E-Gram Panchayat using ICT

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Abstract: **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. Tt means that day working payment loss. These purpose we are invent one software and android application. Its main Moto is whose people want document from gram panchayat. They can apply online as well as android application. It's main benefit is those people need not take a leave from work and that day did not loss that day payment. And it's easy for end-user to apply require document from website as well as android application because of this website and android application work maintain in mother tongue language(marathi). That's why our website and application is user friendly and easy to handle for end user.**

***Keywords*: Fire-base, Gram Panchayat, Dakhala.**

I. Introduction

This is IoT base android application connecting with web application. In that one end user(Local People) using android application for the sending or applying online documents from Gram panchayat and also viewing various scheme list who's candidate appearing for that and voting list and various committee and history of that village and current affairs etc. These all the content user watching or viewing all him/her device. When any user wants any document then firstly user fill the format of application and submit. Then submitted application goes to the website admin panel. When application form comes in admin notification that time admin watching user application form then admin copy aadhar number from application form and searching any remaining balance is available or not (home tax/ water tax/ other tax). When balance is clear then directly whatever documents require to the user this document sending on their android application. When the balance is available then admin sending message to this user your tax balance is remaining these balance you have to pay. Then we will send your documents also whenever Gramsevak and Sarpanch wants all people arranging meeting these notice send by admin on android application. In this project we are using fire-base for the send and receive notification from admin to user and user to admin.

II. Mathematical model

2.1 Equation:

Water_tax=1000;
home _tax=700;
tax=water_tax+home_tax;
remain=no of yr+tax;
if(tax==0)
then
tax=clear;
else(tax>0)
then
remain=no of yr+tax;

1) Tax calculation method:

In Gram panchayat includes two types first water tax and second home tax. We calculate this tax in one input variable Name as "tax". As it stores water tax as well as home tax.

Tax=water_tax +home_Tax

2) Remaining tax calculation method:

In village some people could not able to pay tax in time for some reasons. This system helps out to calculate the remaining tax first the system check how many year the tax is been pending for particular person. The tax is calculate in remain variable as its inputs are no of yr and tax.

Remain =no of yr +tax

3) Success condition

Admin can check all the data through aadhar card. If the particular person has clear the tax then the person can get the document they requested.

4) failure condition:

When a particular person applies any type of document then request goes to the admin panel. The admin check the data if the person has clear tax then admin generate person applying document. If tax is not clear then the person has to pay the remaining tax and get the document.

