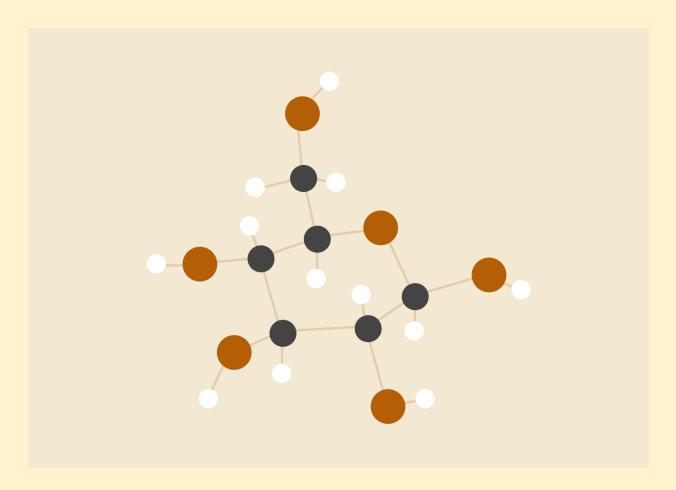
PROJECT FINAL REPORT

Blog website using Django with multiple features



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Introduction

We all know that these days write blogs and considering it as a source of income has become very popular. Many people across the world are working as a full time blogger. There are many website giving payout for writing blog for their website. We all already know about Quora.

What I want to do is, make our own website which facilitates writing blogs on whatever topic we want and publishing it on the internet very easily.

Thanks to python web Framework Django, Which makes it easier to develop websites with backend. I have created a blog website using django. This website makes it easier to write and publish blogs anytime and anywhere.

What is Django?

Django is a high-level Python Web framework that encourages rapid development and clean, pragmatic design. Built by experienced developers, it takes care of much of the hassle of Web development, so you can focus on writing your app without needing to reinvent the wheel. It's free and open source.

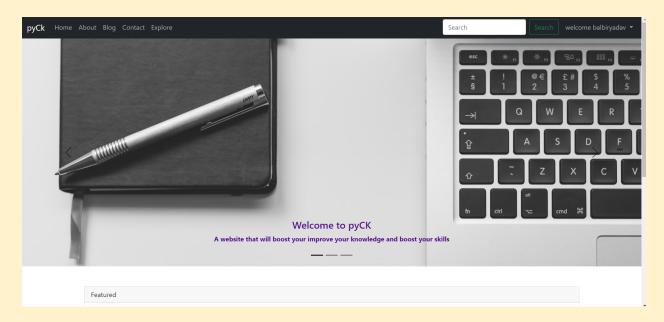
Now moving ahead I will explain the implementation of the Django in our blog website. Since there are so many files so while explaining I'll be using the name of those files directly. Please refer to the project repository for the files.

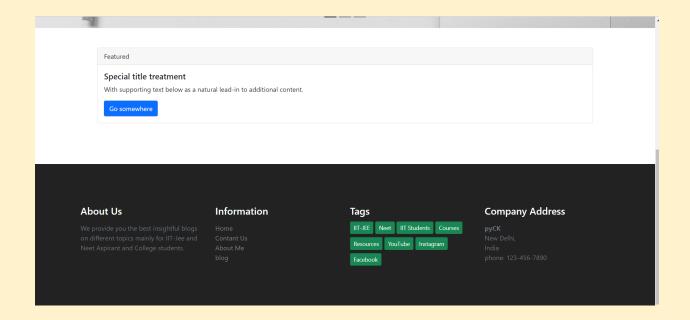
IMPLEMENTATION:

Landing Page:

When a user will search our domain in his/her browser, This is where he/she will land every time. This is the home page. In the **project.url** we have set it by default. In **home.views** I have defined the home function which is calls the template file home.html which has all the necessary codes for whatever user sees at the landing page.

In Landing page, We are featuring some of the blog posts randomly as of now. It has a navbar which shows all the options with which the user can interact. All the design in this page is designed with the help of Bootstrap.



