

VILLAGE MANAGEMENT SYSTEM

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Project Guide

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Certificate

This is to certify that the report entitled “**VILLAGE MANAGEMENT SYSTEM**” submitted by **S NANINEERAJA ID.NO R161264** in partial fulfillment of the requirement for the award of Bachelor of Technology in Computer Science Engineering is a bonafide work carried out by her under supervision and guidance. The report hasn't been submitted previously in part or in full to this or any other university or institution for the award of any degree.

Under the Guidance of **N SATYANANDARAM** (Assistant Professor, Computer Science & Engineering, RGUKT, R.K Valley).

Acknowledgement

the satisfaction that accompanies the successful completion of any task would be incomplete without introducing the people, who made it possible and whose constant guidance and encouragement crowns all efforts with success.

Firstly, I would humbly thank Mr. N Satyanandaram, Asst. Professor, CSE, for being the channel and guide for me to have availed such a rewarding opportunity.

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Abstract

This application mainly focuses on the information and problems sharing of the village. We will have admins and users. Only Admins have the power to change the information status in the application. The users will be able to question/suggest ideas or can donate money for the causes. And there will be an automatic display of the total amount of the funds received for the purpose of the transparency. After an issue got solved the admin will update the information in the application. The admins in this application means the president/head of the village.

Introduction & purpose

The general protocol of approaching problems in a village is to reach to head of the village or to raise the problem at sarpanch's meeting that happens monthly or quite often. Though the problems were raised there would some issues like proofs of problem raised and solved dates. This system also serves the purpose of submitting the reports and showing them the result. This System also allows to showcase the developmental activities that are done by raising the issues from the root level. This system consists of different fields like a villager can raise the issue by mentioning the name, Problem in detailed and date of submission etc.. The head of the village solves the issue and reports the solved dates.

Introduction

Web design encompasses many different skills and disciplines in the production and maintenance of websites. The different areas of web design include web graphic design; user interface design; authoring, including standardised code and proprietary software user experience design and search engine optimization.

These are mainly browser based applications which makes it very easier for user. Good web design helps guide your users' eyes and tell them where you want them to look. On your website, your design can draw attention to special offers, highlight calls to action, and help users identify buttons and clickable elements. All these things can help drive users to take the actions one wanted.

Web design is **the process of creating websites**. It encompasses several different aspects, including webpage layout, content production, and graphic design. While the terms web design and web development are often used interchangeably, web design is technically a subset of the broader category of web development

Web design used to be focused on **designing** websites for desktop browsers however, since the days, design for mobile and tablet browsers has become ever-increasingly important. A web designer works on the appearance, layout, and, in some cases, content of a website.

This process involves organizing content and images across a series of pages, integrating applications and other interactive elements. Creating a map of the website's structure to ensure intuitive navigation.

SYSTEM REQUIREMENTS

Software requirements

Django:

Django is a Python-based free and open-source web framework that follows the model–template–views architectural pattern. Django is a collection of Python libs allowing you to quickly and efficiently create a quality Web application, and is suitable for **both frontend and backend**. Starting a Django project allows one to build the application's entire data model in Python without needing to use SQL. Using an object-relational mapper (ORM), Django converts traditional database structure into Python classes to make it easier to work within a fully Python environment.



Python

Python is a widely-used, interpreted, object-oriented, and high-level programming language with dynamic semantics, used for general-purpose programming. Python has a **simple syntax similar to the English language**. Python has syntax that allows developers to write programs with fewer lines than some other programming languages. Python runs on an interpreter system, meaning that code can be executed as soon as it is written. This means that prototyping can be very quick.



HARDWARE REQUIREMENTS

1.processor: Dual core16hz

2.RAM: 4GB

3.HDD: 250GB

4.Mouse: optical Mouse

Literature Survey

Software lifecycle model: Software lifecycle model is a descriptive and diagrammatic representation of a software life cycle. These models represent all the activities required to make a software product to go through all its life cycle phases.

Ex: Classical waterfall model, Iterative waterfall model, spiral model, evolutionary, agile etc.. **Software lifecycle model:** Software lifecycle model is a descriptive and diagrammatic representation of a software life cycle. These models represent all the activities required to make a software product to go through all its life cycle phases.

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Need for software lifecycle model:

1. Systematic development of a software takes place.
2. Through these models team members can understand what to do and when to do.
3. These models give us an idea about entry and exit of every phase.
4. Without these models it is difficult to know the progress of development.
5. Through these models teams will get to know whether they met with all the requirements of customer.

Different phases of classical waterfall model

1. Feasibility study: The main aim of feasibility study is to determine whether it would be financially and technically feasible to develop the product. Here the

deep understanding of problem is done whether it is possible to develop the system or not and solutions are possible. and will get to know whether the technical teams are sufficient to implement the system or not.

2.Requirements analysis:The aim of requirement analysis phase is to understand the exact requirements of the customer and to document them properly. In this phase they collect required information from customer so that they can remove inconsistency. They focus both on functional and non functional requirements.

3.Design:The goal of this phase is to transform the requirements specified in the SRS document into structure that is suitable for implementation in some programming language.

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3.Design:The goal of this phase is to transform the requirements specified in the SRS document into structure that is suitable for implementation in some programming language.

4.coding and unit testing:This phase consists of implementation of the system and unit testing is being during this phase.Every component of the design are being turned into program.unit test is done whether the component met with its functionality or not.

5.Integration and system testing:Integration of every unit takes place in this stage and checked for bugs.This can be done incrementally but not at a time. And finally the integrated system is tested whether it met with all the requirements.

Alpha-testing:This testing is being done by developed team

Beta-testing:This testing is done by friendly set of customers.

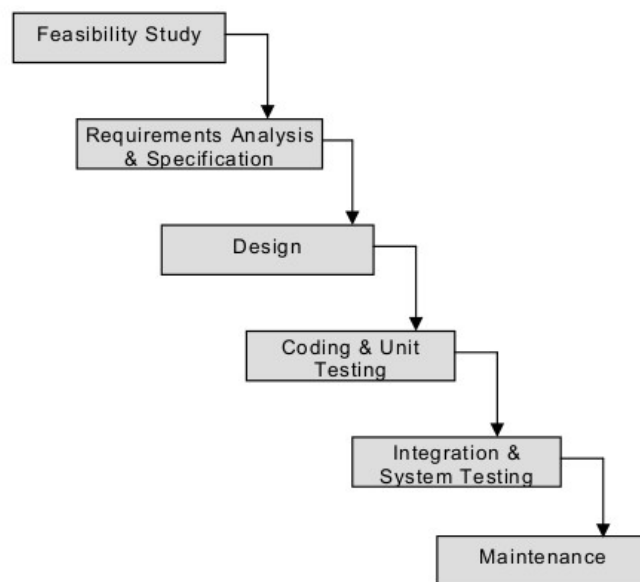
Accpetance-testing:This is done by customer to accept or reject the system or not.