III. System Architecture

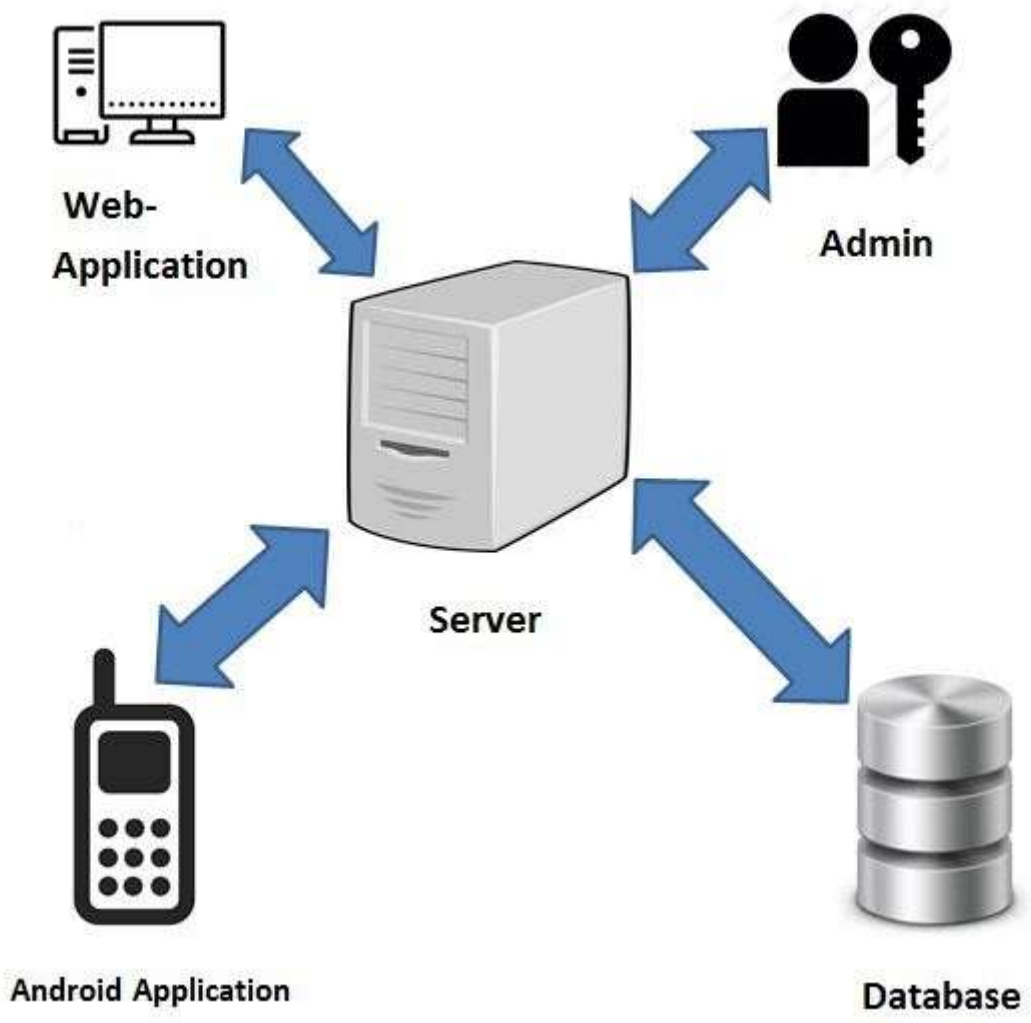


Fig. Architecture diagram.

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 use to send document for a client. User can watch what is the current scheme running in village and all details about village such as sarpanch contact number and other committee members number and photos of village. 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. In admin panel, Admin can see farmer's pending home tax and water tax, if it is nil then only farmer can get their document**.**

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 database is an organized collection of data, generally stored and accessed electronically from a computer system. The database management system is the software that interacts with end users, applications, and the database itself to capture and analyze the data.

3.1 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.

3.2 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.

IV. System Description

4.1 System Feature

- It is main benefit is it's showing transparency between government and people.
- All database maintain in Marathi font that's why it's much user friendly for the user
- Notification send and receive using fire-base.
- It is time consuming process.
- Admin store all record in Marathi database
- It is showing all whenever scheme run in village.
- Avoiding the loss of employment.

4.2 Advantages

- It is main benefit is it's showing transparency between government and people.
- All database maintain in marathi font that's why it's much user friendly for the user.
- Notification send and receive using fire-base.
- It's time saving process.
- It's showing all whenever scheme run in village.
- Avoiding the loss of employment.

4.3 Existing System :

- There was manually work done in existing system.
- People do not know the current scheme of the village.
- People face many problems for applying any doc.
- People's data stored in written format in register.

