

E-Gram Panchayat Management System

Sagar Hanumant Totare¹, Priyanka Vasant Ipkal², Poonam Balusing Pardeshi^{3*}, Satish R. Shelar⁴

^{1,2,3}Student, Department of Computer Engineering, Adsuls Technical Campus, Ahmednagar, India

⁴Professor, Department of Computer Engineering, Adsuls Technical Campus, Ahmednagar, India

*Corresponding author: pardeshipb60@gmail.com

Abstract: This project is aimed at the developing an E- Gram Panchayat Management System (EGPMS). EGPMS is an online based application that can be accessed throughout the internet. This System may be used for monitoring gram panchayat activities. Admin as well as body member's logging, it may also access and public can search provided information regarding gram panchayat at any time. The Information about Schemes published by government or any other activities and billing record will be updated by body members and the secure data maintained by only administrator. EGPMS is being developed for maintain and facilitate easy access to information. For this user don't need to be registered. It is user friendly website, only admin has authority to give access or choose login members. EGPMS is an online based application that aims to provide information keep the Records and Documents like birth certificates, death certificates, residential certificates, 7/12 certificates. Any user can access the data and download some information from database and only body members have authority to upload the data.

Keywords: E-Governance, Government-citizen relationships, E-Government, Android application, User friendly, Secured, centralized approach.

1. Introduction

The village Panchayat is the basic local government unit in rural India. Though Panchayat have been in existence for a long period of time, the present system clearly marks off from the past in respect of powers, functions and financial resources.

2. History

The 73rd amendment to the Constitution was passed in 1992 and the Panchayat Raj in India got a constitutional status. The Maharashtra Zilla Parishads and Panchayat Samitis Act were amended in 1994 to be harmonious with the 73rd constitutional amendment. The State Election Commission of Maharashtra was formed in April 1994 to conduct rural and urban local body elections in the State.

Panchayat have now a major role as instruments of rural reconstruction and development. They have been given wider powers and financial resources not only because they are institutions of political participation but institutions of social and economic development. Sometimes, it becomes the joint responsibility of the centre state and local governments to perform certain important functions.

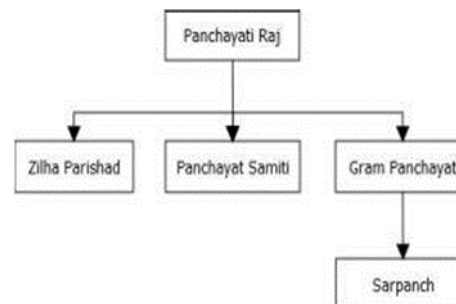


Fig. 1. Structure of Panchayati Raj

There is a growing need of making use of local interest, local knowledge and local participation for the administration of every nation. "There are some functions which can be best performed by local authorities only. Such functions need local attention and adaptation to circumstances. They cannot be standardized on a state or national level". Hence the consolidation and reorganization of local bodies have been felt at all times.

3. Introduction

[1] Ch. Leela Poornima, Ch. Pavani, G. Parameswari, K. Subhash Reddy, "Automation of Gram Panchayat".

Now a day's people in the rural areas have to go to panchayat office in their location to apply and get their certificates provided in that office. It requires a lot of time and may result in work delay. The data in the office has to be maintained manually. There is no security for the data and faults can be encountered during entering the data mainly which require higher calculations. People also face so many problems in their area. They complain to their respective ward members but they may or may not respond quickly. There are many other problems in the present day panchayat raj system. So, the E-panchayat provides solutions to all the problems in the current system.

[2] Amit N. Sangole, S. A. Bhura, "Sustainable Development of Grampanchayat through E-Governance".

E-Governance is system which not only helps Government servants by reducing their unnecessary workload but also helps to the other people those who seeking the services of government. Here Grampanchayat work on the one website which allows Gramsevak work more efficiently. Villager can get transparent and accountable administration. Loss of

government resources and the effort of the villager reduce.

[3] S. D. Dhage, G. A. Ghone, Akash R. Bhojane, Prathamesh B. Thorat, Naim Y. Shaikh, "E-Gram Panchayat Management System."

This project is aimed at the developing an E-Gram panchayat management system. The System (GMS) is an online based application that can be accessed throughout the internet. This System may be used for monitoring gram panchayat activities. Admin as well as body member's logging, it may also access and public can search provided information regarding gram panchayat at any time.

[4] Sonali Jindal, Vinay Ojha "E-Panchayat – A Revolution."

Panchayat is an elected village council in India. The word panchayat means "assembly" (ayat) of five" panch" and raj means "rule". Traditionally these assemblies settled disputes between individuals and between villages. But now to improve the quality of governance of these PRIs has initiated the e-governance scheme known as e-Panchayats. E-panchayat is a functional and dynamic digital platform and working station designed and created for each Panchayat. The main objective of e-panchayat is to empower citizens of every panchayat with bottom up and top down information and content.