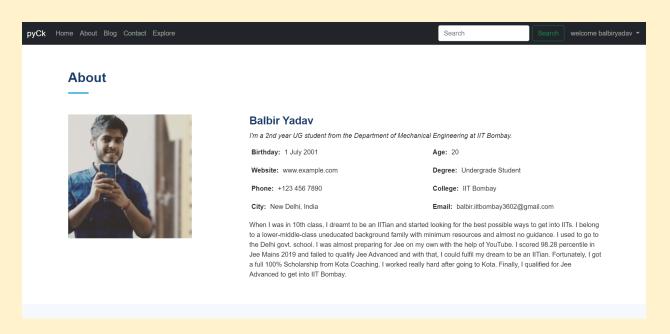


Note: We have created a base.html file with the help of Bootstrap. We will use this template page in almost all the different template pages like home.html, about.html, blog.html etc. with the help of Django. It's a beauty of Django that we are using a single base.html everywhere with adding more details as per the requirement.

About:

When a user goes to www.OurWebsiteDomain/about he will land at about page. Implementation is pretty much the same as above. **Home.url** will call the about function in **Home.views** which is defined to call template **about.html**. This page uses a lot of CSS and Html. Stuffs are just copying and pasting.

Above two page setup was pretty much easy. It has nothing to do with the backend. It was just html, css and bootstrap and integrate pase with the help of Django. Now we will do some backend as well.



I like learning different kind of new skills. I have explored add more skills to my resume. My favourite Programmin			
HTML	g language is python. Doing doing i	PHP	rours continuously.
CSS	90%	WODDDDGGGGMG	90%
CSS	90%	WORDPRESS/CMS	90%
JAVASCRIPT	75%	PYTHON	90%
BOOTSTRAP	80%	C++	80%
ANDROID STUDIO	70%	LATEX	90%
FLUTTER	60%	DJANGO	80%
	100%	GIT AND GITHUB	100%

Contact:

When a user goes to www.OurWebsiteDomain/contact he will land at the contact us page. Implementation is pretty much involved this time. First of

all we have created models with different fields in the form and made migration in the database.

```
# Create your models here.

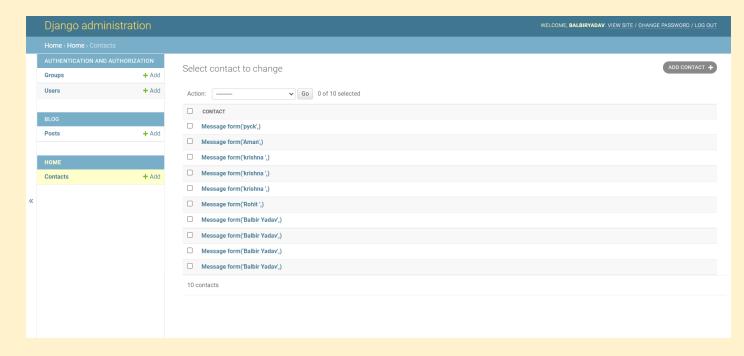
class Contact(models.Model):
    sno=models.IntegerField(primary_key=True)
    name=models.CharField(max_length=256)
    email=models.EmailField(max_length=250)
    phone=models.CharField(max_length=13)
    feedback=models.TextField()
    timestamp=models.DateTimeField(auto_now_add=True,blank=True)
    def __str__(self):
        return 'Message form'+self.name
```

In home urls we call the contact function from home views which has all the fields that are mentioned in form in contact.html. By clicking submit data gets stored in the database. We have also defined some constraints on adding data to the database so that one cannot spam the database form. One successful submission I message will be visible that one has successfully submitted his/her form.

Message:	: Alert! Fill Your Details carefully!	×
	Contact Our Team	
	Name	
	Email address	
	We'll never share your email with anyone else.	
	Phone No	
	Feedback	
	Submit	

Accessing database & Superuser:

One of the best features of Django. /admin will open the backend and ask for username and password that we need to define in the editor by running commands in the terminal. See README.md for this command. Now after successful login we can see the contact/feedback submission as of now. We can modify them and access them as well. All the things we will integrate with the backend, can be found here.



Blog:

First of all we have set up blog.urls such that if the user goes to /blog then will get lend at the blog page where we want to fetch and show all the blog posts from the database up till now. Now for that we need to create our backend accordingly. So in blog.models we have created class and defined all the fields required for blog post.

```
# Create your models here.
class Post(models.Model):
    sno=models.IntegerField(primary_key=True)
    title=models.CharField(max_length=256)
    content=models.TextField()
    author=models.CharField(max_length=250)
    slug=models.CharField(max_length=130)
    timestamp=models.DateTimeField(timezone.now())

def __str__(self):
    return self.title+' by'+self.author
```

After defining all the fields, we need to integrate it to the backend and for that we need to run the migrate command in the terminal. Finally we have all the fields in the backend. We can write as many blogs as we want in the backend very easily.