System testing is normally carried out in a planned manner according to system test paln document.This includes whether all testing related activities schedule of testing and allocate resources.

The testing mainly focuses on whether the system is ready to accept every test case by developed team.

6.Maintanenece:This is the phase where product rewuires much more than neccessary effort than development.In this phase operations team try to find the errors that are not discovered during developemtn.

They check if there is a need for enhancing the system or not .This includes checking whether the software works on different platforms or not.which means the systems adapts new environment or not.



Advantages of waterfall model

1. useful for small projects.
2. clear documentation and planning.

Disadvantages of waterfall model

1. High amount of risk and uncertainty.
2. Back tracking is not possible for new requirements added by customer.

3. Not suitable for complex systems.

4. Can't use for development for systems whose requirements are not clear.

5. Ignores users feedback until completion of whole system development.

Agile Methodology

Agile software development is a process which happens on incremental and iterative approach. Which do not need in-depth planning for project at beginning.

The requirements are implemented based on the priority. Agile method follows twelve principles where they always deliver a working software.

Working software is the key measure of progress in a project. The main focus of agile is on code rather than the design.

Advantages of Agile

1. Reduced Risk since they work on small sprints .

2. Continuous improvement since they develop small snippets they can meet with changes.

3. Organized and managing teams are built.

Disadvantages of Agile

1. Poor resource planning as they do not focus on prior planning one can't predict cost and team required for implementation.

2. Limited documentation . "Just in time" documentation is preferred in agile which leads to improperly detailed.

3. Difficult measurement. progress tracking becomes difficult while moving to next step in development.

4. Need for professional

5. Off tracking is highly possible if the customer representative is not clear.

Devops:

Devops is one of the software development methodologies which was introduced in mid 2000's. This method aims on fast development of software as well as safety of operations and customer satisfaction.

Why to choose devops ?

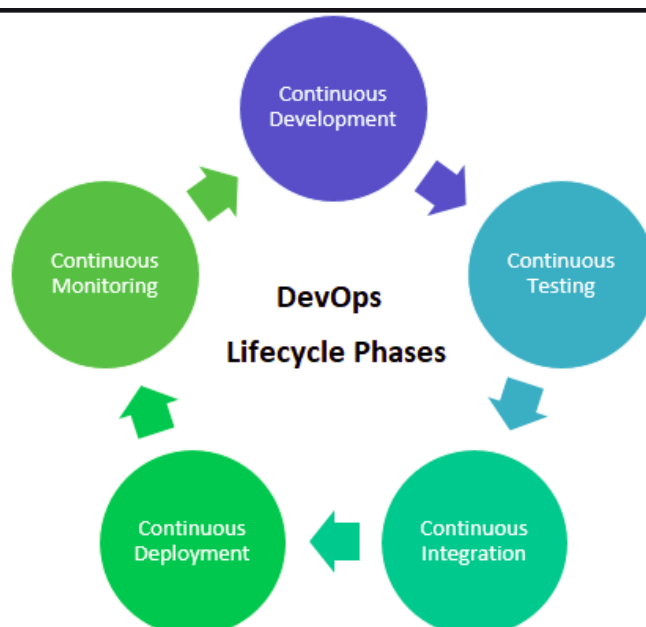
Difference lies at a point after development where software integration and deployment takes place.

Devops focuses on operations since it is continuous integration and incremental methodology. And do not allow software downtime as it continuously work on operations.

Devops believes that a single team must have the obligation of development, operations and entire lifecycle.

It focuses on speed, automation and immediate feedback.

Less manpower due to automation.



Continous Developoment:

This phase involves Planning and coding. Vision of project will be done during planning and beginners start coding at this phase. Code can be written in any language, but it is maintained by version control tools like Git, CVS etc.

“Commit” in Git play an important role in Communicating among the team. Most importantly Git is used for Stable version.

Continous Testing:

This phase of devops involves debugging using testing tools like Selenium, Junit etc.. and Automated report generation is one of the advantages. During this phase different test cases are tested.

Continous Integration:

This stage plays a crucial role in whole devops lifecycle which is known as heart of devops lifecycle. Jenkins is most popularly used. Jenkins fetches the code whenever there is change in Git.

Continous Deployment:

This stage involves deploying code continously into production servers. Here configuration management and Containerization comes into picture.

Configuration management is the act of maintaining consistency in an functional requirements and performance.

Containerization helps consistency across different environments where application is developed, tested and deployed.

Continous Monitoring:

This is most important role in devops lifecycle where continously monitors application's functionality. The root cause of any issue can be determined here.

Different tools used in devops:

1.Storage and collaboration: Git Hub

2.Testing tools: Selenium and J-Unit

3.Integration tools: Jenkins,Bamboo,Hudson

4.Deployment:

i.contenarization:Docker and Cubenats

ii.configuration:Chef,Puppet, advil and Saltstack

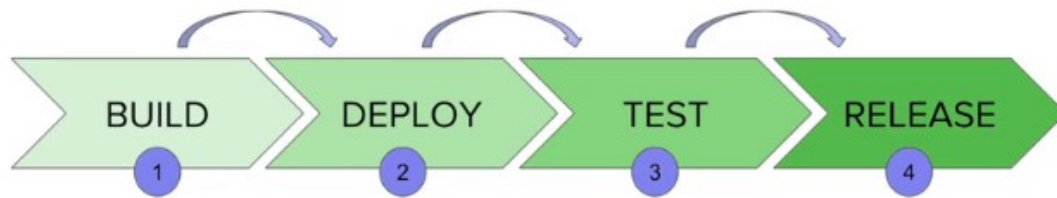
5.Monitoring:Nagios,Splunk and Sensu

Jenkins

It is one of most commonly used integrated tools in automation. Jenkins is a widely used application around the world that has around 300k installations.Jenkins can automate build and test at a rapid rate.

It is a server based application amd require a web server like Apache Tomcat.

