WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Web Platform for Vonluntary Collaboration

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I. INTRODUCTION

The main aim of designing the system is to develop a user-friendly application for volunteers. They can upload their teaching skills, which will help rural people access teaching, medical services, village cleaning, and more based on their interests.

In this application, the admin can log in using their username and password. After successful login, the admin can view volunteer information. Initially, this application allows users and volunteers to register using their basic details through the website. After successful registration, users can log in to the website and view volunteer profile information such as name, skills, location, and contact details. Users can then make booking requests to volunteers. Volunteers can view complete request details after successful login and can confirm or reject requests based on their availability and interest. Users can view the status of their requests, whether accepted or rejected by volunteers, through the website. Finally, users can post feedback to volunteers, which volunteers can view after successful login. The web application has been developed with advanced features to make the system user-friendly and reduce manual work.

1.1 ABOUT THE PROJECT

The concept of volunteering consists of selfless activity that mainly involves an individual or a group of individuals by providing services for the benefit of another group of individuals without any financial profit. It helps in improving the quality of human life and the promotion of goodness. It can be converted in a form that could provide support to the cleanup process, medical teams, setting up homes or a rescue operation. Volunteers are known as people who can willingly offer some services to themselves by taking part in several activities and performing without any payment.

In general cases, volunteers are trained in the areas to provide education, medical aid and emergency rescue. Volunteers allow other people to gain knowledge with new skills, fulfilling one inner soul needs, enhancing their career prospects, connect with the community at large, development of self-esteem and bringing mental satisfaction.

1.2 EXISTING SYSTEM

The existing system used manual operation, where the fund details for the voluntaries are given. Finding appropriate voluntaries and for further information according to the service required is difficult in the existing system. Voluntaries will tend to provide service but it is unaware whether it is true or not.

There are many possibilities for the fake users to take place in sending social-service related messages. The existing system is tedious and time consuming. It also requires handling knowledge and skilled manpower. The maintenance cost with this system is periodical and unavoidable.

1.2.1 DRAWBACKS OF EXISTING SYSTEM

While developing a web platform for voluntary collaboration presents numerous advantages, there are also potential drawbacks to consider:

- **Manual Processes and Paperwork:** The current system involves a significant amount of manual work and paper-based documentation, leading to inefficiencies, errors, and increased workload for users. This reliance on traditional documentation methods can result in time-consuming processes, data inaccuracies, and challenges in managing large volumes of information effectively.
- **Lack of Information Sharing:** Volunteers/providers may not have access to comprehensive patient details within the existing system, leading to gaps in knowledge and potentially compromising the quality of services delivery. This limitation can hinder volunteers' ability to provide tailored assistance and support to patients or individuals in need.

- **Inefficiency and Time Consumption:** The current system is characterized by inefficiencies that contribute to time-consuming processes and reduced overall efficiency. These inefficiencies can lead to delays in service delivery, increased operational costs, and a lack of responsiveness to urgent needs or requests.
- **Difficulty in Finding Appropriate Records:** Users or volunteers may face challenges in locating specific records or information within the existing system due to inadequate search functionalities or disorganized data management. This limitation can impede the quick retrieval of relevant details, affecting decision-making processes and service delivery outcomes.

1.3 PROPOSED SYSTEM

The drawbacks, which are faced during existing system, can be eradicated by using the web application. The main objective of the proposed system is to provide a user-friendly application for user. In proposed system, admin will enter the necessary information regarding the needs for the patient.

Website admin can give approve for service request upload the proof copy with society details etc., after that, the user can register themselves they can view voluntaries available details. After that the user makes request the voluntaries for their requirement for cleaning their home town or education given to the poor children and medical help for the old age peoples into this application. An application will help for admin and the voluntaries providers. People who are ready to give a service to the society people they can easily register this application and make the approve process. It is a user-friendly application anyone can access easily.

1.3.1 ADVANTAGES OF PROPOSED SYSTEM

- **Efficient Administration**: The new system allows the admin to manage and oversee all relevant details effectively. By providing a centralized platform for data management, the admin can easily access, update, and organize information related to volunteers, users, requests, and feedback. This streamlines administrative tasks, enhances decision-making processes, and ensures smooth operation of the program.
- **Time-Saving Search Functionality:** Webpage with improved search features and filters, the new system significantly reduces the time required to find specific information. Volunteers can quickly locate relevant opportunities or requests based on their skills, availability, and location. Similarly, users can easily search for volunteers with the desired skills or services, saving time and effort in connecting with the right individuals.
- **Enhanced Matching Capabilities:** The new system facilitates the efficient matching of volunteers with appropriate needs. By utilizing advanced algorithms or criteria-based matching systems, the platform can suggest suitable volunteers for specific requests or services.

