

EGRAMAM

PROJECT GUIDE

SREEREKHA V.K

AISWARIYA K

TVE20MCA-2003

INTRODUCTION

- E-Gramam is a system for automating the various services, functions and management activities within a particular village.
- A village is the most basic sector of the hierarchical governance and therefore there are only few areas that is concerned to be managed online while the majority of rest of the services not very well taken care of.
- This system aims to address the difficulties arises during the manual processing of every aspect of panchayath services to citizens and tries to make it more efficient, reliable, convenient and fast.

PROBLEM DEFINITION AND MOTIVATION

- People in local areas of a village are not often properly and timely informed about various government projects, benefits, and other valuable informations.
- Using this system we can collect and organise the records in a common platform , from all parts of the village ensuring its confidentiality and use the data to identify the people who are most eligible for particular benefits and to maintain an accurate statistics of the financial background and living standard.
- The problems of some of the marginalised sections of the society are not yet fully addressed due to the lack of prior and reliable knowledge, This system can be used to collect true data that depicts the actual living standard and help to implement various plans to upgrade the living standard.

EXISTING SYSTEM

- The existing system is very much manual. There is no complete online solution to collect and handle the data of a village and process it accordingly.
- The people live in remote areas are not often able to do all the clerical works on time and they may be unable to register with the local self governance to avail the benefits they deserve.
- Managing the data on paper for various purpose may compromise the confidentiality of the data.
- The private online service centres are the another way for helping the process. But it can not be considered as a complete solution as it is not cost effective and convenient for local people.

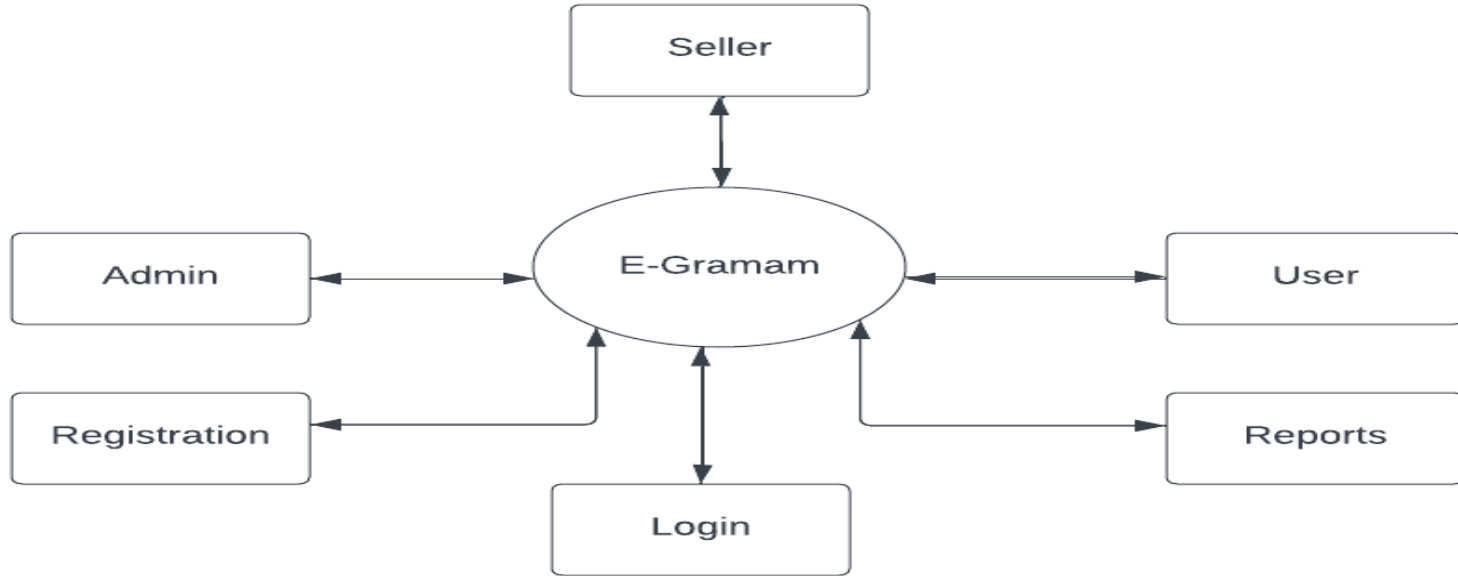
PROPOSED SYSTEM

- The proposed system tries to reduce the human intervention during the handling of the data of the people within a particular village.
- Data can be added by the people themselves ensuring its correctness and they will only be responsible for the correctness.
- It saves a lot of time to register with the system and it can be done anytime from anywhere.
- Proposed system handle data in a more organised way helping authorities and common users to access and process it more easily