Jenkins Pipeline is a suite of plugins which supports implementing and integrating continuous delivery **pipelines** into **Jenkins**. A continuous delivery **pipeline** is an automated expression of your process for getting software from version control right through to your users and customers.



Working of Jenkins Continuous Delivery Pipelines

Jenkins Pipelines support big projects. You can run multiple jobs, and even use pipelines in a loop.

Advantages of Jenkins

- 1.Easy to install.
- 2.free of cost.
- 3.It is built in java so that can be run in many platforms.
- 4.Only need to commit changed to the source code and jenkins will automate the rest of the process.
- 5.Easy to debug errors in jenkins.
- 6.Less time to deliver the project due to continous integration.

Disadvanatges of Jenkins

- 1.Jenkins UI is not user friendly in comparision to current UI technologies.
- 2.Tracking becomes hard to find out what went wrong.

GIT

GIT is a version control system for tracking changes and co ordinate work on those files among multiple people.It is primarilu used for source code management in software development. Code in GIT can be written in python. Perl,C,C++.It provides cloud storage for source code.

GIT supports all popular programming languages, and streamlines the iteraton process.

Repository in GIT contain a collection of files of various versions of a project. These files are imported from the repository into the local server of the user for further updations and modifications in the content of the file.

Bare Repositories: These repositories are used to share the changes that are done by different developers. A user is not allowed to modify this repository or create a new version for this repository based on the modifications done.

Non-bare Repositories: Non-bare repositories are user-friendly and hence allow the user to create new modifications of files and also create new versions for the repositories. Cloning process by default creates a non-bare repository if any parameter is not specified during the clone operation.

Differences between Agile and devops

Agile	Devops
1. Agile helps to manage complex projects.	1. Devops focuses to manage end-to end process.
2. Focuses on constant changes.	2. Focuses on constant testing and delivery.
3. Need to train all team members to have equal skills	3. As they have different teams they do not need equal skills.
4. Feedback is taken from customer.	4. Feedback is taken from internal teams.
5. Do not rely on automation.	5. Mostly rely's on automation.

Why NOOps to devops?

Devops is basically associated with development and operation team. Whereas NOOps work on the principle of "Make everything deployable by design with no effort from anybody".

In devops as we knew that there is continuous deployment of code, but in NOOps there will be continuous code deployment along with deployment of infrastructure.

If the application is simple, PaaS of cloud is a good solution and devops will be easy to use. If it is more big then we need more control over the application.

NOOps is more considered to devops since it is highly automated and giving faster outcomes.

NOOps produces less friction between devopler team and operations team since there is no need of interation between the two team and a single team is taking whole responsibility of development and operation.

Since a single team is taking whole responsisbility deveoplers can concentrate more on development rather than bothering about infrastructure.

NOOPs doesn't mean that one can have some magical automation so that one can't resolve the problems and troubleshoot. it might mean instead of traditional operations organozation we use automation.

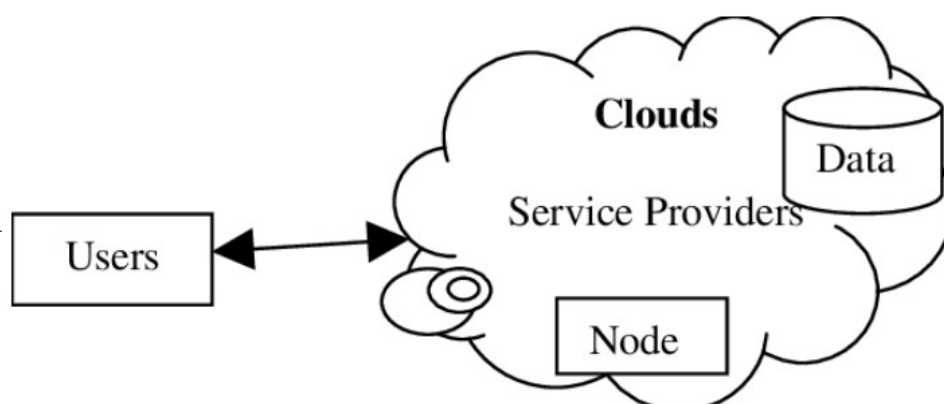
But finally the conclusion can be given in such a way that the implementation of NOOps is not highly recommended since due to high automation once if there is a single breakdown whole system can't work on the project.

And if the infrastructure is completely available one can have test trials and move inn to proceed with the project. if the environment is not that much supportive it becomes a risky task to organization to work on the project.

Cloud Computing

Cloud computing is a shared pool of resources where many services are provided to the user through internet. The resources includes tools like servers, data storage, data bses, networks etc..

It is the use of remote servers on the internet to store, maintain and process the data rather than local servers.



Cloud service providers provide users with infrastructure and storage so that people could access it.

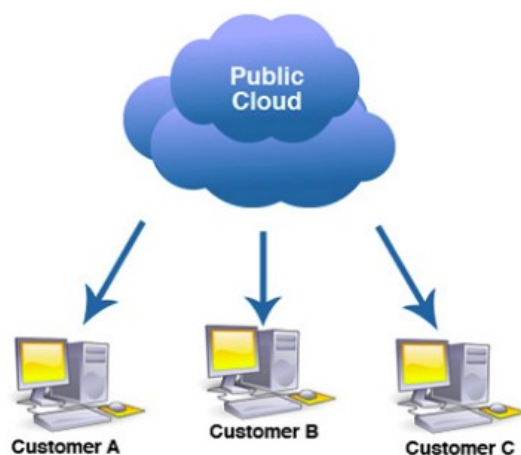
Deployment models

1.Public cloud:

It is based on the standard cloud model in which a service provider makes resources such that application or storage available to general public over internet.

Ex:Elastic compute cloud,sun cloud

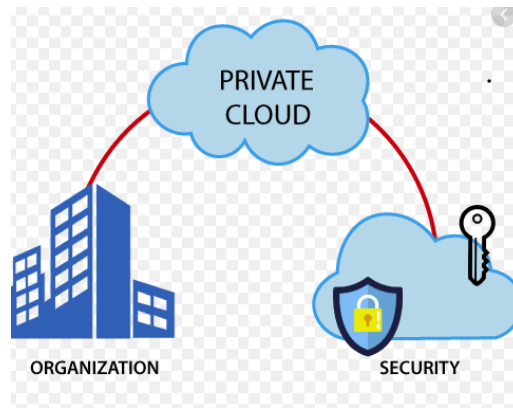
Third party multitenant cloud infrastructure and service. Available to people based on subscription basis.