[5] M. S. Sawane, Prashik S. Awachar, Saurabh S. Shah, Sushant C. Waghole "E-Gram Panchayat using ICT."

This is the technology generation everyone use internet on mobile as well as computer. Now-a-days in rural area farmers and workers work in farm. This people daily working in farm for earn money that time this people or worker want any document regarding some certificate(Dakhala) for any purpose from gram panchayat. That time these people taking leave from work and and visiting in gram panchayat for the document. It means that day working payment loss. These purpose we are invent one software and android application.

[6] Pooja S Bhagat, Pornima B. Niranjane "Smart e-Governance for Gram panchayat."

Information technology has a vital role to play in all transactions that government undertaken. It helps the government cut red tapism, avoid corruption, and reach citizens directly. Such initiatives will help citizens learn about the various policies, process and help the lives that the government offers. This application will help to maintain all daily transactions which take place in Gram panchayat. This paper provides the application for reducing paper work at Gram panchayat and e-services will give the simple servicing.

[7] Resham Dhillon, Vijay Laxmi "Reaching Rural Population for E-Governance Through E-Panchayat: A Review Paper."

E-panchayat is the lowest tier for rural development. Use of Information Communication Technology (ICT) in e-governance/ e-panchayat is providing fast services to the citizens. These tools make delivery of government services to citizens in transparent and efficiency in effective way. The results of previous studies on E-panchyat show that urban

citizens are taking a lot of benefits from these services in comparison to rural population.

4. Existing System

Now a day's people in the rural areas have to go to panchayat office in their location to apply and get their certificates provided in that office. It requires a lot of time and may result in work delay. The data in the office has to be maintained manually. There is no security for the data and faults can be encountered during entering the data mainly which require higher calculations. People also face so many problems in their area. They complain to their respective ward members but they may or may not respond quickly. There are many other problems in the present day panchayat raj system.

5. Proposed System

E-Gram Panchayat Management System (EGPMS) propose solutions to all the problems in the current system. EGPMS provides online service to the people living in that area. All the services which are done manually are made online in the project. The people can about their panchayat, activities notifications and all other information related their villages. All the applications and certificates are applied and verified online. The users on the people in the village can complain about their problem through online. Suggestions are also accepted from the people for the development of their village. The user can request any application, suggestion, and complaint at anywhere and at any time. The gram panchayat provides birth certificate, death certificate, residential certificates, 7/12 certificates, domicile certificate, receipts for house tax, water tax etc. They give order for construction of road, buildings, renewal of building. They keep records of their monthly & yearly budge.

6. System Architecture

1) Web application

The proposed web application can use admin and user for the operations to be performed. It used to send notification through firebase from client to admin and admin to client. Web application produces all taxes records in the database. This system uses to send document for a client.

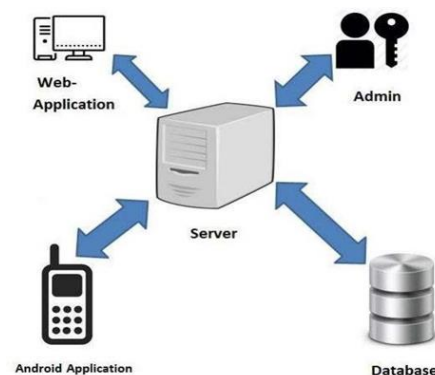


Fig. 2. Architecture diagram

2) Server

Server is helps store the data globally. In this System we are using SQL Server 2008 R2. It is three tier architecture.

3) Android Application

In android application as well as web application, we can register or sign up with our email, password and mobile number. Each user can apply online documents in web application and android application such as birth certificate, living certificate, income certificate etc.

4) Database

Database handlers create database in such a way that only one set of software program provide access of data to all the users. This System uses SQL Server 2008 R2 for storing the data. In android application, the system uses Fire base console to store the data in cloud. Firebase console is Google free service; we can use the cloud as the database.

A. Modules

- Module 1: In android application as well as web application, we can register or sign up with our email, password and mobile number.
- Module 2: The user will get welcoming mail from our website. Then the user can login with email id and password. Later user will get all the necessary information about village.
- Module 3: User can watch what are the current schemes running in village and all details about village such as sarpanch contact number and other committee members number and photos of village.
- Module 4: all the request of the farmer or people admin can handle, admin has an authority to check farmer's details by their aadhar card number.
- Module 5: Admin can see farmer's pending home tax and water tax, if it is nil then only farmer can get their document.
- Module 6: Each user can apply online documents such as birth certificate, living certificate, income certificate etc.

