E-Gram Panchayath

Liji L Chacko¹ and Prof. Redhya M²
Assistant Professor, Department of Computer Applications
Sree Narayana Institute of Technology, Kollam, Kerala, India

Abstract: A student initiative called "E-Gram Panchayath" seeks to modernize and digitize the operations of rural local government entities, particularly gram panchayats in India. The project's objective is to provide a web-based platform that will help gram panchayats carry out their obligations and responsibilities, such as the administration of local development, management of community resources, and provision of public services projects. The platform will offer a variety of functions, such as online complaint forms and a platform for accessing official data and papers, tools for monitoring the progression of requests, and development initiatives. The project's objective is to increase the accountability, openness, and efficiency of gram panchayats as a result of better outcomes for the communities they serve.

Keywords: HTML, CSS, JavaScript

I. INTRODUCTION

The incorporation of technology into many parts of governance has become crucial in the age of digital transformation in order to expedite operations, improve transparency, and guarantee effective service delivery. The "E- Gram Panchayath" project is a comprehensive and creative effort designed to modernize and digitize the operation of rural governance via the use of digital tools and platforms. The goal of this project is to provide a powerful online platform that enables effective management, transparent operations, and seamless communication inside a Gram Panchayat. The project consists of a number of important modules, each of which is geared to address particular duties and responsibilities within the Gram Panchayat framework.[1]

Generally speaking, there are four modules:
1. Secretary
2. Worker
3. User
4. An employee named Asha

We have four logins in this paper: one for the user, one for the Asha worker, and one for the secretary. Project managers may manage users, employees, services, and other resources with the Secretary module. The second module of the project is The Employee. The employee has the ability to add asha workers, validate blogs, complaints, service requests, etc. Another module of the project is the user. User login is possible on the website. Users can check in to the website using their registered user name and password on a secure login page that is provided. The user has access to blogs, a complaint box, service requests, etc. The project's other module is the ash worker. The Asha employee has the ability to add blogs and access both their own and all other material. It uses MongoDB as the database, Node.js and Express.js as the backend, and React as the front end.

II. METHODOLOGY

A approach for methodically resolving the research challenge is called research methodology. The approach the researcher plans to take in order to make consistent scientific proposals is described. A research design is basically a framework for a study that directs data collection and analysis. It is a checklist that is used to finish a study.[2]
Identify the precise administrative duties and responsibilities that the Secretary module should perform, such as document management, record keeping, and communication with other modules. Design the system so that the secretary module's user-friendly interface makes it simple to access functions like data entry and intermodule communication. Implement a reliable database system for managing and storing different types of data, including user records, employment records, and information. Integrate with other modules to make it easier for the Secretary module to share data and communicate with other stakeholders. Information Dissemination: Create a central location where key announcements, rules, and community initiatives can be kept up to date. Implement a system that will allow people to apply online for various services, such as birth certificates and permits, follow their requests' progress, and get notifications. Enable staff to collect and update data relevant to their own tasks, such as maintaining infrastructure or running social welfare programs. Develop resources for Asha employees to gather and maintain health-related data, such as patient records and health indicators.[4]

By following this methodology, the E-Gram Panchayath project can effectively serve the needs of various stakeholders while enhancing transparency, efficiency, and communication within the local community.

III. EXISTING AND PROPOSED SYSTEMS

The current E-Gram Panchayath system is a platform for rural communities to access government services and information. The platform allows villagers to view government schemes, apply for various services, and track the status of their applications. The platform is aimed at improving access to government services and reducing corruption.[3]

Limitations of the Existing System

The following are the drawbacks of the existing system:

- Lack of transparency
- Inefficiency
- Limited access to information
- Limited reach

To overcome the drawbacks on the existing system a new system has to be implemented. In the proposed system, we can include information to educate and inform the people about various health issues and diseases, provide citizens with a comprehensive list of available government schemes and services, enhance user experience.

Advantages and Features of the Proposed System

- Increased efficiency
- Improved transparency
- Comprehensive information
- Improved reach
- Health information

IV. BACKGROUND

Technologies used in this Project:

The MERN stack is a popular combination of technologies used to build web applications. MERN stands for MongoDB, Express.js, React.js, and Node.js. Each component of the stack has a specific role to play in the web application development process. MongoDB is a NoSQL database that is used to store and manage the application data. Express.js is a server-side framework for Node.js that helps in building RESTful APIs and handling HTTP requests. React.js is a front-end framework used for building user interfaces. Node.js is a server-side JavaScript runtime used to build scalable and high-performance applications. [5]
V. RESULTS AND DISCUSSIONS

SCREENSHOTS

Figure 1: Login page

Figure 2: Sign up page

Figure 3: Service Request Page
VI. CONCLUSION

In conclusion, the "E-GRAM PANCHAYATH" initiative has considerably improved rural government through the use of technology and digital platforms. The project's implementation has produced a wide range of advantages and favorable effects for the rural populace as well as the administrative system. The first benefit of the E-Gram Panchayath project is that it has increased the effectiveness and transparency of government services. Through the digitization of numerous procedures and services, it has been possible to do away with red tape, lessen corruption, and provide easier and quicker access to vital services like social welfare programs and birth certificates. The residents' trust in the system has increased as a result, and they have also saved time and effort. Second, the project has made it easier for remote communities to connect and communicate. The development of digital infrastructure, including internet connectivity and computer centers, has made it simple for villages to access information.

In conclusion, the e-Gram Panchayath project has been instrumental in revolutionizing rural governance, empowering villagers, and enhancing the overall quality of life in rural areas.

REFERENCES

[5]. Introduction to system analysis and design; James A Senn