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Village Connectivity

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Abstract: ***The primary objective is to bridge the digital divide by ensuring access to affordable and reliable internet connectivity in rural area. The project aims to enhance economic opportunities in villages by promoting e-commerce, online education and digital services. It seeks to improve the overall quality of life in rural communities by enabling access to information, healthcare and government services.***
The Village Connectivity Project is a comprehensive initiative aim at improving the accessibility and connectivity of remote rural areas.
This documentation outlines the project's objectives, strategies and outcomes. The primary goal is to enhance transportation infrastructure including roads And bridges to link isolated villages with regional centers. Additionally the project emphasizes digital connectivity by providing internet access to underserved communities. Through collaborative efforts with local governments and community stakeholders, this project aims to bridge the urban-rural divide, fostering economic development and improving the quality of life in these villages.
Keywords: Village, Online platform, Connectivity, Emergency service etc.

I. INTRODUCTION

We propose to build a system that can efficiently handle and manage various activities. The main aim of system is to connect rural village to modern communication. Village Connectivity system help bridge the gap between rural and urban area, improving the overall quality of life for those living in these villages. Emergency services are easily accessible through the system during critical situations. Village news, announcement, informed about local events, festival and recently updates from government schemes.
This system provides a user- friendly platform. The website is completely developed in struts framework and it uses the database to store the details of the members another organizational details. Emergency services are easily accessible through the system during critical situations.

II. PROBLEM STATEMENT

This website must be designed to be user- friendly and tailored specifically to the needs and preferences of the rural population.
It should cater to various aspects, including disseminating village news and announcements, offering access to emergency services, supporting agricultural development, enhancing education and skill development, promoting healthcare and wellness, managing waste responsibly, enabling community engagement and simplifying access to government services. The successful development and implementation of Village Connectivity will empower the rural community, creating opportunities for growth, encouraging sustainable practices and fostering a cohesive and thriving environment.

III. OBJECTIVES

1) Provide a comprehensive document that outlines the goals, methods and outcomes of a project aimed at improving transportation and infrastructure in rural areas.
2) Enhancing access to basic services, promoting economic development, or improving the overall quality of life in rural communities.
3) To aware about the facilities to the people who are not aware of modern technique.
4) Provide education on technology that supplements indigenous skills.
5) To understand village history and their culture and also local news and events information.

IV. LITERATURE SURVEY

1) *Rutuja Somwanshi, Utkarsha Shindepatil, Deepali Tule, Archana Mankar, Namdev Ingle. Study and development of villages as a smart village, International Journal of Scientific and Engineering, 2016*

In this paper is being developed for smart village is to collect community efforts and strength of people from various streams and integrate it with information technology to provide benefits to the rural community. This project report deals with study and development of village as a smart village. We define smart village as bundle of services of which are delivered to its residence and businesses in an effective and efficient manner. " Smart Village" is that modern energy access acts as a catalyst for development in education , health, security, productive enterprise, environment that in turns support further improvement in energy access.

2) *Srikanta Patnaik, Siddhartha Sen, Magdi S Mahmoud, Smart Village Technology. Modeling and optimization in Science and Technologies, 2020*

In this paper education, health, information connectivity etc. are the critical dimensions of a 'smart village'. The entire globe today strives for a 'Sustainable Development' agenda that would include smart villages. As the chapter posits, rural-urban migration, and economic vulnerability stemming from unemployment could be prevented by rejuvenating rural infrastructure. The goal of this paper is to discuss various smart village initiatives and technologies to improve the lives of people in the rural areas while respecting their local environment, beginning with the basic or first phase of development in which small technological initiatives can lead to healthier living.

3) *Annepu Yakanna. October, Issues and Challenges of Rural Development in India, Indian Journal of Applied Research, 2017*

This paper discusses the issues and challenges facing the rural areas and suggests ways to overcome these challenges and to create opportunities of gainful self-employment for the rural families, especially disadvantaged sections, ensuring sustainable livelihood, enriched environment, improved quality of life and good human values. This is being achieved through development research, effective use of local resources, extension of appropriate technologies and up gradation of skills and capabilities with community participation. This paper Suggest possible ways to mitigate these problems.

