E-Gram Panchayath

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PROJECT SUMMARY

E-Gram Panchayath is a web application that is specially designed to establish an environment, wherein village public can easily communicate with the village councils.



OBJECTIVE

- This project is aimed at achieving the solution for the problems that are faced by the public in villages, through this application public can easily contact PDO regarding any issues such as availing for services, complaints and certificates.
- PDO (panchayath development officer) can easily monitor/track on the village problems and managements.



TECNOLOGY USED

Programming language: Python 🕌



Web framework: Django Web framework



Database : SQLite



Front end: HTML5, Boot Strap (CSS)





TECHNOLOGY BRIEF

Python

Python is a high-level, general purpose programming language, Python is commonly used for developing websites and softwares and data analysis.

Django

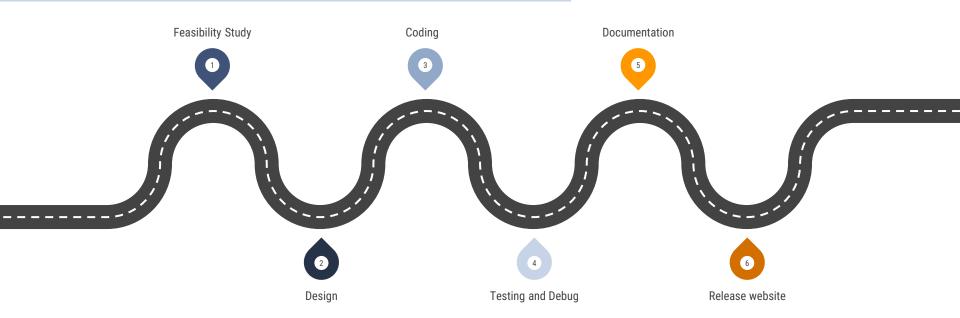
Django is a python based web framework that follows MVT architectural pattern, that encourages rapid development and clean, programmatic design.

SQLite

SQLite is a C-language library that implements a small, fast, self-contained, high-reliability, full featured, SQL database engine.