2.Private cloud:

Designed to offer the same features and benefits of public cloud to a particular organization, institution with added features. A public cloud model within a company's own data center infrastructure for internal use.

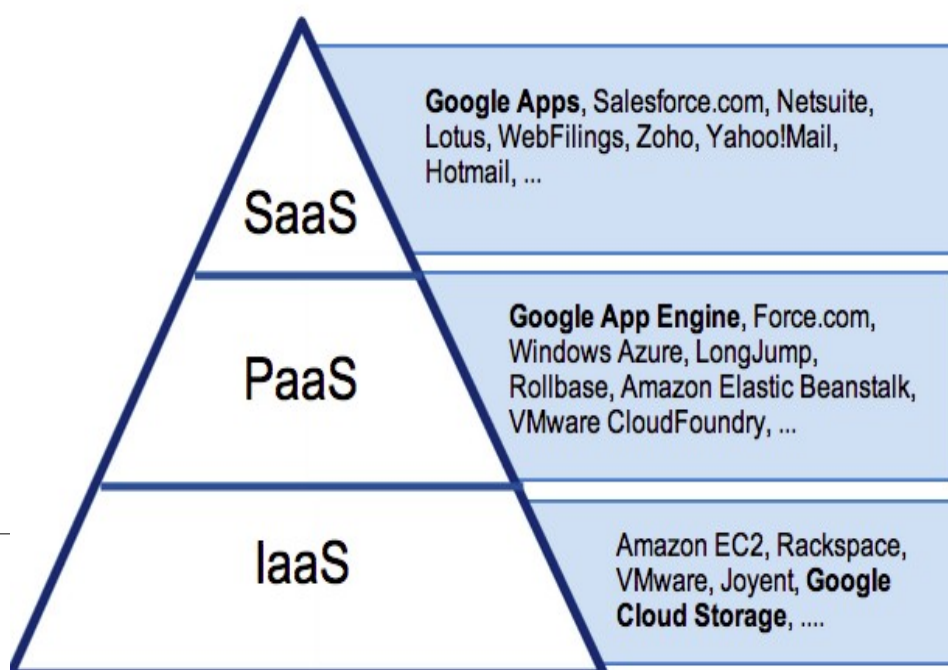
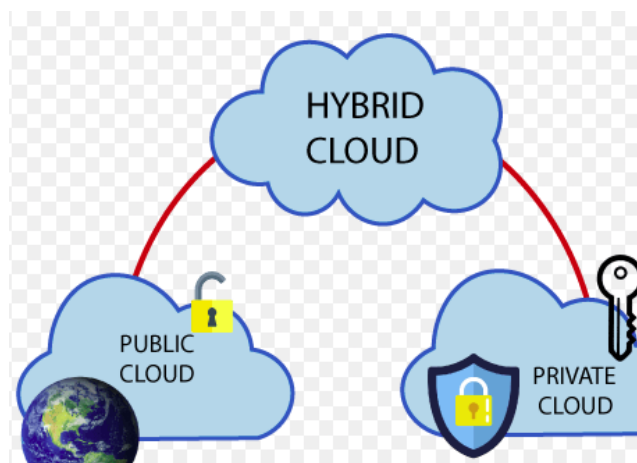
Ex:Google



3. Hybrid cloud:

It is composition of atleast one private and public cloud. Mixed range of public and private clouds .Leasing private cloud services are insufficient.

Ex:Microsoft,Amazon



**Cloud
computing
reference
models**

i. IAAS:Infrastructure as a service which provides bare servers so that one don't need additional backup and power supply.Virtual machines are created on users request and users are given tools and interfaces to configure software stack.

ii.PAAS:Platform as a service they provide Java,Ruby,PHP so that no need manage their binaries.It devlivers scalable and elastic runtime environment. On demand that host execute of application.

iii.SAAS:Software as a service which provides email and quequing services as SQS.It provides applications and services on demand.the application are shared across multiple users where interaction is isolated from one another.

Characteristics of cloud computing

- 1.Pay for what is used.
- 2.web and mobile access.
- 3.Multitanant
- 4.Automated backups and automated upgrades.
- 5.Demand service.
- 6.Scalability

AWS(Amazon Web Services)

Aws is a global cloud platform which offers set of services at affordable rates. This helps customers scale up their services .

Why AWS...?

1.Easy to use

AWS is designed in such a way that it allows users to access it very easily ,quickly and securely host the applications whether they are existing or SaaS based application. So that one can use its console as simple as possible.

2.Flexible

AWS enables us to choose desired programming language, Operating system, web application platform, database and other.

This allows us to preserve our existing application while we are working with new solutions.

3.Cost-effective

As like other service providers AWS do not allow up-front commitment. We only pay for the compute power, storage, and other services that we use. This is one of the reasons why most of the start-ups choose AWS.

4.Reliable

AWS gives us the advantage of Reliability which encompasses to perform workload with an intended function correctly and consistently when there is a need. This includes the ability to operate and test the workload through its total lifecycle.

5.Scalable and high-performance

Using AWS tools, auto scaling and elastic load balancing ones application can scale up and scale down based on demand. Through which one predicts performance at lowest possible cost. Due to many of its built-in tools and scalability AWS gives us high performance.

6.Security

AWS follows end-to-end approach to secure the data. Data protection services provide encryption and key management and threat detection that continuously monitors and protects the accounts and workloads.

Different services provided by AWS

Compute services

- 1.EC2: Elastic compute cloud is a virtual machine on cloud which you have a OS level control.This is a cloud server we can run whenever needed.
- 2.Lightsail:This cloud computing tool automatically deploys and manages the computer,storage,and networking capabilities required to run the application.
- 3.EKS:Elastic container service for Kubernetes this tool takes us to kubernetes on cloud without installation.
- 4.AWS Lambda: AWS service allows you to run functions in the cloud. This is a big cost saver for you as to pay only when functions execute.

Migration

Migration services used to transfer data physically between your datacenter and AWS.

- 1.SMS:Server Migration service allows you to migrate on-site servers to AWS easily and quickly.
- 2.Snowball:It is a small application which allows you to transfer terabytes of data inside and outside of AWS environment.

