

International Journal of Advanced Research in Computer and Communication Engineering

Vol. 10, Issue 7, July 2021 DOI 10.17148/IJARCCE.2021.10745

VILLAGE MANAGEMENT SYSTEM

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Abstract: Village management system is the project which deals with the day-today activities of the villagers. The villagers find it difficult to adapt themselves to "Digital India" so, the project helps the villagers survive in the developing world. The web application is a time constraint application which saves the time of the villagers in doing day-to-day activities. Village management system is the management of activities done by the village panchayat board such as payment system of domestic taxes like water tax, residence tax, Mahatma Gandhi 100-days work scheme management(100 naal velai thittam) and Women's Self-Help Groups(Magalir Suya Udhavi Kuzhu) i.e SHG's. A successful implementation of the Village Management System helps the villagers as well as the Panchayat staffs in maintaining and easy access of their information.

Keywords: Self Help Group (SHG), Unified Payment Interface (UPI)

I. INTRODUCTION

In India there are 6,00,000 villages out of them 1,25,000 villages are backward so there is a need for designing and building the village as a smart village. With modernization and urbanization people migrate from one place to another place for different facilities such as education, employment and affinity of people towards locality or city. Village is main criteria for development of nation. Villagers have no sufficient knowledge about Digital India. To overcome from this problem and to help villagers it is possible to make web application from them to know all important information through web application.

This web application consists of various features like Paying residence tax, water tax, Mahatma Gandhi 100days work scheme management, Village Pachayat Meeting conduction and schedule, finally women's self-help group called "MagalirSuyaUdhaviKuzhu" management.

The web application is designed with catchy layouts filled with some attractive colours. It allows the Villagers of a specific District login and view their details which is held by the Panchayat Board. Previously in the Mahatma Gandhi 100-days work scheme, there would be some crimes or other illegal activities involved but in this web application all those activities could be avoided as everything is done online. This section includes the daily attendance of the workers and their wages regularly.

There are 6.96L SHG's including 103.32L women in Tamil Nadu. Government is providing various funds and schemes for the active Women's self-help group. By digitalising the women's self-help group management, lakhs of poor women would be actively participating in the SHG's not only in availing loans but also in the development of the village they are residing. This web application includes the schemes which can be availed by the SHG's and the availed schemes by the women of a specific village individually.

The Grama Sabha is the grass root level democratic institution in each Village Panchayat. A vibrant Grama Sabha is essential for the effective functioning of Village Panchayats by promoting transparency and accountability in administration, enhancing public participation in the planning and implementation of schemes and in the choice of beneficiaries, and paving the way for social audit. The Government have ordered the conduct of Grama Sabha meetings a minimum of four times a year i.e. on 26th January, 1st May, 15th August and 2nd October. The discussions done in the meeting would be uploaded in this web application.

The last section in this project is tax payment system. The village-hold taxes like water tax, residence tax could be paid online through secure payment gateway.

II. ANALYSIS

OBJECTIVE

The project will focus on development trend, intensity of growth of the village, and find out the problems related to the Socio-Cultural or physical development of the area.

- The villagers will be able to make the best use of time instead standing of a queue in the VAO office to pay the tax.
- Women would be actively participating in the women's self-help group programs even when doing their dayto-day works.
- The scandals could be avoided as everything would be digitalised in Mahatma Gandhi 100 days work scheme.



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SCOPE

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- This project is far worth that, it can be installed in every village in India to achieve the goal "Digital India"
- The "Mahatma Gandhi 100-days work scheme section" has a vast scope that the villagers and workers can easily be updated with their wages and their attendance. So there would be no crimes involved.
- This project has also advantages for the Village Panchayat staffs in maintaining and managing all the villagehold data.
- As this is a digitalised project, this would be welcomed by the village administration and the Government in order to avoid the easy spread of the virus.

SYSTEM ANALYSIS

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Problem Definition

1. To implement and design a web application which could be a massive solution for the villagers in the aspects of their lifestyle, modernism, and their progress towards the digitalisation of the villages.

2. To develop a great user interface (UI) between the villagers and the Panchayat Staffs in order to achieve a user friendly web application.