B. Scope

- In the rural area.
- When user outside the village and his require document then he can apply online.
- Maintain the huge data and paper

7. Results

E-Governance for panchayat provides online services to the people living in that panchayat. It helps for the people in that area to easily complete their work which involves the action of authority of the panchayat people.

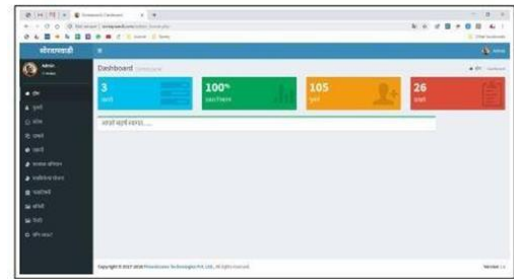


Fig. 3. Home Page (Dashboard)

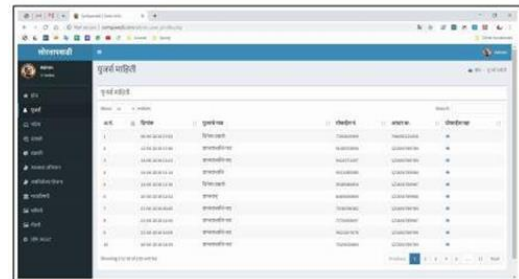


Fig. 4. Users Information

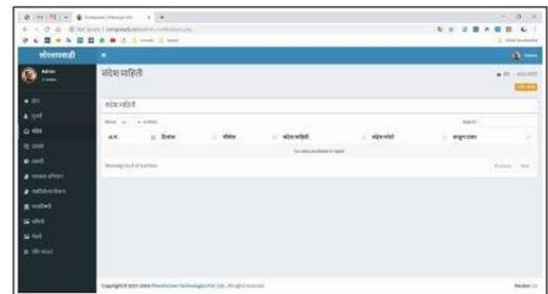


Fig. 5. Message Information

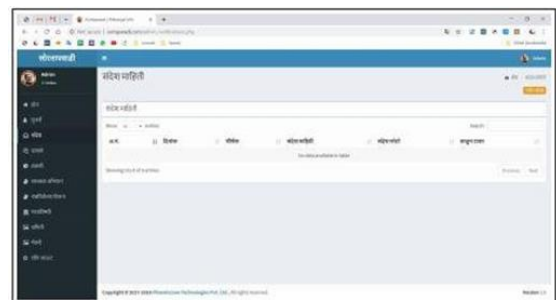


Fig. 6. Certificate Information

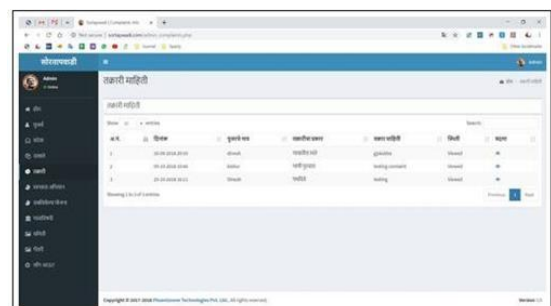


Fig. 7. Complaint Information

8. Conclusion

E-Governance for panchayat provides online services to the people living in that panchayat. It helps for the people in that area to easily complete their work which involves the action of authority of the panchayat people. As everything is made online people can request their applications from anywhere at any time.

References

- [1] Ch. Leela Poornima, Ch. Pavani, G. Parameswari, K. Subhash Reddy, "Automation of Gram Panchayat", International Journal of Emerging Trends in Engineering Research, 2016.
- [2] Amit N. Sangole, S. A. Bhura, "Sustainable Development of Grampanchayat through E-Governance", International Journal of Computer Science and Information Technologies, 2016.
- [3] S. D. Dhage, G. A. Ghone, Akash R. Bhojane, Prathamesh B. Thorat, Naim Y. Shaikh, "E-Gram Panchayat Management System", International Journal for Scientific Research & Development, 2018.
- [4] Sonali Jindal, Vinay Ojha "E-Panchayat – A Revolution," International Journal of Science Technology and Management, 2017.
- [5] M. S. Sawane, Prashik S. Awachar, Saurabh S. Shah, Sushant C. Waghole "E-Gram Panchayat using ICT," International Journal for Scientific Development & Research, 2019.
- [6] Pooja S. Bhagat, Pornima B. Niranjane, "Smart E- Governance for Grampanchayat," International Journal of Scientific & Engineering Research, 2013.
- [7] Resham Dhillon, and Vijay Laxmi "Reaching Rural Population for E-Governance Through E-Panchayat: A Review Paper," International Journal of Computer Science and Technology, 2014.