Here are screenshots of /admin page of blogs



Here is the screenshot where we can write our blog in the backend.

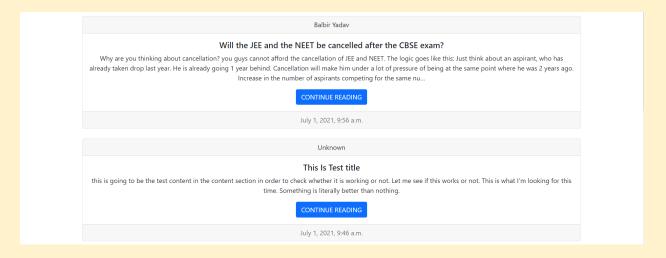


Once we got ready with the blogs in the backend, we fetch them at the blog.html page. This is how we set up our blog page.

We are showing only the title and a few lines of the blog. We have given a button "continue reading" where users can click and read the full blog/article.

For showing full content of the blog we have created another template which fetches the full blog from the database.

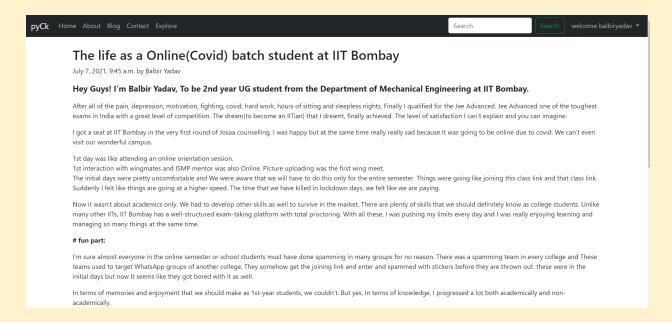
Here is how blog page looks like



Now after clicking on "Continue Reading" button we reach at blogpost page

where we have shown the complete content of the blog.

Have a look below:

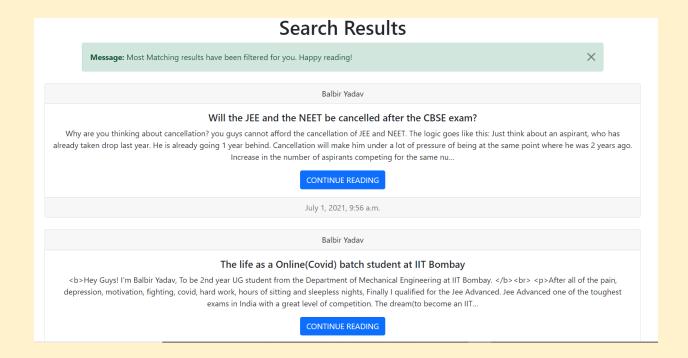


As of now we have the major part of this project now we are going to add some extra things like creating search options which facilitate the user to search the most related content he wants to read and also allow the user to login and logout.

Search Blog:

There is a search option at every page of this blog website where the user can enter the topic, keywords which he/she wants. We will filter out all the posts/blogs related to that query from the database and render a search.html page which shows the related blogs. If no match is found it will flash a message that no results are found with the given query.





Login & Logout

Finally we have created user authentication where readers can login and logout on our website. We have to search a lot over the internet for this section/part. Django had everything already cooked up. What we need to know is how to eat and where to go to eat them.

CONCLUSION

Django is really really awesome for developing websites both frontend and backend together without much hassle. It has already so many things cooked up. We just need to know how to use them. Our Project is about building a blogging website with the help of Django. Before starting this project, I had just heard the name of Django and I had no idea what it was. But after the course pyCK, I got to know that it's a web framework of Django. So I decided to make a project based on this.

For making a project based on Django, I had to learn this first. So I went ahead and learned the basics of Django from Django documentation and YouTube resources.

After learning about the basics of Django, I started working on this project. While working on this project, I was learning more. I had faced many challenges but searching over the internet and Youtube helped me a lot.

On our website users can sign up with their basic details and then login. He/She will have access to all the blog posts available. They can read whatever they want. They can search whatever they want to read with any keyword/query, Django website will filter blogs/posts related to that keyword/query. Users can send their feedback to the admin by contact us page. We can add more stuff in the future also.

REFERENCES

- 1. https://docs.djangoproject.com/en/3.2/
- $2. \ https://stackoverflow.com/questions/tagged/django\\$
- 3. youtube.com/codewithharry