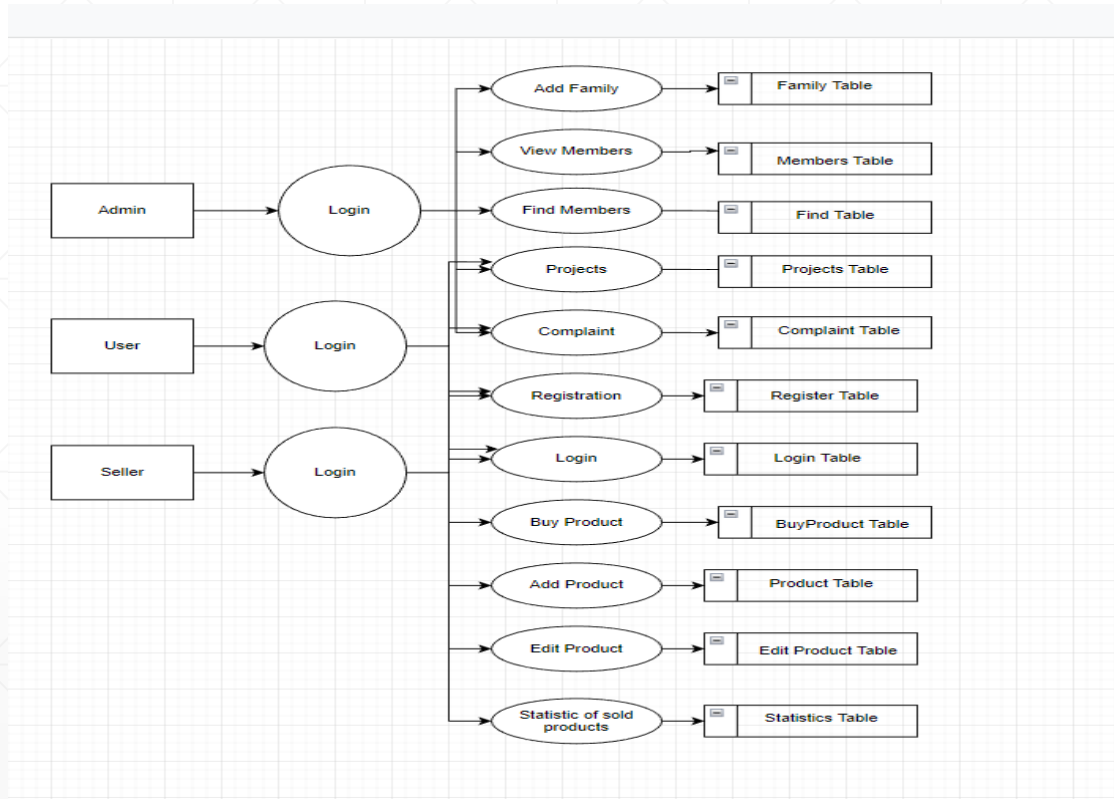
SYSTEM DESIGN

DATA FLOW DIAGRAM

- LEVEL 0 DFD



- LEVEL-1 DFD



1. ADMIN

Admin is the user of the system who has an overall control of the operations. Admin perform the actions like,

- Adding families.
- View the complaints put forward by user.
- Sort the people based on different parameters.
- Add new members
- Declare new projects

2. USER

Users are the common folk who make use of the system. They can,

- User can store their basic details and register in the system.
- User will be informed about all the operations on time .
- User can ask their queries and concerns to higher officials using complaint form.

3. SELLER

Seller is another kind of user who can register in the E-Gramam system in order to make the trading related operations online which help to implement an e commerce in that particular village,

- Add the products he wish to sell and its quantity.
- Add the details of the product to be sold.
- Edit the details and quantity of the product and update it based on the varying amount of stock.
- Specify the count and the statistics of the products purchased for the users to identify the demand and overall rating of the product.

IMPLEMENTATION

TECHNOLOGIES USED

- **FRONT END: FLUTTER**

- ❑ Flutter is a software development kit with prewritten code consisting of ready to use and customizable widgets as well as libraries and documentation that together serve to build cross platform apps.