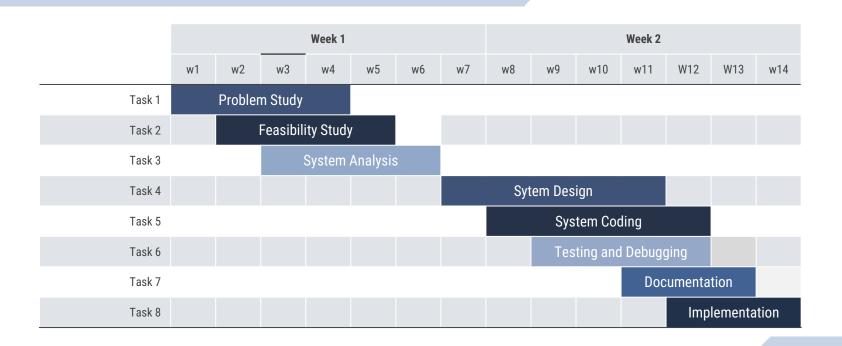


PLANNING - ROADMAP



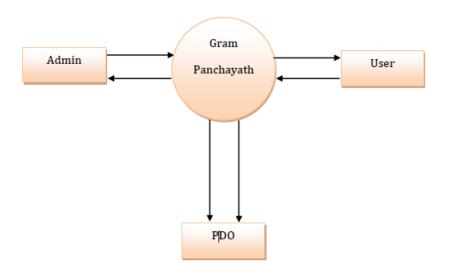


PLANNING - GANTT CHART

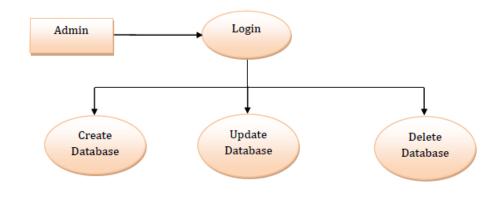




ANALYSIS - DFDs LO



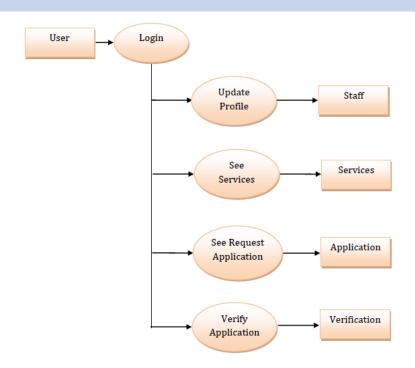
Context level diagram



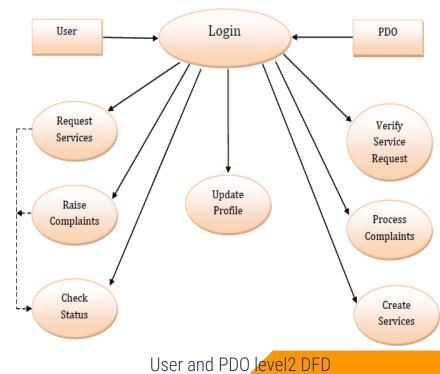
Admin level DFD



ANALYSIS - DFDs L1, L2



User level1 diagram

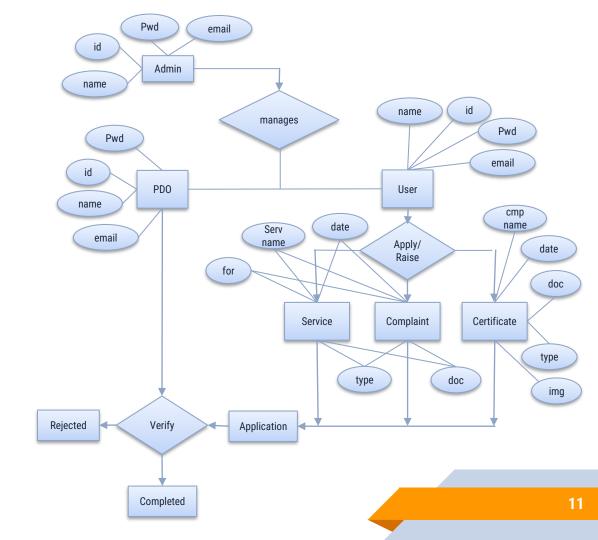


ER DIAGRAM

ER Model

An entity-relationship model describes interrelated things of interest in a specific domain of knowledge.

A basic ER model is composed of entity types (which classify the things of interest) and specify relationships that can exist between the entities.





CODE SAMPLE

Login Functionality

```
def login_user(request):
    if request.method == 'POST':
        uname = request.POST.get('uname')
        pwd = request.POST.get('pwd')
        user = authenticate(uname, pwd)
    if user is not None:
        login(request, user)
    else:
        messages.warning(request, "Uname
and Pwd is Invalid")
    return render(request, 'Login.html')
```

Password Change Functionality

```
If request.method == 'POST':
    form = UserPwdForm(request.user,
    request.POST)
    if form.is_valid():
        form.save()
        messages.success(request, f"your
    pwd changes successfully")
        return redirect('Login')
    else:
        form =
    UserPwdForm(request.user)
```

Process Request Functionality

```
Class Processrequest(DetailView):
   model = Services
   template_name_suffix =
'_process_request_details'

   def get_context-data(self,
**kwargs):
      context =
super().get_context_data(**kwargs)
      return context
```

DATABASE

Certificate Table

Column Name	Column Type	Condition
Certificate Type	Char Field	Max length = 20
Certificate Name	Char Field	
Father Name	Char Field	Max length = 20
Mother Name	Char Field	Max length = 20
Address	Text Field	
Govt id	Char Field	
Govt Proof Document	File Field	
Birth Date	Date Field	
Death Date	Date Field	
Death Location	Char Field	Max length = 20
Caste	Char Field	Max length = 20
Caste Category	Char Field	
Income Value	Char Field	
Document Proof	File Field	
Remarks	Text Field	
Approval Status	Char Field	Max length = 20

DATABASE

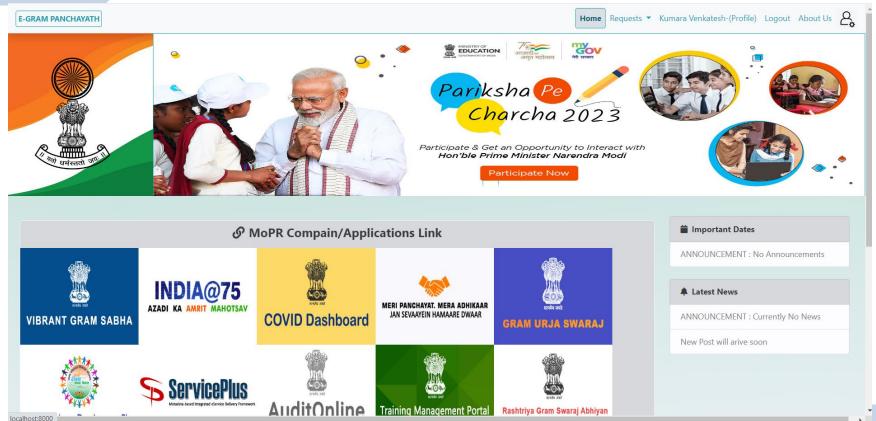
Service Table

Column Name	Column Type	Condition
Service Type	Char Field	Max length = 20
Service Name	Char Field	
Service Applied Date	Date Field	
Service Description	Text Field	
Service Applied By	One to One Field	
Serv Request Image	Image Field	
Serv Remarks	Text Field	Max length = 100
Estimated Completion Date	Date Field	Max length = 20
Completion Status	Char Field	Max length = 20
Serv Completion Image	Image Field	
Serv Doc Name	Char Field	
Serv Doc File	File Field	