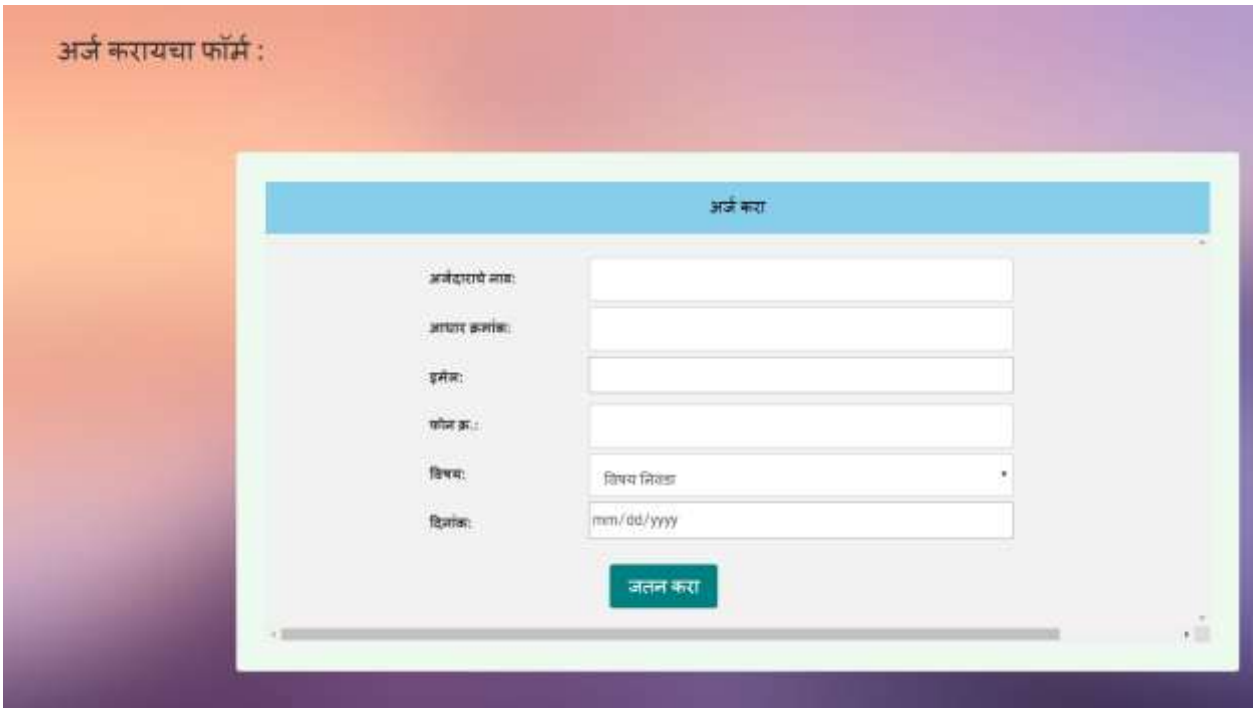
4.4 Proposed System:

- Candidate can fill online form for request to the document eg. Income certificate, etc.
- Admin can receive all the notification from candidate using fire-base.
- Candidate can receive all the documents on their android application.
- We are maintaining database in marathi font.