- **BACKEND: FIREBASE**

- ❑ Firebase is a Backend-as-a-Service (Baas).
- ❑ It provides developers with a variety of tools and services to help them develop quality apps, grow their user base, and earn profit.
- ❑ It is built on Google's infrastructure.
- ❑ Firebase is categorized as a NoSQL database program, which stores data in JSON-like documents.

- **LANGUAGE: DART**

- ☐ Dart is a client-optimized programming language for apps on multiple platforms.
- ☐ It is developed by Google and is used to build mobile, desktop, server, and web applications.

- **IDE: ANDROID STUDIO**

- ☐ Android studio is the recommended IDE for the flutter app development.
- ☐ It provides code completion, syntax highlighting, widget editing assists, run and debug support, and more.
- ☐ There is a browser-dev-tools style inspector.

TESTING

Different methods for testing the apps are,

- **Functional Testing**

Procedure	Result
The application installs and launches correctly.	Pass
The users can sign up and login	Pass
Text boxes and buttons work properly	Pass
Push notifications render correctly	pass

- **Compatibility testing**

Procedure	Result
The app is compatible with different operating systems and their various versions	yes
The app performs well with varying networks and their parameters	yes
The app is compatible with different browsers	yes
The app is compatible with different devices (screen size, data storage)	yes

- **Performance Testing**

Procedure	Result
Device performance	Good
Network performance	Good
API/Service performance	Good

- **Usability testing**

Procedure	Result
Layout and design	Good
Intuitive	Good
Response time	Good

SCREENSHOTS

1.Home page



2. Admin Dashboard



3. Add Family

Emergency calls 0... 92% 10:23

← **Add Family**

Area

Name

Phone

House Name

House Number

Category

Ration card? ☐

Emergency calls 0... 92% 10:23

← **Add Family**

Do you have own house? ☐

NO

Do you have toilet facility? ☐

Do you have drinking water facility? ☐

Is road available? ☐

Is electricity available? ☐

Have useless water resource? ☐

Do you have land? ☐

NO

Do you have domestic animal? ☐

NO

Submit

4.Edit Family

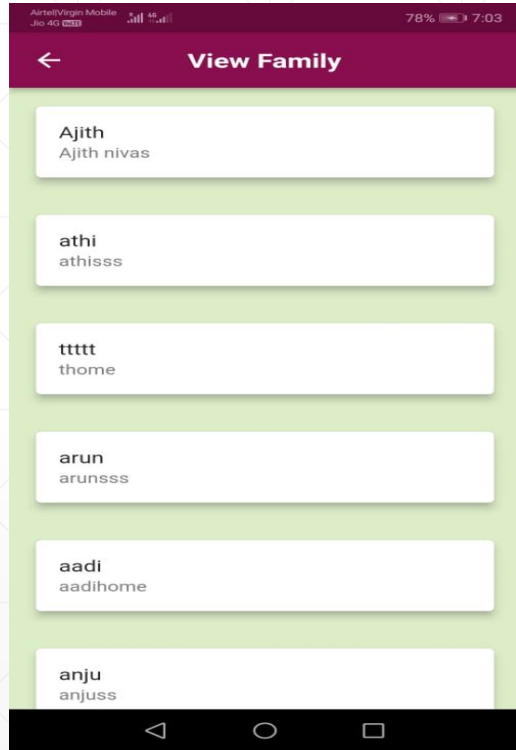
A screenshot of a mobile application interface titled "Edit Family". The form contains the following fields:

- Area: Kottopadam
- Name: Ajith
- Phone: 9866425748
- House Name: Ajith nivas
- House Number: 26
- Category: ST
- Ration card?: ☒