Storage

- 1.Amazon Glacier:It is extremely low cost storage service.It offers secure and fast storage for data archiving and backup.
- 2.EBS:Amazon Elastic Block Store this allows a block storage to use with Amazon EC2 instances.EBS store volumes are network attached and remain.
- 3.AWS storage gateway:This AWS service is connecting on-premises software applications with cloud-based storage.It offers secure integration between the company's on-premises and AWS's storage and infrastructure.

Security

- 1.IAM:Identity and access management is a secure cloud security service which helps one to manage users,assign policies,form groups to manage multiple users.
- 2.Inspector:It is an agent that you can install on your virtual machines, which reports any security vulnerabilities.
- 3.Certificate manager:The service offers free SSL certificates for your domains that are managed by Route53.
- 4.Cloud directory:This service allows you to create flexible ,cloud native directories for managing hierarchies of data along multiple dimensions.
- 5.KMS:Key management service it is a managed service.This service help you to create and control the encryption keys.
- 6.Shield: Shield is a managed Distributed Denial of service protection service.it offers safeguards against web applications running on AWS.
- 7.GuardDuty:It offers threat detection to protect your AWS accounts and workloads.
- 8.Macie:This is a data visibility service that provides us an ability to classify and protect your sensitive critical content.

Databases

- 1.Amazon RDS:This database in AWS is used to set up,operate,and scale a relational database in the cloud.
- 2.DynamoDB:It is a fast,fully managed database service.It is a simple service which allow cost-effective storage and retrieve data.
- 3.Elastic Cache:It is a web service which makes it easy to deploy,operate and scale memory cache in cloud.
- 4.Neptune:it is a fast,reliable and scalable graph database service.

5.Redshift:It is Amazon's data ware housing solution which one can use to perform complex OLAP problems.

Analytics

1.Athena:This analytics service allows perform SQL queries on S3 bucket to find files.

2.CloudSearch:This service can be used for creating a fully managed search engine for your website.

3.ElasticSearch: It is similar to cloudsearch but with added features.

4.System manager:This service allows you to group the resource. And allows one to find issues and act on them.

5.Managed services:It offers mamangement of your AWS infra which allow one to focus on application.

Internet of things

1.IoTCore:This is one of managed services by AWS which allows us to connect cars,light bulbs,sensors etc...

2.IoTAnalytics:This AWS IOT service helpful to perform analysis on data collected by ones IoT devices.

3.FreeRTOS:This real-time operating system for microcontrollers helps to connect IoT devices.

Application services

1.Step functions: It is a way of visualizing whats going inside appllication and what different microservices it is using.

2.SWF:Simple workflow service helps us to coordinate both automated tasks and human-led tasks.

3.SNS:Simple Notification service can use this service to send our notification in the form of mail and SMS based on given AWS service.

4.SQS:Simple Queue service This service is used for decoupling

the application .it is a pull-based application.

5.Elastic Transcoder:This AWS service tool helps to change a video format and resolution to support various devices like tablets,smartphones and laptops of different resolutions.

Deployment and management

1.AWS cloud Trail:This service records AWS API calls and send backlog files to you.

2.CoudWatch:The tools monitor AWS resources like Amazon Ec2 and RDS instances.

3.CloudHSM:This AWS service helps you to meet corporate,regulatory, and contractual,compliance requirements for maintaning data security.

Develpoer tools

1.Codestar:Codestar is a cloud based service for creating ,managing and working various software developeent projects on AWS.

2.CodeCommit:This is a Version control service which allows to store code and other assets in cloud privately.

3.CodeBuild:This service automates process of building and compiling the code.

4.CodeDeploy:This is service which allows one to deploy the code in to EC2 instances.

5.CodePipeline:Helps to create a deployment pipeline like testing, building,testing authentication,deployment on development and production environments.

6.Cloud9: It is an integrated developeent environment for writing, running and debugging in the cloud.

Bussines productivity

1.Alexa: It empowers organization with voice,using Alexa.It will help to allow you to build custom voice skills for your organization.

2.Chime:Can be used for online meeting and video conferencing.

3.WorkDocs:Helps to store documents in cloud.

4.WorkMail:Allows one to send recieve mails.

Mobile Services

1.Mobile Hub: Allows you to add,configure and design features for mobile apps.

2.Cognito:Allows users to sign up using his or her social identity.

3.Devicefarm:Helps to improve the quality of apps by quickly tesing hundereds of mobile devices.

4.AppSync:It is a fully managed GraphQL service that offers real time data sychronization and offline programming features.

Desktop

1.Workspace:Virtual Desktop infrastructure allows to use remote desktop in this cloud.

2.AppStream:A way of streaming desktop application to users on web browser.

Applications of AWS

1.Website hosting

2.Application hosting using Saas

3.Media sharing like Images,videos etc..

4.Content delivery and distribution

5.Disaster recovery one of best applications.

- 6.Storage and Back up
- 7.Development and testing environment
- 8.Academic computing
- 9.Search engines
- 10.Social Networking

Disadvantages

- 1.Paid services are allowed for immediate and instance service.
- 2.They to have some common cloud computing issues when one move to a cloud like limited control and downtime etc..
- 3.AWS sets default limits on resources which differ from region to region like images,volumes and screen shots etc..
- 4.Hardware – level changes happen to application which may not offer the best performance and usage of application.

Feasibility Report

Feasibility is done to check the economic impact of the project socially economically and technically. It mainly focuses on whether the company can invest the budget to implement it or not and to know the technical support is available or not under the budget. And to check whether the organisation is ready to purchase the requirements.

- .Technical Feasibility
- .Economical Feasibility
- .Social Feasibility

Technical Feasibility:

This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands on the available technical resources. This will lead to high demands on the available technical resources. This will lead to high demands being placed on the client. The developed system must have a modest requirement, as only minimal or null changes are required for implementing this system.