V Result


रजिस्टर करा


साइन इन करा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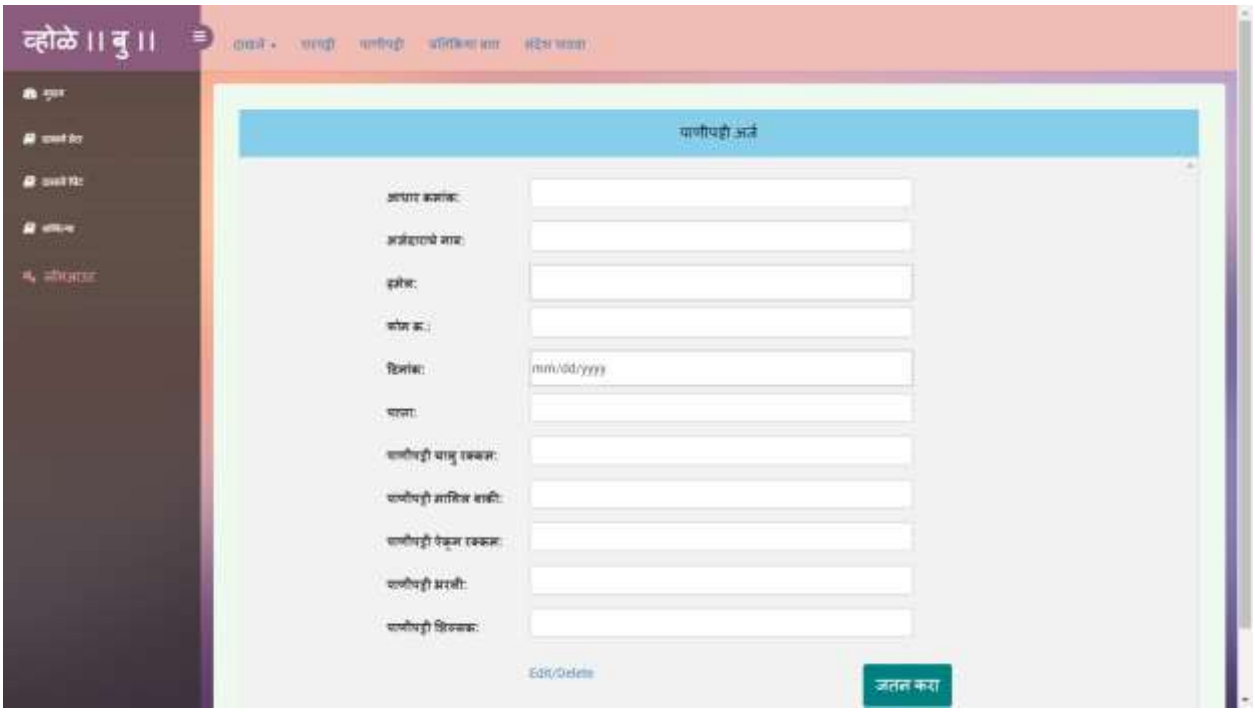
जतन करा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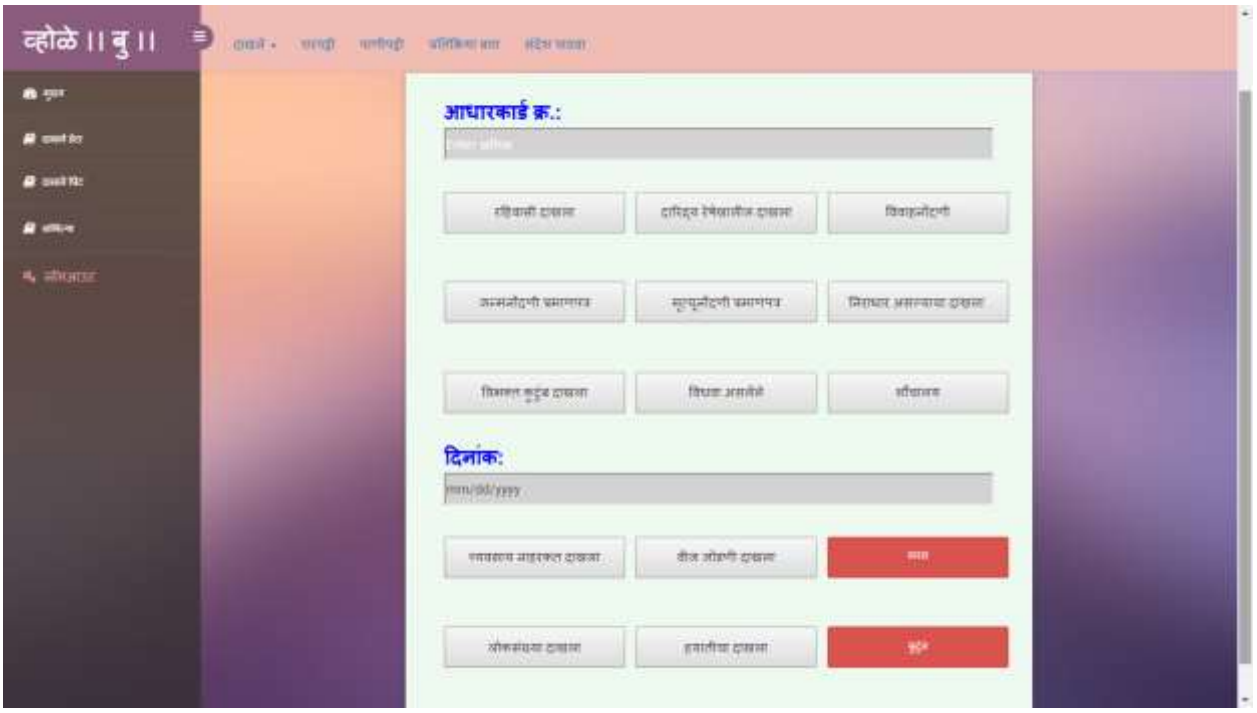
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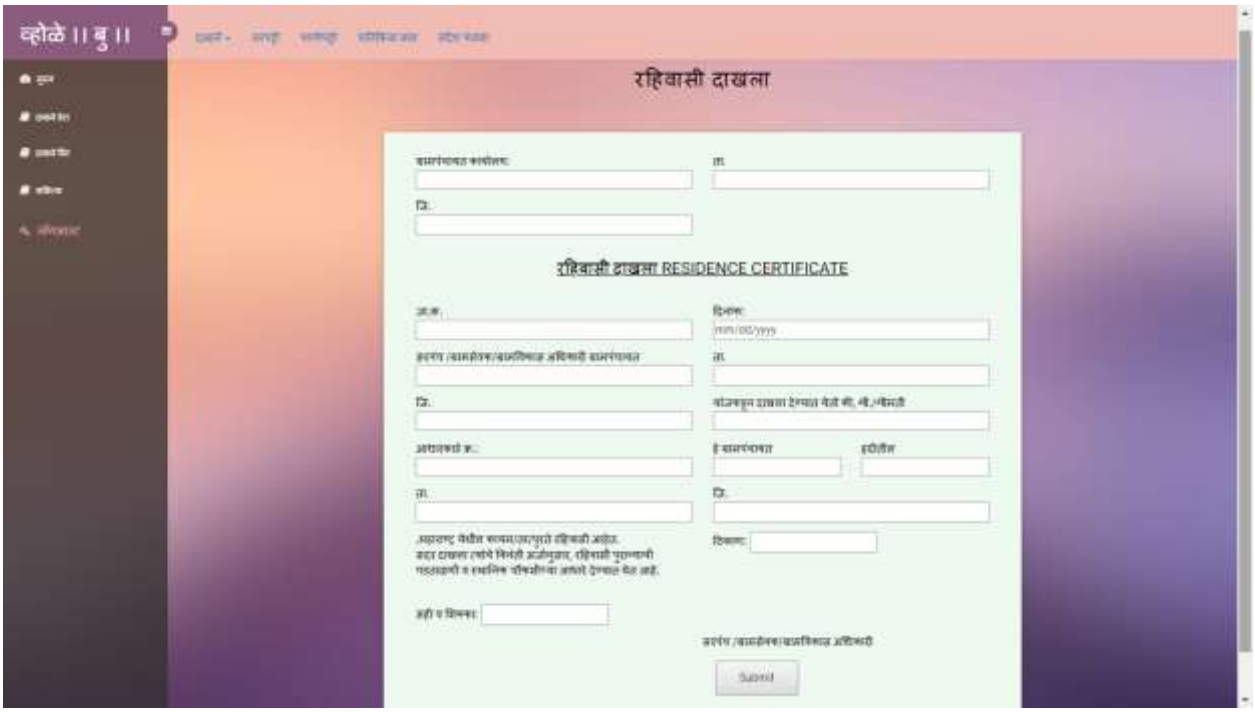
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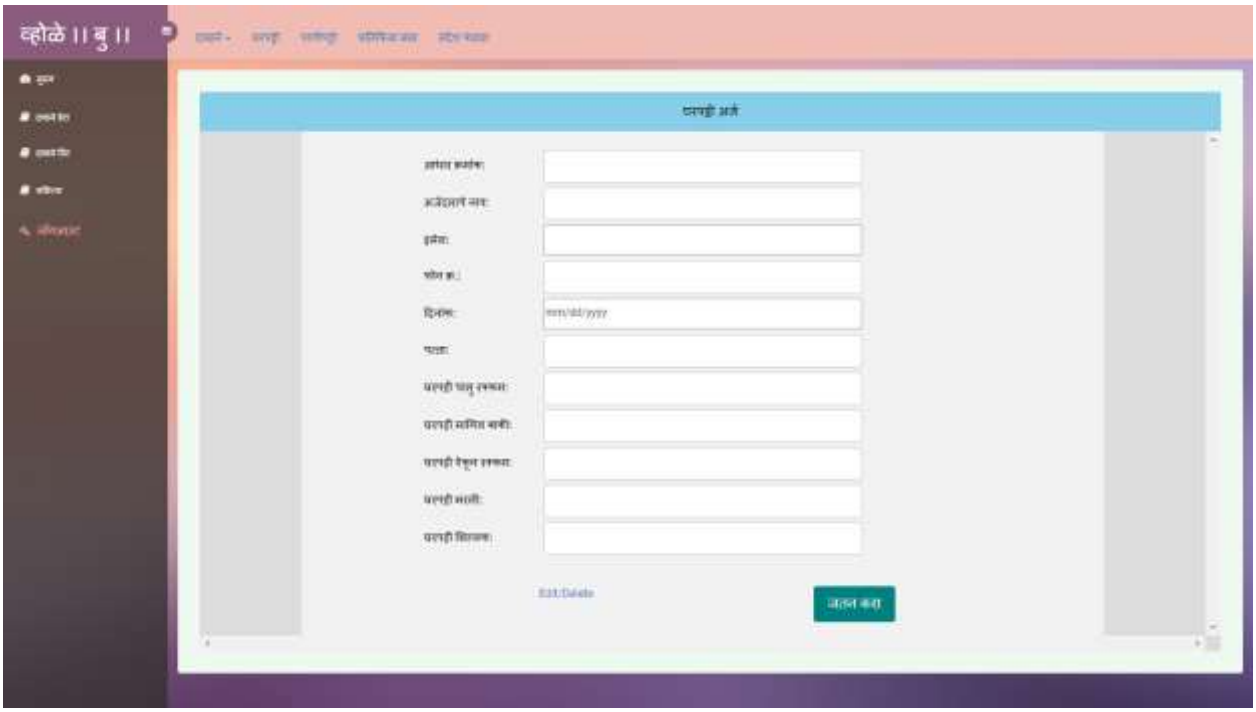
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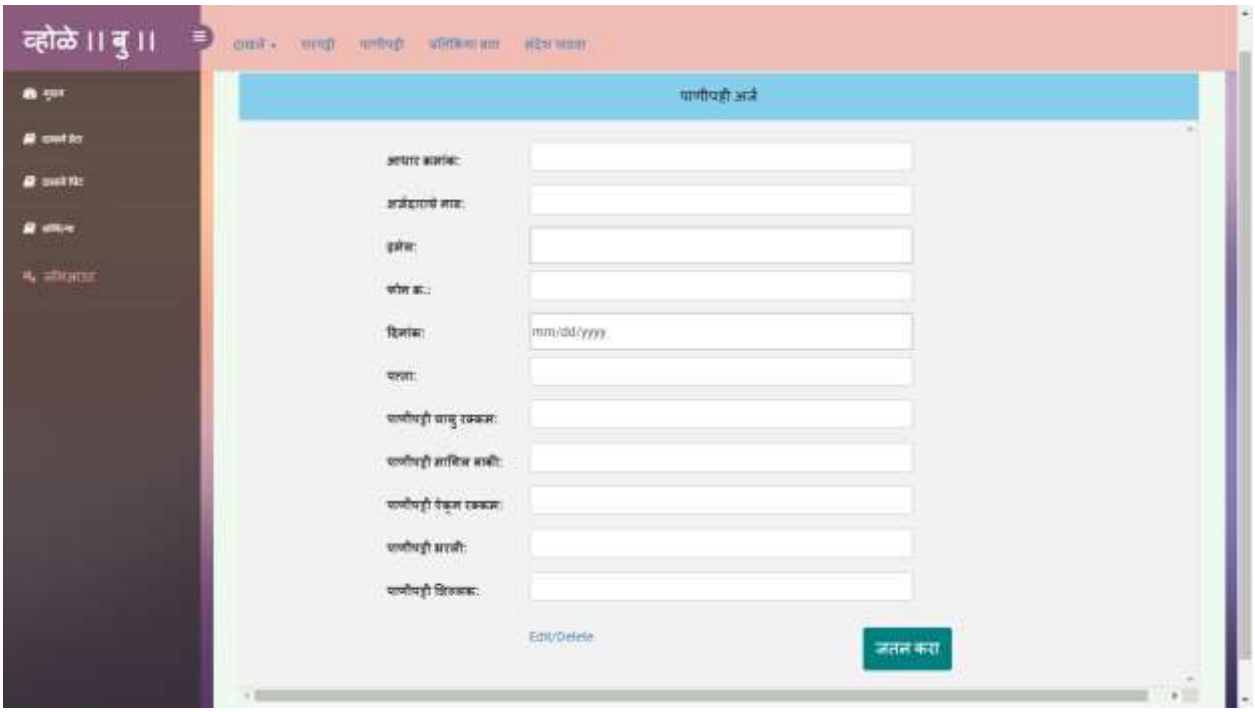

V. Conclusion and future work

We have developed the software for farmer, as use of the internet is increased day by day. This is important for the people of India to apply the online certification. This builds the transparency between government and people. Our main aims to build this software is to saves the time and employment of farmer. This reduced the work load of the government employee. This web base application will not only helpful to the local Government but also to the villager of that village, it will bring transparency, accountability, efficiency in administration. Document and their related record will be available on this application. It help to make administration more accountable as well as more transparent, above survey and proposed system will help Gram panchayat system to work efficiently. This system provides User ID and password for the gram-sevak. This will help to minimize corruption in the system, also save effort and time of common man and government officer.

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