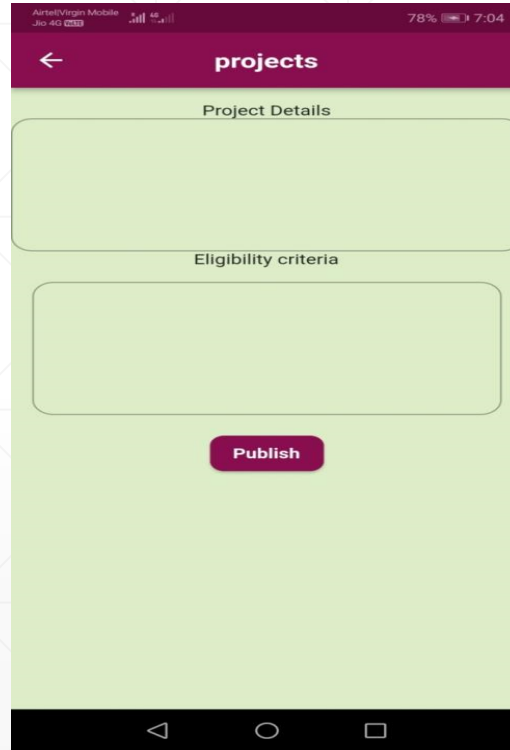
A screenshot of a mobile application interface titled "Edit Family". The form contains the following fields:

- Do you have drinking water facility? ☒
- Is road available? ☒
- Is electricity available? ☒
- Have useless water resource? ☒
- Do you have land? ☒
- Land: 10 cent to 1 acre
- Do you have domestic animal? ☒
- Animal: Buffalo
- Buttons: Edit, View Members