Economical Feasibility:

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified. Thus

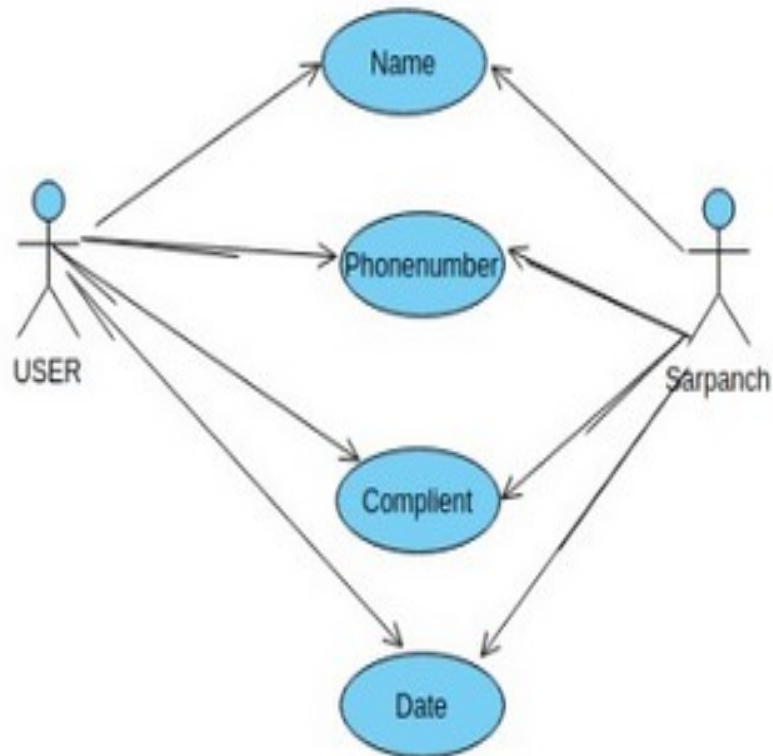
the developed system as well within the budget and this was achieved because most of the technologies used are freely available. Only the customized products had to be purchased.

Social Feasibility:

This study is done to check the level of acceptance or satisfaction of the user. This includes the training or learning process of the user to use the system efficiently for 100%. The complete acceptance of the system is done through the levels of knowledge that user gets during the study.

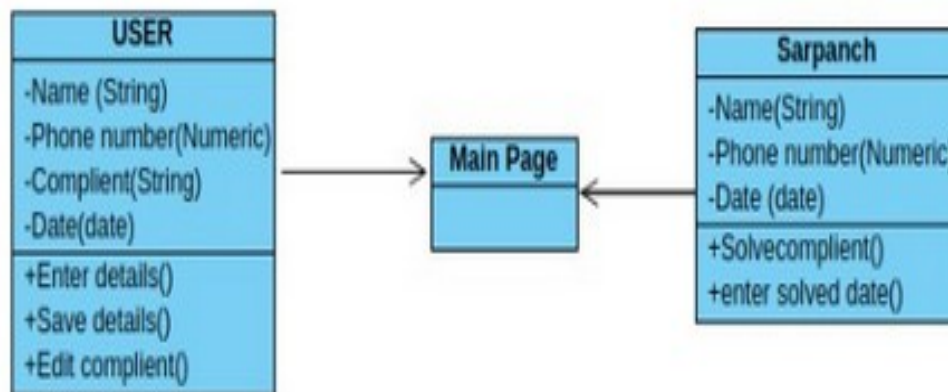
System design

Usecase



A use case diagram is a graphical depiction of a user's possible interactions with a system. A use case diagram shows various use cases and different types of users the system has and will often be accompanied by other types of diagrams as well. The use cases are represented by either circles or ellipses

Class Diagram



Class diagram is a static diagram. It represents the static view of an application. Class diagram is not only used for visualizing, describing, and documenting different aspects of a system but also for constructing executable code of the software application.

Class diagram describes the attributes and operations of a class and also the constraints imposed on the system. The class diagrams are widely used in the modeling of objectoriented systems because they are the only UML diagrams, which can be mapped directly with object-oriented languages.

Class diagram shows a collection of classes, interfaces, associations, collaborations, and constraints. It is also known as a structural diagram.

Testing

The purpose of testing is to find errors. Testing is that the method of making an attempt to find each conceivable fault or weakness during a work product. It provides the simplest way to examine the practicality of parts, sub assemblies, assemblies AND/or a finished product it's the method of workout code with the intent of making certain that the software package meets its needs and user expectations and doesn't fail in an unacceptable manner. There are varied sorts of check. every check kind addresses a particular testing demand.

Integration testing

It is a testing that is performed after the unit testing. It mainly focuses on the bug that encountered during the combining the code. Though the code is doing good individually it is checked for the combination.

Unit Testing

Unit checking involves the look of test cases that validate that the inner program logic is functioning properly, which program inputs turn out valid outputs. All call branches and internal code flow ought to be valid. it's the testing of individual computer code units of the applying.

It aims on making the things at root level. It accepts the code from developer and testing them individually for checking whether they are able to co relate with each other.

Required code

```
student@db161264:~/Desktop/myproject$ source myvenv/bin/activate
(myvenv) student@db161264:~/Desktop/myproject$ code .
(myvenv) student@db161264:~/Desktop/myproject$ python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
January 23, 2022 - 22:24:18
Django version 3.2.10, using settings 'vms.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.
```

steps:

1.Creating the virtual environment

source myvenv/bin/activate

2.Opening the virtual environment to code.

Code .