2. SYSTEM SPECIFICATION

A System Requirements Specification (SRS) (also known as a Software Requirements Specification) is a document or set of documentation that describes the features and behavior of a system or software application.

2.1 HARDWARE SPECIFICATION

- CPU type : Intel Pentium 4
- Clock speed : 3.0 GHz
- Ram size : 512 MB
- Hard disk capacity : 40 GB
- Monitor type : 15 Inch color monitor

2.2 SOFTWARE SPECIFICATION

- Operating System : Windows 10
- Language : Asp.net
- Back End : SQL Server
- IDE : Visual Studio 2010

2.3 FRONTEND

ASP.NET OVERVIEW:

ASP.NET is the next version of Active Server Pages (ASP). it is a unified Web development platform that provides the services necessary for developers to build enterprise-class Web applications. While ASP.NET is largely syntax compatible, it also provides a new programming model and infrastructure for more secure, scalable, and stable applications.

ASP.NET is a compiled, NET-based environment, we can author applications in any .NET compatible language, including Visual Basic .NET, C#, and JScript .NET. Additionally, the entire .NET Framework is available to any ASP.NET application. Developers can easily access the benefits of these technologies, which include the managed common language runtime environment (CLR), type safety, inheritance, and so on.

ASP.NET has been designed to work seamlessly with HTML editors and other programming tools, including Microsoft Visual Studio .NET. Not only does this make Web development easier, but it also provides all the benefits that these tools have to offer, including a GUI that developers can use to drop server controls onto a Web page and fully integrated debugging support.

FEATURES AND FRAMEWORKS:

Developers can choose from the following two features when creating an ASP.NET application. Web Forms and Web services, or combine these in any way they see fit. Each is supported by the same infrastructure that allows to use authentication schemes; cache frequently used data, or customizes your application's configuration, to name only a few possibilities.

Web Forms allows us to build powerful forms-based Web pages. When building these pages, that use ASP.NET server controls to create common UI elements, and program them for common tasks. These controls allow to rapidly build a Web Form out of reusable built-in or custom components, simplifying the code of a page.

An XML Web service provides the means to access server functionality remotely. Using Web services, businesses can expose programmatic interfaces to their data or business logic, which in turn can be obtained and manipulated by client and server applications. XML Web services enable the exchange of data in client-server or server-server scenarios, using standards like HTTP and XML messaging to move data across firewalls. XML Web services are not tied to a particular component technology or object-calling convention. As a result, programs written in any language, using any component model, and running on any operating system can access XML Web services

FUNCTIONALITY:

ASP.NET provides a simple model that enables Web developers to write logic that runs at the application level. Developers can write this code in the global.aspx text file or in a compiled class deployed as an assembly. This logic can include application-level events, but developers can easily extend this model to suit the needs of their Web application.

ASP.NET provides easy-to-use application and session-state facilities that are familiar to ASP developers and are readily compatible with all other .NET Framework APIs. ASP.NET offers the IHTTP Handler and IHTTP Module interfaces. Implementing the IHTTP Handler interface gives you a means of interacting with the low-level request and response services of the IIS Web server and provides functionality much like ISAPI extensions, but with a simpler programming model. Implementing the IHTTP Module interface allows you to include custom events that participate in every request made to your application.

BENEFITS:

ASP.NET takes advantage of performance enhancements found in the .NET Framework and common language runtime. Additionally, it has been designed to offer significant performance improvements over ASP and other Web development platforms. All ASP.NET code is compiled, rather than interpreted, which allows early binding, strong typing, and just-in-time (JIT) compilation to native code, to name only a few of its benefits. ASP.NET is also easily factorable, meaning that developers can remove modules (a session module, for instance) that are not relevant to the application they are developing. ASP.NET provides extensive caching services (both built-in services and caching APIs). ASP.NET also ships with performance counters that developers and system administrators can monitor to test new applications and gather metrics on existing applications.BACKEND

SQL SERVER

The OLAP Services feature available in SQL Server version 7.0 is now called SQL Server 2008 Analysis Services. The term OLAP Services has been replaced with the term Analysis Services. Analysis Services also includes a new data mining component. The Repository component available in SQL Server version 7.0 is now called Microsoft SQL Server 2008 Meta Data Services. References to the component now use the term Meta Data Services. The term repository is used only in reference to the repository engine within Meta Data Services

SQL-SERVER 2008 database consist of six types of objects and they are,

1. TABLE

2. QUERY

3. FORM

4. REPORT

5. MACRO

TABLE:

A database is a collection of data about a specific topic.