4.View Family



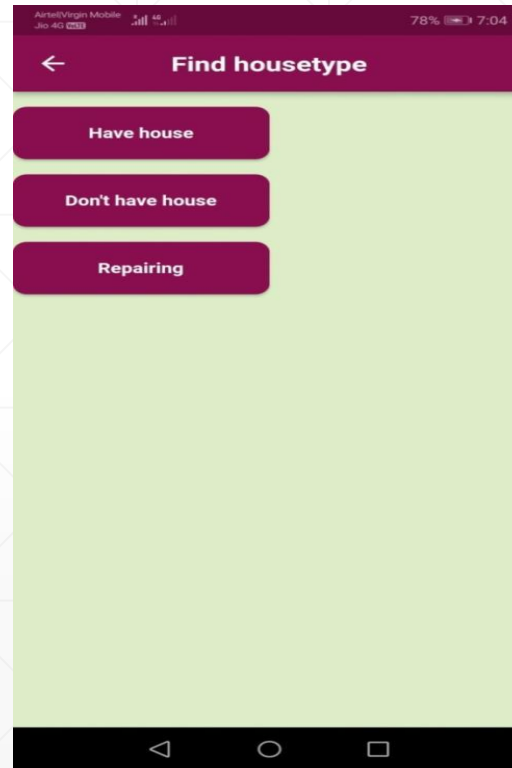
5.Projects



6. Find Members



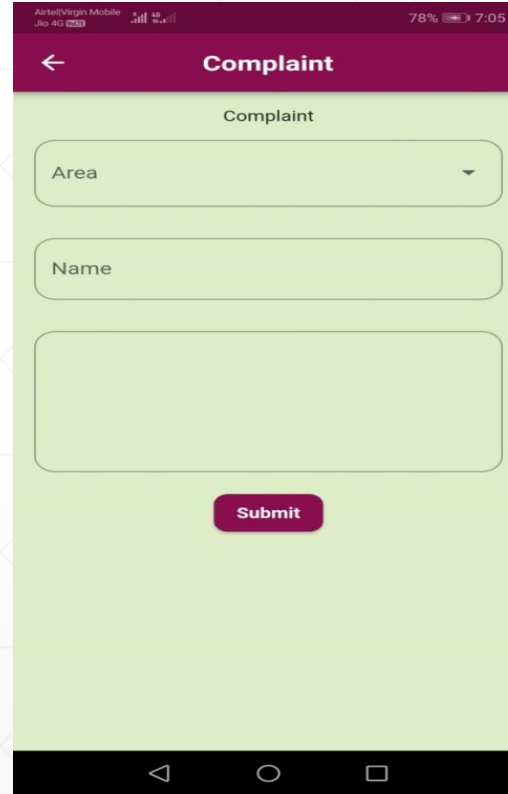
7. Find Housetype



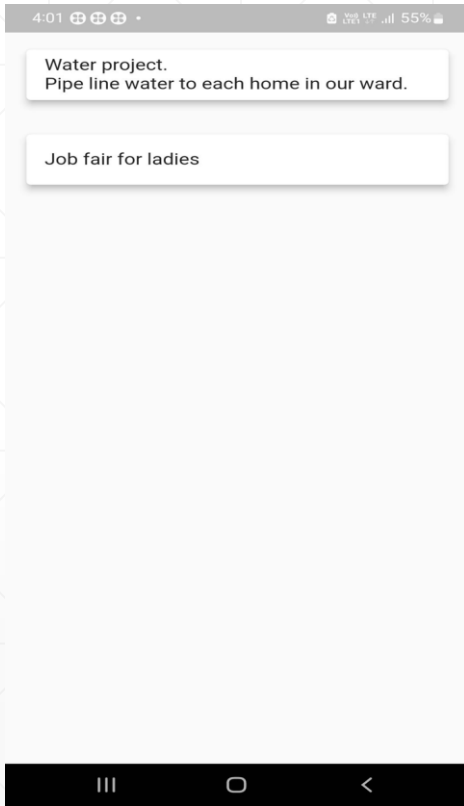
8. User Dashboard



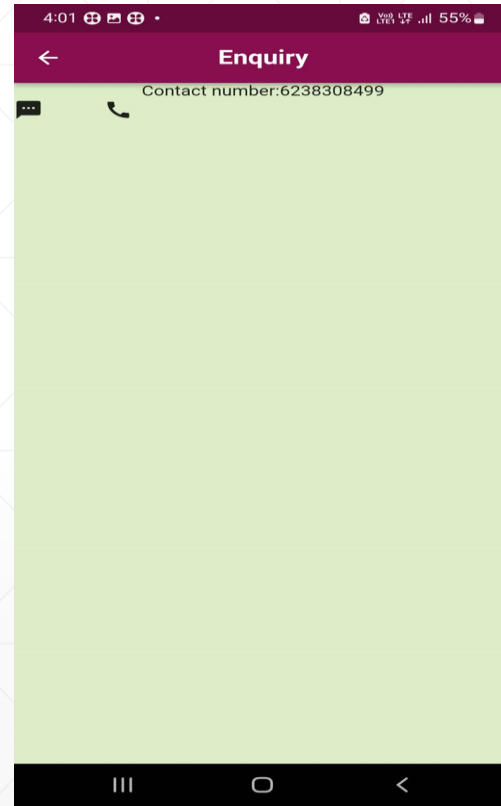
9. Complaint Registration



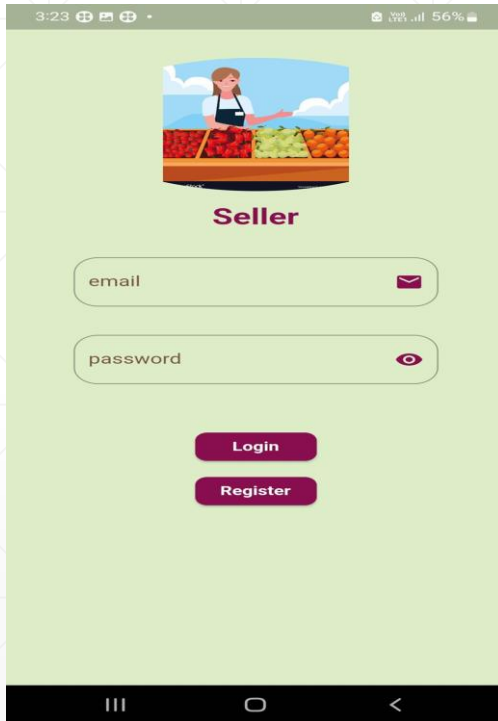
10. View Projects




11. Enquiry



12. Seller Login



3:23 56%



Seller

email

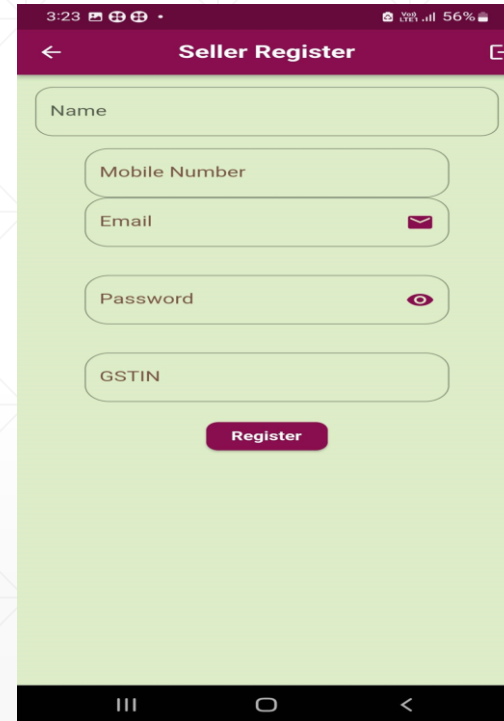
password

Login

Register

The screenshot shows a mobile app interface for seller login. At the top, there's a status bar with the time 3:23 and battery level 56%. Below that is a header with a green background. In the center, there's an illustration of a seller in a white shirt and black apron, holding a wooden basket filled with various fruits. Below the illustration, the word "Seller" is written in a bold, dark font. Underneath, there are two input fields: "email" and "password". The "password" field has a small eye icon to toggle visibility. At the bottom, there are two buttons: "Login" and "Register".

13. Seller Register



3:23 56%

Seller Register

Name

Mobile Number

Email

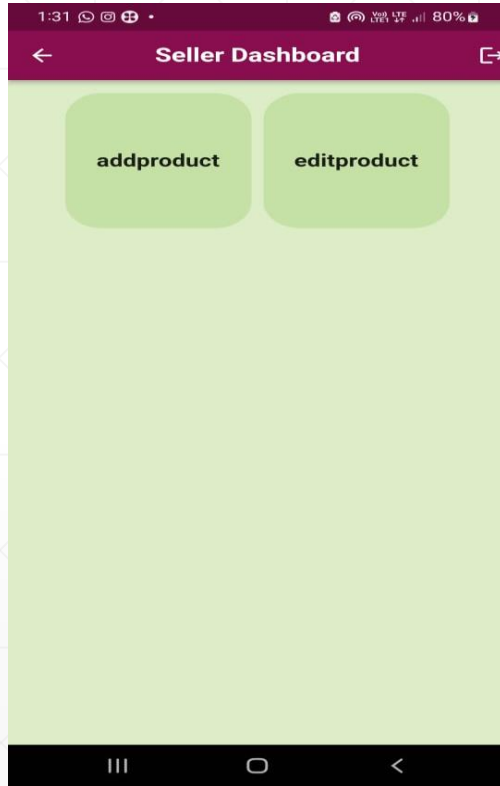
Password

GSTIN

Register

The screenshot shows a mobile app interface for seller registration. At the top, there's a status bar with the time 3:23 and battery level 56%. Below that is a header with a green background. The title "Seller Register" is displayed in a bold, dark font. Below the header, there are five input fields: "Name", "Mobile Number", "Email", "Password", and "GSTIN". The "Email" field has a small envelope icon, and the "Password" field has a small eye icon. At the bottom, there is a single "Register" button.

14.Seller Dashboard



CONCLUSION

- ❑ The project entitled “E-GRAMAM” is an online platform for the purpose of handling the data of the people in a village in an effective manner and organising it in productive way.
- ❑ It helps the local self governance authorities to conduct survey of the people in the village in an effective way.
- ❑ It also helpful for the people in the village who can easily know and contribute to the developmental process of the particular village.
- ❑ The application was implemented and tested in real time on the server and it works error free. The system is really user-friendly and it has high protection. All necessary validations are carried out and it is made very attractive with the help of dart and flutter.

FUTURE ENHANCEMENT

- ❑ It is possible to empower the people in the village by integrating more e commerce start up proposals which are aided by government and their subsidy can be provided through online payment just by adding their account details which ensures its transparency.
- ❑ An addition to the system is by integrating a job portal system to help the the people and can minimise the rate of unemployment.
- ❑ It can be used to conduct various surveys within a village just by adding a survey form for any project establishments.