3.Run the server

python manage.py runserver

4.Get the localhost Ip address

copy the url to browser and website get visible

Activities Visual Studio Code Sun 10:31 PM

views.py - myproject - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

MYPROJECT

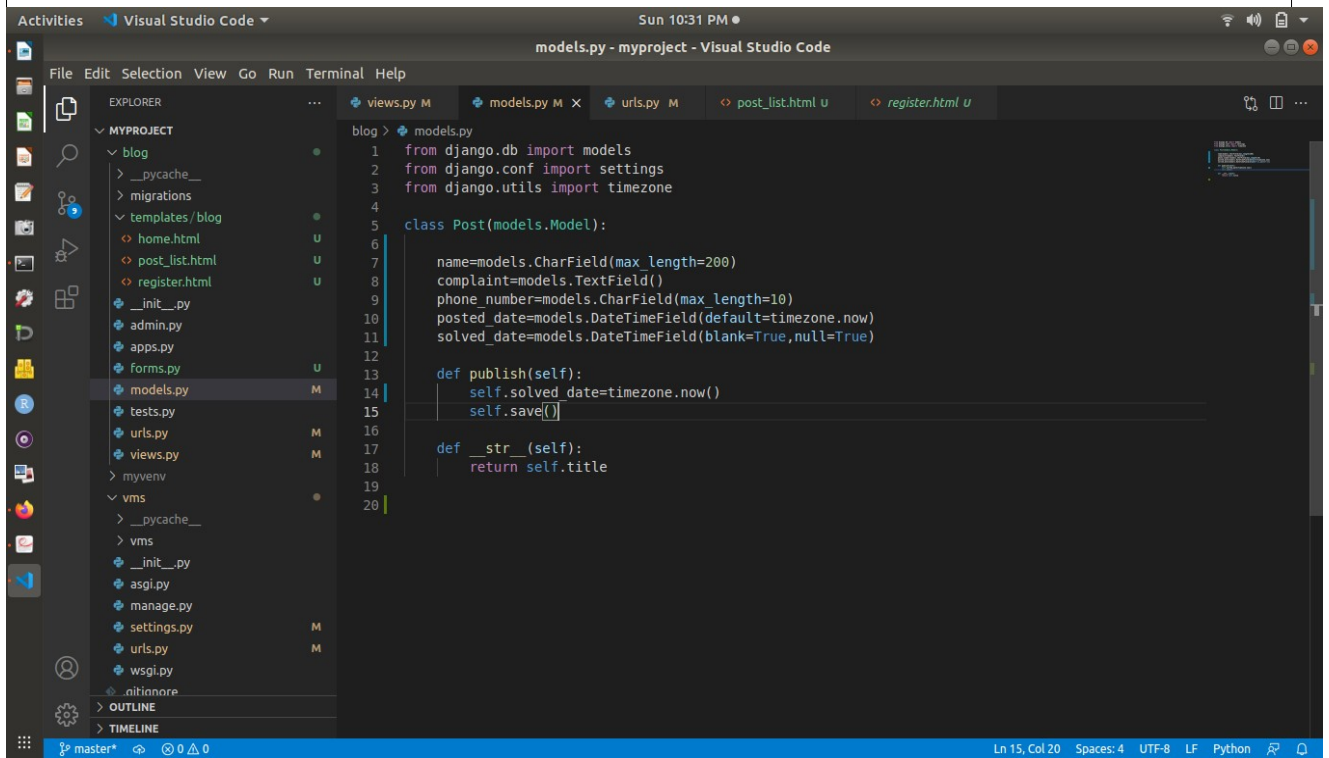
- blog
 - __pycache__
 - migrations
 - templates/blog
 - home.html
 - post_list.html
 - register.html
 - __init__.py
 - admin.py
 - apps.py
 - forms.py
 - models.py
 - tests.py
 - urls.py
 - views.py
- myenv
- vms
 - __pycache__
 - vms
 - __init__.py
 - asgi.py
 - manage.py
 - settings.py
 - urls.py
 - wsgi.py
- __init__.py
- OUTLINE
- TIMELINE

views.py

```
1 from django.shortcuts import render, redirect
2 from django.http import HttpResponse
3 from django.http import HttpResponseRedirect
4 from django.urls import reverse
5 from django.contrib.auth.decorators import login_required
6 from .forms import NewUserForm
7 from django.contrib.auth import login
8 from django.contrib import messages
9 from .models import Post
10 from django.utils import timezone
11
12 def post_list(request):
13     all_posts= Post.objects.filter(solved_date__lte=timezone.now()).order_by('solved_date')
14
15     return render(request,'blog/post_list.html',{'all_posts':all_posts})
16
17
18
19 def register_request(request):
20     if request.method == "POST":
21         form=NewUserForm(request.POST)
22         if form.is_valid():
23             user = form.save()
24             login(request,user)
25             messages.success(request,"Registration successful")
26             return request("main:homepage")
27             messages.error(request,"Unsuccessful.Invalid info")
28         form=NewUserForm()
29     return render(request=request,template_name="blog/register.html",context={"register_form":form})
```