VIEWS OF TABLE:

The project work with a table in two types,

1. Design View

2. Datasheet View

Design View

To build or modify the structure of a table we work in the table design view. We can specify what kind of data will be hold.

Datasheet View

To add, edit or analyses the data itself we work in tables datasheet view mode.

QUERY

A query is a question that has to be asked the data. Access gathers data that answers the question from one or more table. The data that make up the answer is either dyna-set (if edit it) or a snapshot (it cannot be edited). Each time we run query, we get latest information in the dyna-set. Access either displays the dyna-set or snapshot for us to view or perform an action on it, such as deleting or updating.

FORMS

A form is used to view and edit information in the database record by record. A form displays only the information we want to see in the way we want to see it. Forms use the familiar controls such as textboxes and checkboxes. This makes viewing and entering data easy.

Views of Form:

Work with forms in several primarily there are two views are,

1. Design View

2. Form View

Design View

To build or modify the structure of a form, we work in forms design view. We can add control to the form that are bound to fields in a table or query, includes textboxes, option buttons, graphs and pictures.

Form View

The form view which displays the whole design of the form.

REPORT:

A report is used to vies and print information from the database. The report can ground records into many levels and compute totals and average by checking values from many records at once. And also the report is attractive and distinctive because we have control over the size and appearance of it.

MACRO:

A macro is a set of actions. Each action in macros does something. Such as opening a form or printing a report. Write macros to automate the common tasks the work easy and save

MODULE:

Modules are units of code written in access basic language. We can write and use module to automate and customize the database in very sophisticated way

3. SYSTEM DESIGN

Systems design is the process of defining the architecture, modules, interfaces, and data for a system to satisfy specified requirements. Systems design could be seen as the application of systems theory to product development.

3.1 INPUT DESIGN

Input Design in this application the required pages is created from the registration form, login form and all other forms is designed using the development IDE contains the predefined options such as labels, textbox, and buttons all other required fields into this application.

Input pages are:

1. Register Page
2. Login Page
3. Voluntary Register page

3.2 OUTPUT DESIGN

Outputs are the most important and direct source of information to the customer and application. In this output design after designed the input forms write the coding and connect with database. User given inputs store into the database and page should be navigated to the page is output design. Register page receives the user inputs and stored into the particular table.

The output design was based on the following factors.

- Authority views the user missing certificate requirements and approve.
- Admin view the authority approval and generate the certificate.
- The user view uploaded certificate and downloa

3.3 DATABASE DESIGN

The database design is collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make information access easy, quick, inexpensive and flexible for the user.

In this application we use the database for store all the user inputs into the separate table.

1. Register Table

This Table consists of user register into this application. So that user and authority can login and access the portal

2. Login Table

This Table consists of the admin, user and authority username and password in the login table. So that user and authority can login and access the portal

3. Service Request Table

This Table consists of the user request for the required service for their society details store into the request table. So that admin and authority can view and approve the user request.

4. Voluntary approval Table

This Table consists of the user request for the voluntary service in the request table. So that authority can view and approve the user request.

5. Service Photo Upload Table

This Table consists of the voluntary update the service status and upload in this application. User can download from the database.

4. CONCLUSION

The designed system aims to create a user-friendly platform that connects volunteers with rural communities in need of various services such as teaching, medical assistance, and village cleanliness. By allowing volunteers to showcase their skills and enabling users to easily request assistance based on their needs, the system promotes efficient communication and collaboration.

The inclusion of features like registration, profile viewing, request management, and feedback mechanisms enhances the overall user experience and streamlines the process for both volunteers and users. With a focus on reducing manual work and incorporating advanced functionalities, this web application stands to significantly benefit both volunteers and rural communities by facilitating meaningful connections and improving access to essential services.

BIBLIOGRAPY

Books Referred:

- Roger S Pressman, **"SOFTWARE ENGINNERING",** 2000 Edition, Dream tech Publications
- A. Keyton Weissinger**, "ASP IN A NUTSHELL"**, Shroff Publishers and distributors Pvt. Ltd, February 1999
- A. Russel Jones, "**ASP.NET Complete Reference"**, Sybex Publications, February 18,2002
- **"DATABASE SYSTEM CONCEPTS"**, Henry F. Korth, Megraw-Hill, Third Edition, 1997.
- **"SQL SERVER HIGH AVAILABILITY"**, Paul Bertucci, Sams publishing, First Edition, 2004. [5]. SOFTWARE ENGINEERING CONCEPT, E. Fairly Tata Megraw-Hill Publications, Third Edition, 1997.

WEBSITES:

- http://www.C#corner.net
- http://www.w3schools.com/asp.net
- http://asp.net-tutorial.com
- http://en.wikipedia.org/wiki/asp.net