Existing system

Payment of domestic taxes like water tax, residence tax does only exist for the cities and not for the villages. People need to go VAO office, stand in a queue for a long period of time to pay their taxes or the Panchayat staffs would be collecting the taxes by visiting the houses individually which is more dangerous for both villagers and the staffs in this infectious situation. There is no online portal for the Mahatma Gandhi 100-days workers to check their attendance and their wages updation online. These activities are done manually by a Panchayat staff. For the women's SHG's, the schemes the details of participation and performance of the SHG's and other details of the women participating in the SHG's are present

Proposed system

The project would be a successful project that it is a great web application for the villagers. The implementation of the domestic tax payment system is a great advantage. The members of Women Self Help Groups would be able to login to the web application and view their details by creating an account with the details of the SHG. They would be able to actively participate and contribute to the development of their groups and the village online. In Mahatma Gandhi 100-days work scheme, the workers would be very much excited to know of their attendance and their wages updation status online. They also would be able to login to the application by their card number which will be already updated to the database by the Panchayat staffs.

III.SYSTEM DESIGN

Village management system is the project which deals with the day-today activities of the villagers. The villagers find it difficult to adapt themselves to "Digital India" so, the project helps the villagers survive in the developing world. The web application is a time constraint application which saves the time of the villagers in doing day-to-day activities. Village management system is the management of activities done by the village panchayat board such as payment system of domestic taxes like water tax, residence tax, Mahatma Gandhi 100-days work scheme management(100

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Fig 1: Overall System Design

IV.MODULES

- 1. Mahatma Gandhi 100 days work scheme
- 2. Women's Self Help Group
- 3. Tax payment system

1.Mahatma Gandhi 100 days work scheme

In this module, the user needs to create an account to get accessed to the particular section. If the user is already registered to the section, he/she can prevail in the section else they will be asked to register themselves to the application. After logging in to the section, the user can view their attendance, salary details, funds and schemes provided by the government. If any changes occurred, they can intimate or contact the admin. If any updation regarding their 100-days work scheme card, they can approach the admin. They can choose to get the attendance confirmation through their registered mobile number or registered mail id. If they don't get any message they can contact the admin.

2. Women's Self Help Group

In this module, first the user needs to create an account to enter into the section. If the user is already registered with an account, he/she can just login to their account. After logging in the user can choose any section from the sets of sections available. This module consists of many sub sections like organization, administration, project, contact details and events. If the user chooses project section, he/she will be able to see the active projects like MagalirSangam, NRLM, skills improvement training which are been carried out by the Women's self-help group. There are more sections like schemes section in which there are many schemes like agriculture, tailoring, vermin culture, back yard poultry, handicrafts and driving. The group will train the new members in all these fields and will also provide loan to go through the particular scheme. The user can navigate through the module and choose the different sub sections like Events in which the details of the new and upcoming events based on the women's self- 28 help group will be displayed. After accomplishing their tasks, they can choose to log out the system.

3. Tax payment system

The user need to login to their account with the credentials provided by the village panchayat. They need to check the status of the tax whether they have paid or not. If they have not paid the tax, they can choose to pay the tax online by selecting the mode of payment they desire. The payment mode includes credit/debit card payment, UPI, paytm, internet banking, paypal. If they choose to pay via credit/debit card, they must enter their card details. If they wish to save those card details for the next transaction, they can choose to save. If the payment mode is UPI/paytm/paypal, they would be redirected to the payment page. If internet banking is the option of payment mode they will be redirected to their respective bank page to pay. After paying the tax, they can log out of the system.

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V.RESULTS AND DISCUSSION

The result analysis was carried out by comparing the services provided in existing and proposed system. Services like tax payment, Mahatma Gandhi 100- days work scheme, Women's self-help group and the time taken to deal with the user services were taken into consideration. It is seen that the problems in the existing system is avoided in the proposed system. The works which included paper works are neglected which was the time consuming process which in turn would help the people make the best use of time.

VI. CONCLUSION

Village Management using web application guarantees that the time constraint problems faced in real life can be overcome by using online payment system, it also provides good security features and also helps to improve the standard of living of the villagers by introducing them to the digital India.

REFERENCES

- [1]. 1. S. Daniel, M.A.Doran (2013). Geo Smart City : Geomatrics Contribution to the Smart City, In: The 14th ACM Annual International Conference on Digital Government Research, Pp. 65-71.
- [2]. R.Heeks(2002).Information Systems and Developing Countries: Failure, Success, and Local Improvisations. The Information Society, pp 101-112.
- [3]. M.Vesisenaho and E.Sutinen (2010). Smart Morning in an African Village: Diversifying Technologies within a Tanzanian Context. International Journal of Media, Technology and Lifelong Learning.
- [4]. Xun,LI(2008). Bottom-up: new features of socialist new village construction. Journal of City Planning Review, 2008-12.
- [5]. V. Sharma, V.Mansotra and F.S.Sambyal(2009). Computer Science and Information Technology, ICCSIT 2009.2 nd IEEE International Conference on Date8-11 Aug 2009