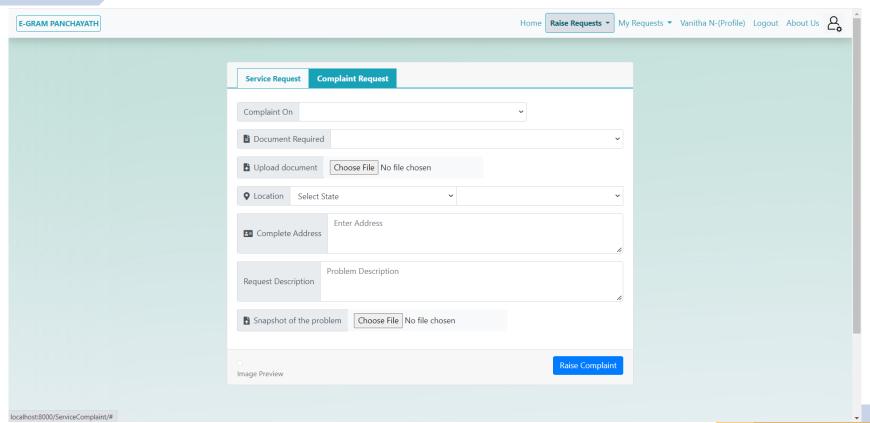
User Table

Column Name	Column Type	Condition
User Name	Char Field	Max length = 150
First Name	Char Field	Max length = 150
Fmail	Fmail Field	Wax length = 100
	Char Field	May langth - 40
Password	0.1.4. 1.10.4	Max length = 40
Groups	Char Field	
User Permission	Char Field	Null = True
Is Staff	Boolean Field	Null = True
Is Super User	Boolean Field	Null = True
Last Login	Date Field	Time Zone
Date Joined	Date Time Field	Default = time zone