V. EXISTING SYSTEM

In traditional system there was Lack of knowledge related to education, history of village, population and many things. The young generation still doesn't know our culture and history. Some government schemes were not reaching the villages and even if they were, people did not understand them. Generally this system involves focus on enhancing communication, access to essential services and fostering community growth. This system helps to improve quality of for residents in remote villages and also help to understand information about education it useful for students. Village history and culture is in the form of articles, photo galleries, helping residents connect with their root. With the help of this website people automatically know all history of village. Peoples are easily see images of festivals celebrated in village.

VI. PROPOSED SYSTEM

Proposed system provides a solution to existing system by extending its facilities as follows:
We will add some more environment information it helps to protect environment also we add some educational information.
When we get new updates about pulse polio dose, meetings, we will send notification to users. Even if there no water or no light we also send notification to users.

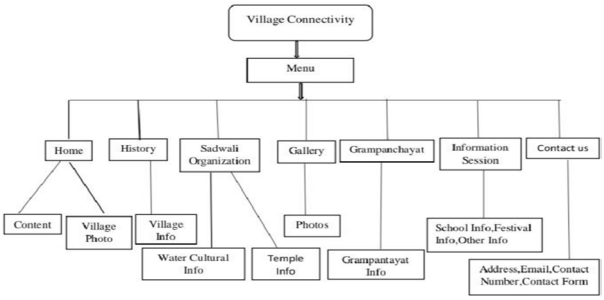


Fig.1. System Architecture

VII. SYSTEM MODULE

1) *User Module:* In this module, we are authenticating the users by providing a username and password. If the username and password are valid then they will be taken to their screen.
2) *Database Module:* The proposed system used MySql as its database because of its simplicity and flexibility. This module stores every single piece of information about users and models their data on specified operations.
3) *Home Module:* In home module there are village photos and some information about village.
4) *History Module:* In this module we provide some information about village history and also information about village.
5) *Sadwali Organization Module:* In this module there is information about water system in village and how water is supplied in the village.
6) *Gallery Module:* In gallery module there are village photos, nature photos, some festival photos and independent photos.
7) *Grampanchayat Module:* Information about grampanchayat, whose members were sarpanch earlier and their photos are given in this module.
8) *Information Session Module:* Information about water system, villages in temples, schools are given in this module.
9) *Contact Us Module:* If people have any problem then they can complain in this section and appropriate decision will be taken.

VIII. SYSTEM FLOWCHART

The system is divided into 2 sub-groups

A. *Flowchart for Admin*

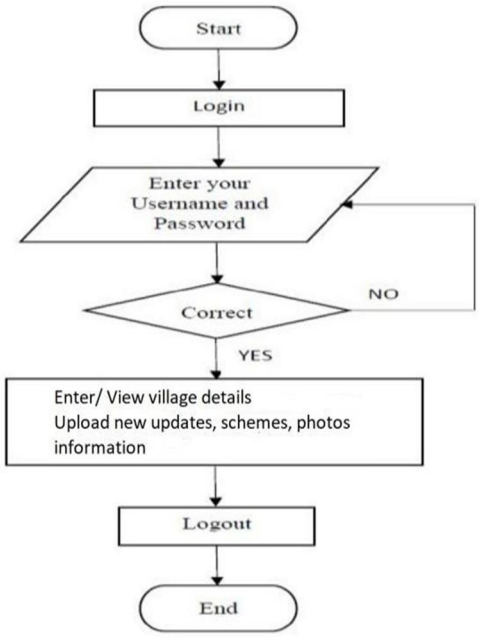


Fig.2. Admin Flowchart

1) *Admin Registration:* The first step in this system is to get the users to register.
2) *Admin Login:* After registering the admin is allowed to log in. He or she can now view the admin homepage where there are options to upload information, upload photos, and send notifications to users.
3) *Update Gallery:* Admin can add pictures to the gallery this image goes to the image gallery. These images are visible to all users.
4) *Send Notification to Users:* Admin can send notifications to users. Notifications related to government schemes, important information, education workshops
5) *Upload Circular:* Through this, a staff cans upload a notice to users. it will make it easy to retrieve important notices like water system or about electricity updates that can be delivered to the users.