PUBLICATION

The screenshot displays the 'PaperPublication (Copy)' application interface. The top bar includes navigation icons for 'Review', 'Share', 'Submit', 'History', 'Layout', and 'Chat'. Below this, a tabbed interface shows 'Source (legacy)' and 'Rich Text' tabs. The 'Source' tab is active, displaying a LaTeX document structure for a paper titled 'E-Gramam: Management application for a village using Flutter'. The document includes author information (Aiswariya K, Department of Computer Applications, College of Engineering, Trivandrum) and an abstract. The right pane shows a preview of the rendered document, which includes the title, author details, and the beginning of the introduction and motivation sections. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 09:19 on 06-07-2022.

```
11 \T{kern-.1667em\lower.7ex\hbox{E}\kern-.125emX}}
12 \begin{document}
13
14 \title{E-Gramam: Management application for a village using
Flutter\\
15 {}
16 \thanks{Identify applicable funding agency here. If none,
delete this.}
17 }
18
19 \author{\IEEEauthorblockN{Aiswariya K}
20 \IEEEauthorblockA{\textit{Department of Computer Applications}
\\
21 \textit{College of Engineering,Trivandrum}\\
22 Kerala, India \\
23 k.aiswariya20@gmail}.com}
24
25 }
26
27 \maketitle
28
29 \begin{abstract}
30 E-Gramam is an online platform for surveying, announcing
projects, sorting the beneficiaries of each project and
accepting the complaints from the people in a village. It is
operational at the ward level.
31 The admin will be the ward member. She/he can add families, add
members to each family. The survey includes complete details
```

E-Gramam: Management application for a village using Flutter

Aiswariya K
Department of Computer Applications
College of Engineering,Trivandrum
Kerala, India
k.aiswariya20@gmail.com

ABSTRACT—E-Gramam is an online platform for surveying, announcing projects, sorting the beneficiaries of each project and accepting the complaints from the people in a village. It is operational at the ward level. The admin will be the ward member. She/he can add families, add members to each family. The survey includes complete details about the family. Also the member can sort the people on the basis of job, education, patients, etc. Member can accept complaints from people. The user can also self participate in the survey. They can view the projects, communicate with ward member and post complaints. A seller can also be registered with the system and add his product as per the quantity, specify the details of product, update its quantity and details. The users can view the products and purchase them.

Index Terms—

I. MOTIVATION

The digitalization of the country has also started to expand to the most basic level, i.e. the villages. It is important to have proper and easy to use mobile applications in order to manage the entire data and the operations together in a single platform. People in local areas of a village are not often properly and timely informed about various government projects, benefits, and other valuable information.

Using this system we can collect and organise the records in a common platform, from all parts of the village ensuring its confidentiality and use the data to identify the people who are most eligible for particular benefits and to maintain an accurate statistics of the financial background and living standard. The problems of some of the marginalised sections of the society are not yet fully addressed due to the lack of prior and reliable knowledge. This system can be used to collect true data that depicts the actual living standard and help to implement various plans to upgrade the living standard. Even though we are in a developing stage to provide all the basic services to everyone in the most effective way it can not be fully implemented for every sections of the society uniformly. Many areas to be considered are still neglected and need to be

II. INTRODUCTION

E-Gramam is a system for automating the various services, functions and management activities within a particular village. As we are in the process of revolution of making everything online, it is also essential to facilitate the change in the most flexible and convenient way that can make an impact and momentum towards the change. A village is the most basic sector of the hierarchical governance and therefore there are only few areas that is concerned to be managed online while the majority of rest of the services not very well taken care of. This system aims to address the difficulties arises during the manual processing of every aspect of panchayath services to citizens and tries to make it more efficient, reliable, convenient and fast.

The modules include admin, seller and normal user. Admin is the one who has overall control over the system and ultimately handles different users as well as different operations in the system. The admin will be the ward member. She/he can add families, add members to each family. The survey includes complete details about the family. Also the member can sort the people on the basis of job, education, patients, etc. Member can accept complaints from people. The seller is the one who make use of the system through making it useful to everyone through implementing an e-commerce. Seller can add his products in order to sell them in the village and can provide the details to be verified by the users and edit them, initiate payments and display the statistics. The normal users register in the system and add their family and all relevant details that may need to be processed for various classification purposes within the village. The users can register their complaints and ask for corrections. The user can also self participate in the survey. They can view the projects, communicate with ward member and post complaints.

E-Gramam was created with a vision of simplifying this very process with a focus of creating an one-stop destination through which we could avail all the services provided by the local body at anytime from any location.

REFERENCES

- Satish R. Shelar , Sagar Hanumant Totare, Priyanka Vasant Ipkal , Poonam Balusing Pardeshi ,E-Gram Panchayat , International Journal of Research in Engineering, Science and Management,2020.
- Pratiksha Dhage , Shital Wathore , Prof. Vidya Jagtap, E-Grampanchayat management system , Open access international journal of science and engineering,2018.
- C.S.R Prabhu, Cost effective solution for effective e-Governance-e-Panchayat, Computer society of india,2017.

THANK YOU