Ln 15, Col 53 Spaces: 4 UTF-8 LF Python

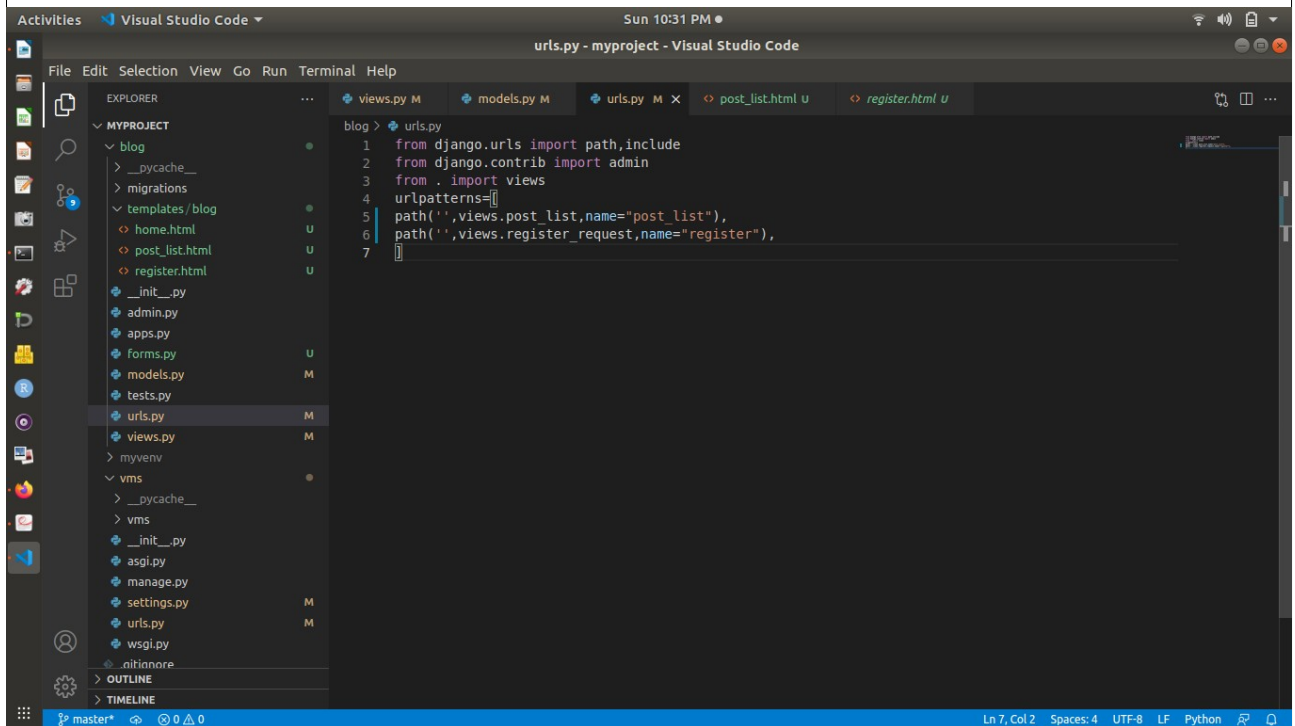
Creating models



The screenshot shows the Visual Studio Code editor with the file explorer on the left and the code editor on the right. The file explorer shows the project structure with a 'blog' directory containing 'home.html', 'post_list.html', and 'register.html'. The code editor shows the 'models.py' file with the following code:

```
1 from django.db import models
2 from django.conf import settings
3 from django.utils import timezone
4
5 class Post(models.Model):
6
7     name=models.CharField(max_length=200)
8     complaint=models.TextField()
9     phone_number=models.CharField(max_length=10)
10    posted_date=models.DateTimeField(default=timezone.now)
11    solved_date=models.DateTimeField(blank=True,null=True)
12
13    def publish(self):
14        self.solved_date=timezone.now()
15        self.save()
16
17    def __str__(self):
18        return self.title
19
20
```

urls Creation



The screenshot shows the Visual Studio Code editor with the file explorer on the left and the code editor on the right. The file explorer shows the project structure with a 'blog' directory containing 'home.html', 'post_list.html', and 'register.html'. The code editor shows the 'urls.py' file with the following code:

```
1 from django.urls import path,include
2 from django.contrib import admin
3 from . import views
4 urlpatterns=[
5     path('',views.post_list,name="post_list"),
6     path('',views.register_request,name="register"),
7 ]
```

HTML PAGES

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <meta name="viewport" content="width=device-width, initial-scale=1">
5 <style>
6 body {font-family: Arial, Helvetica, sans-serif;}
7 form {border: 3px solid #f1f1f1;}
8
9 input[type=text], input[type=password] {
10 width: 100%;
11 padding: 12px 20px;
12 margin: 8px 0;
13 display: inline-block;
14 border: 1px solid #ccc;
15 box-sizing: border-box;
16
17
18 button {
19 background-color: #4CAF50;
20 color: white;
21 padding: 14px 20px;
22 margin: 8px 0;
23 border: none;
24 cursor: pointer;
25 width: 50%;
26
27
28 button:hover {
29 opacity: 0.8;
30
31
32 .cancelbtn {
```

```
44 width: 40%;
45 border-radius: 50%;
46
47
48 .container {
49 padding: 16px;
50
51
52 span.psw {
53 float: right;
54 padding-top: 16px;
55
56
57 /* Change styles for span and cancel button on extra small screens */
58 @media screen and (max-width: 300px) {
59 span.psw {
60 display: block;
61 float: none;
62
63
64 .cancelbtn {
65 width: 100%;
66
67
68 }
69
70
71 </style>
72 </head>
73 <body>
74
75 <h2>Login Form</h2>
76
77 <form action="/action_page.php" method="post">
78
79 <div class="container">
```


Visual Studio Code interface showing the file explorer on the left with the project structure. The Explorer pane shows a tree view of the project files, including a 'blog' directory with subdirectories like 'templates' and 'migrations'. The 'post_list.html' file is selected in the Explorer.

The main editor area displays the content of 'post_list.html', which is an HTML template for a login form. The code includes a form with fields for 'Username' and 'Password', a 'Login' button, and a 'Remember me' checkbox. The form is styled with a container class and a background color. The status bar at the bottom indicates the file is at line 12, column 17, with 2 spaces, UTF-8 encoding, and LF line endings.

```
blog > templates > blog > post_list.html > html > head > style > input[type=text]
68 </head>
69 <body>
70
71 <h2>Login Form</h2>
72
73 <form action="/action_page.php" method="post">
74
75   <div class="container">
76     <label for="uname"><b>Username</b></label>
77     <input type="text" placeholder="Enter Username" name="uname" required>
78
79     <label for="psw"><b>Password</b></label>
80     <input type="password" placeholder="Enter Password" name="psw" required>
81
82     <button type="submit"><a href="register.html"><a>Login</a></button>
83   </div>
84   <input type="checkbox" checked="checked" name="remember"> Remember me
85   </div>
86 </form>
87
88 <div class="container" style="background-color: #f1f1f1">
89   <button type="button" class="cancelbtn">Cancel</button>
90   <span class="psw">Forgot <a href="#">password?</a></span>
91 </div>
92 </body>
93 </html>
94
95
96
```

Visual Studio Code interface showing the file explorer on the left with the project structure. The Explorer pane shows a tree view of the project files, including a 'blog' directory with subdirectories like 'templates' and 'migrations'. The 'register.html' file is selected in the Explorer.

The main editor area displays the content of 'register.html', which is an HTML template for a registration form. The code includes a form with a 'Register' button and a message for users who already have an account. The form is styled with a container class and a background color. The status bar at the bottom indicates the file is at line 13, column 14, with 4 spaces, UTF-8 encoding, and LF line endings.

```
blog > templates > blog > register.html > ...
1 {% extends "blog/header.html" %}
2 {% block content%}
3 <div class="container py-5">
4   <h1>Register</h1>
5   <form method="post">
6     {% csrf token%}
7     {{register_form|crispy}}
8   <button class="btn btn-primary" type="submit">Register</button>
9 </form>
10
11 <p class="text-center">if you already have an account,<a href="#">instead.</a></p>
12 </div>
13 {% endblock%}
```

Output

Site administration

AUTHENTICATION AND AUTHORIZATION

Groups

[+ Add](#) [Change](#)

Users

[+ Add](#) [Change](#)

BLOG

Posts

[+ Add](#) [Change](#)

Recent actions

My actions

[nani](#)
Post

[+ nani](#)
Post

AUTHENTICATION AND AUTHORIZATION

Groups

[+ Add](#)

Users

[+ Add](#)

BLOG

Posts

[+ Add](#)

ADD POST

Name:

Complaint:

Phone number:

Posted date:

Date:

2022-01-23

Today

Time:

22:50:39

Now

Solved date:

Date:

Today

Time:

Now

Save and add another

Save and continue editing

SAVE

**Scope:**

This project helps us minimizing the work load of an user since they could sit at thier place and do the work that Actually had to be done physically.This helps when people could not go to actual resolver but can solve the issue.

References:

- 1.www.google.com
- 2.www.tutorialspoint.com
- 3.www.stackoverflow.com
- 4.Django series by Aksonai(Youtube.com)