Home Page

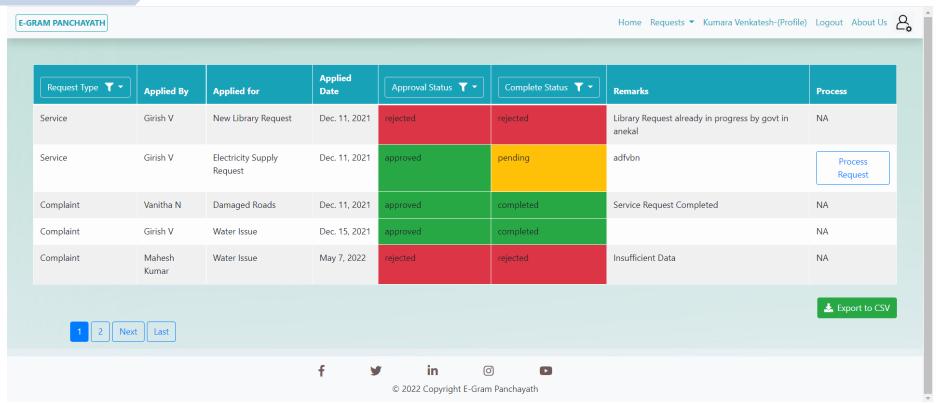


Complaint Request Page

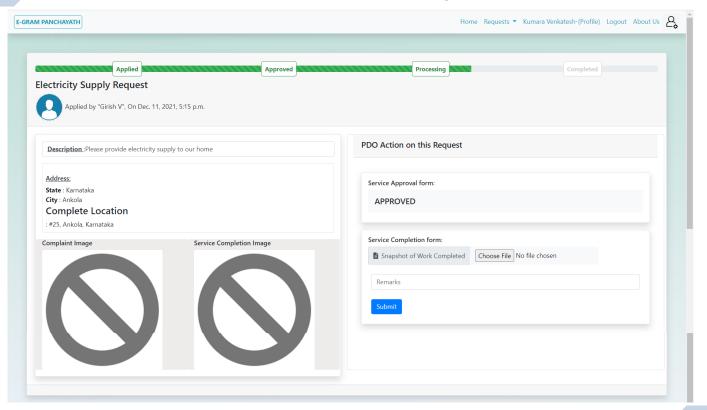


GUI

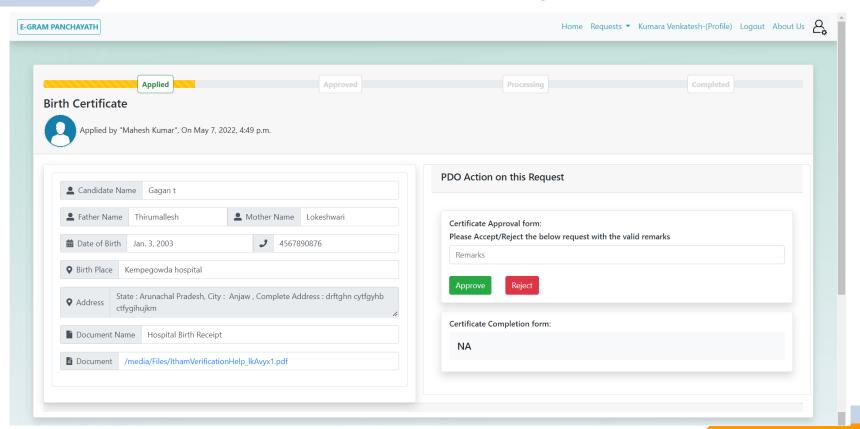
PDO Requests Page



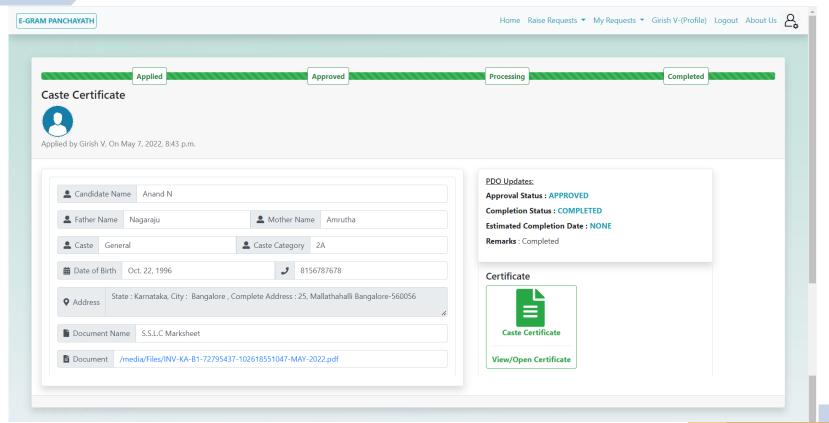
Service Process Page



Certificate Process Page



Request Details Page



Certificate Download Page





Caste Certificate

This certificate is presented to

An and N

This is to certify that Mr./Miss/Mrs **Anand N** S/o,D/o Nagaraju and Amrutha, is resident of State : Karnataka, City : Bangalore , Complete Address : 25, Mallathahalli Bangalore-560056, Anand N born on Oct. 22, 1996,

As per the S.S.L.C Marksheet records/declaration, Anand N belongs to **Caste** :General, Category :2A.

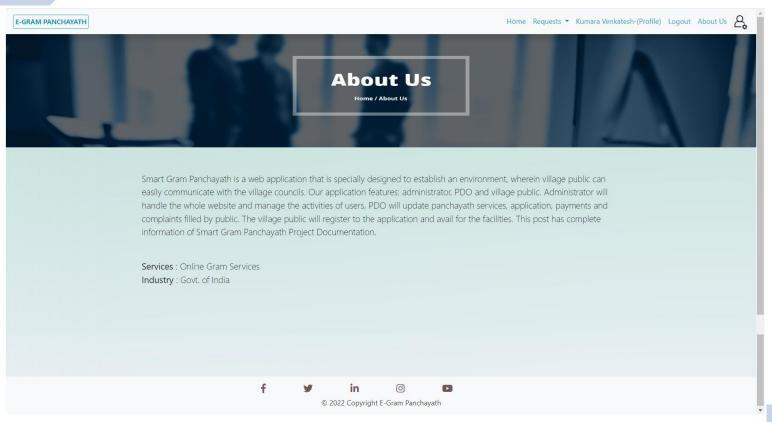
Date: Fri Dec 02 2022



Tahsildar/District Manager/Deputy Commissioner Signature



About Us Page





FUTURE SCOPE

- This project has more scope in future and it can be integrated further.
- This project can be implemented for AI based voice assist to raise request/service through voice in user language (it's for illiterate, blinds).
- This project currently available as website, it can be implemented for Mobile applications, tabs, etc.
- Can be enhanced to common application for all village development programs.



CONCLUSION

E-Governance for panchayath provides online service to the people living in that panchayath, it helps for the people in the area to easily complete their work which involves the action of authority of the panchayath people,

As everything is made online people can request their applications from anywhere at any time.

After requesting the certificate/Service the process will be carried out normally, no need for the people to go to panchayath office every time for the completion of work, people can track there request online, It saves time and helps track of the village development activities.



THANKS!

Any questions?