B. Flowchart for Students

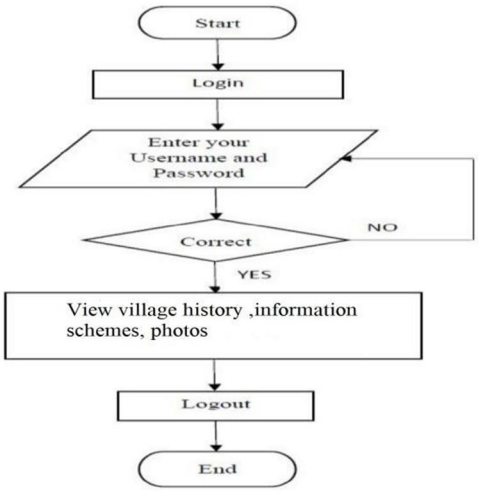


Fig.3. Flowchart for Students

1) View Information: Users can view information uploaded by the admin. They can view it anytime.
2) Communicate: Users can also communicate with admin through contact module in system.
3) View Results: Users can even view history, photos uploaded by the admin.
4) Check the gallery: Images can be seen by users.
5) View the notification sent by the admin: Notification is sent to the users. Useful information, government schemes, and important announcements are received on users registered accounts. They can view it anytime.

IX. ER-MODEL

The model shown below represents the academic functioning of a Website. There are 7 entities, Home, History, Sadwali Organization, Gallery, Grampanchayat, Information Session, Contact us. The entities are related to each other and the relationships are explained below:

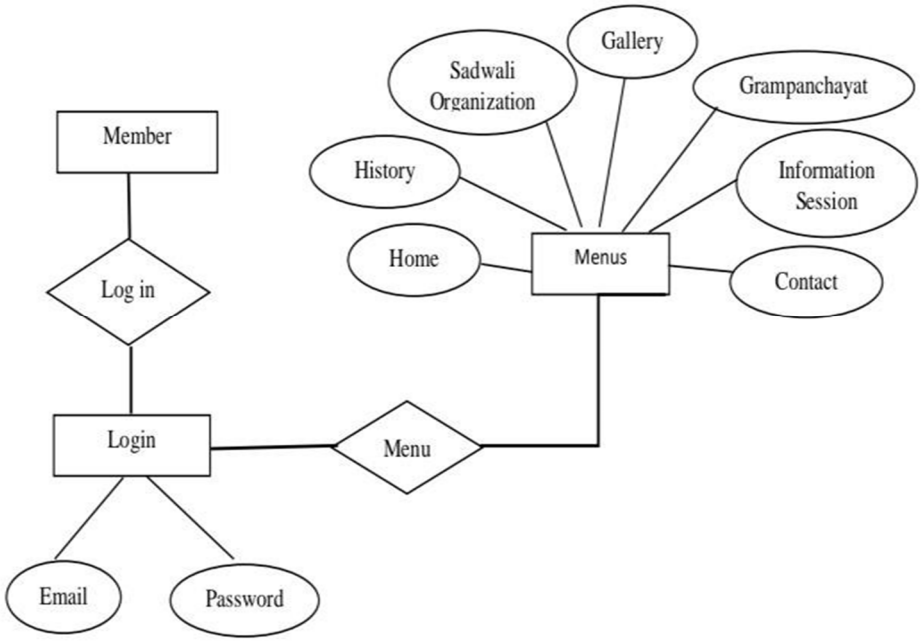


Fig.4. ER Model

X. RESULTS

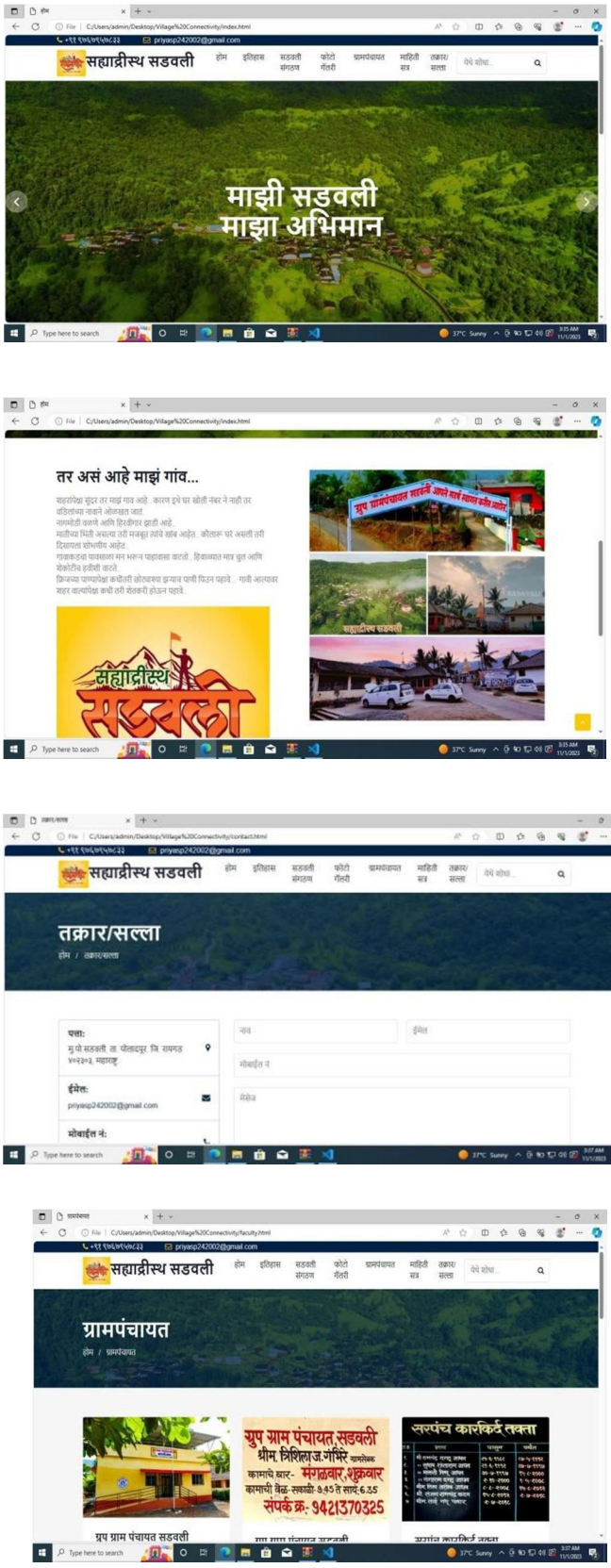


Fig.5. Output results

XI. SCOPE

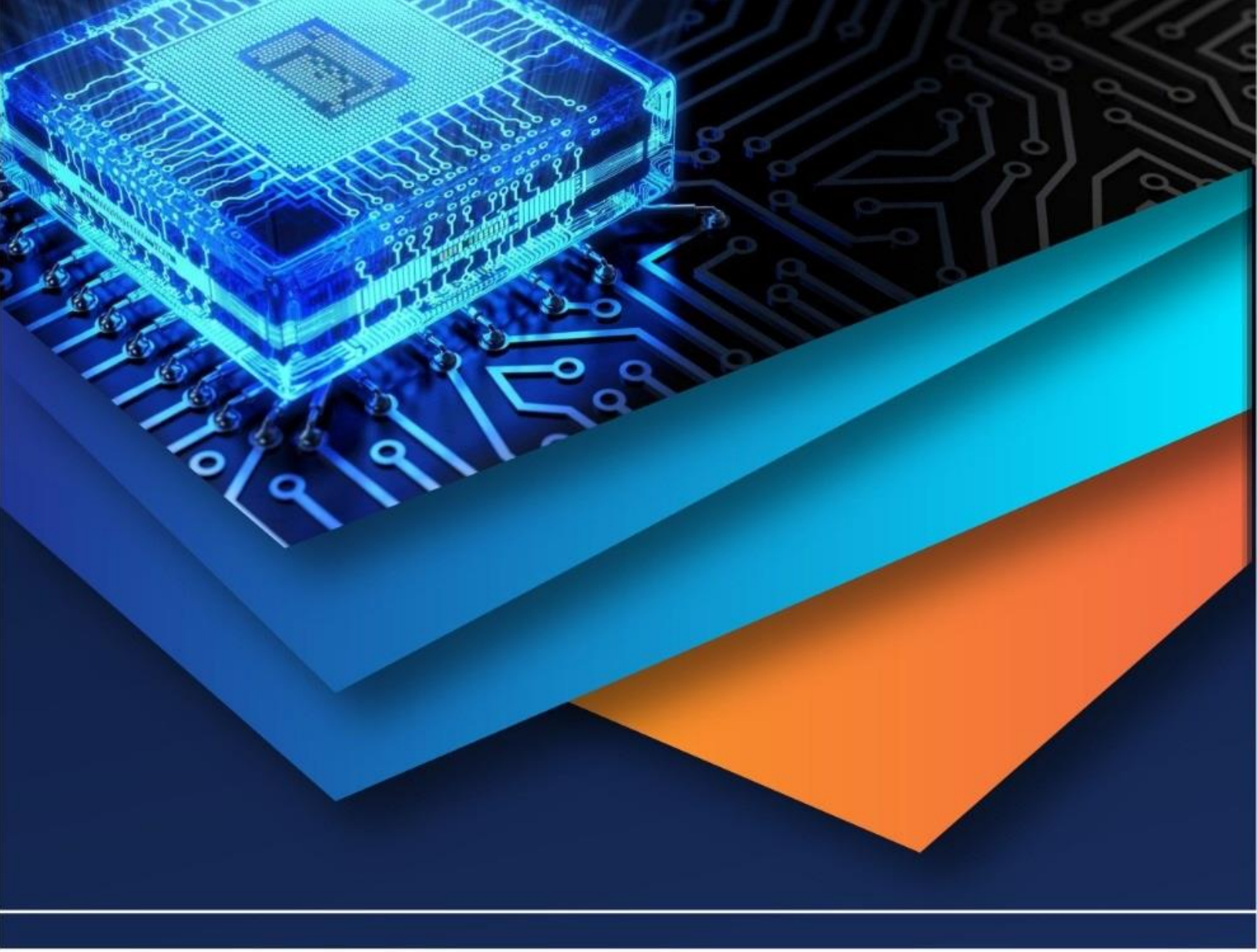
1) Access/ Search information.
2) Login to the system through the first page of the system.
3) View/change some information, photos, and announcements details.
4) An admin login should be present who can read as well as remove any uploads.

XII. CONCLUSION

This paper assists in automating the existing manual system. This is a paperless work. The website offers reliability, time savings and easy control. It can be used as a base for creating and enhancing website for viewing the results, tracking village location. It reduces the man power required. It provides accurate information always. Users will view results, information, announcement and scheme details and notifications using this website anywhere and anytime. This website will greatly simplify and speed up the management process. It provides high security and a system that reduces the work and resources required in traditional process. The data which is stored in the repository helps in taking intelligent decisions by the management. This system is essential in the village.

REEFERENCES

[1] Rutuja Somwanshi, Utkarsha Shindepatil, Deepali Tule, Archana Mankar, Namdev Ingle. Study and development of villages as a smart village, International Journal of Scientific and Engineering, 2016
[2] Srikanta Patnaik, Siddhartha Sen, Magdi S Mahmoud, Smart Village Technology. Modeling and optimization in Science and Technologies, 2020
[3] Annepu Yakanna. October, Issues and Challenges of Rural Development in India, Indian Journal of Applied Research, 2017
[4] Pinak Ranade, Sunil Londhe, Asima Mishra. Smart Villages through information technology -need of emerging India. International Journal of information technology, 2015
[5] Somwanshi R, Shindepatil U, Tule D, Mankar A, Ingle N. Study and development of village as a smart Village,International Journal of Scientific & Engineering Research, 2016.
[6] Bansode AA, Chavan PS, Urunkar DD, Satpute PL, Salunkhe SS, Toraskar AB, et al. June, Research paper on Development of Ahirwadi Village as Smart Village, International Research Journal of Engineering and Technology. 2021
[7] Mirza Danish Beg. January, Smart and sustainable rural development, International Journal of Recent Scientific Research. 2018



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