allowing volunteers to actively contribute to helping senior citizens. Through this platform, a supportive environment is created where individuals can assist one another in a structured and organized way. By providing a centralized platform for requesting and offering help, the system improves the efficiency and reliability of support services for elderly individuals. Overall, the platform promotes



independence, safety, and a better quality of life for senior citizens while fostering a sense of responsibility and care within the community.

## VI. CONCLUSION

The Senior Citizen Help Platform provides a practical solution to support elderly individuals in their daily activities. By connecting senior citizens with volunteers through a web-based platform, it allows seniors to easily request help for tasks such as purchasing groceries or medicines. The system also promotes community engagement by encouraging volunteers to assist elderly individuals and provide timely support. This creates a supportive environment where seniors feel cared for and less isolated in their daily lives. Additionally, the platform demonstrates how Management Information Systems (MIS) can help address social challenges and improve the quality of life for senior citizens. It offers a centralized system for managing help requests and volunteer responses efficiently. The platform is designed with a simple and user-friendly interface so that elderly users can easily operate it without difficulty.

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### **BIOGRAPHY**

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