

DEGGENDORF INSTITUTE OF TECHNOLOGY
Faculty of Electrical Engineering, Media Technology and Computer
Science

Programming World
Programming Assignment – Advanced Programming Techniques
Summer Semester 2019

Collaborators in this project:

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What kind of project do you implement?

Type of project: Blog

Description of project: Core focus of our project is to implement a Blogging platform, which provides bloggers various genre of blogging categories. We focus on enhanced user experience combined with a rather minimalistic approach to ease the burden of sophistication for amateur bloggers. Subscribing to this blog will be free of charge so that users can enjoy writing and reading blog posts. We have included three programming for blogging.

We are planning to create total 8 webpages in our project.

First page: This is the first page which shows when user opens our website. In this page, there are one login form, three different categories like python, Django C programming. Many small options are also available like search, contact etc.

Programming World

C Programming	Email
Django	Password
Python	Log In

Second Page: It is a Sign-Up Page. In this page, user can make his personal account for Programming World by giving his personal information like: First Name, Last Name, User name, mail-id, birthdate, password etc.

Sign Up

First Name :

Last Name :

User ID :

Email :

Password :

Confirm Password :

Create Account

Pages(3,4,5): These three pages are for reading, liking and commenting the blog posts.

Page 6: This page is for author only. In this page author can write their post.

Title:

Author:

Subject of a post:

Body:

In addition, we are going to add here our special feature of media. By using that user can upload picture, video and photos. Author can style text also.

Page 7: This page is also for author. In this page user can see his/her activity like when user uploaded a specific post, change they did in their post.

What are the specific features that set apart your project from similar projects?

Core focus of our project is to implement a BlogSpot, which provides bloggers various genre of blogging categories. We focus on enhanced user experience combined with a rather minimalistic approach to ease the burden of sophistication for amateur bloggers. We also provide language translation tool so bloggers can write an article in both English and German language's and the reader can read the article in his or her choice of language as well. We are also implementing various levels of security to ensure the protection of intellectual data of users without any conflict of privacy rights

SPECIAL FEATURES EXPLAINED

□ reCAPTCHA V3 is used in the blog authors window, as a method of accessing the composer for those who wishes to publish their content in the blog. reCAPTCHA is used as an identification method for the authors, that the contents are composed and edited by humans not by bots .

□ Forgot password option is available for admin to reset his password in case he or she forgot the password of the master login. This option is available in the login window for admin, where he can make use of forgot password link to guide him to password reset link. The password rest link will pop up in the Django window; the link will redirect the admin to a reset password dialogue to enter the new password. Once the new password is set, he or she can login with the new password and the existing username.

□ Media upload and attachment is available for the authors. Where authors can either upload a sole media file or attach media into their written contents to increase the aesthetics of the blog. Whereas the admin has the full discretion to remove the content if the nature of content s licit or infringe media rights.

What are the necessary elements that must be implemented?

For the creation of our blog, we are going to use Django 2.0.5 which is a web development framework that contains set of libraries and tools for creating websites and web applications. Since it needs a command line, we will be using Anaconda prompt So our website would be the Project and blog would be the application.

In Django, there are 3 major pieces that need to be dealt with: Models, Views, and Templates.

1) Model: It is a class that represents something you want to work with. In our case, our blog has many blog posts therefore a Post will be one of our models. Since a post should have an author, we will also have an Author model. Models usually have attributes; for instance, a blog post usually has a title, the date it was created, an author, and the actual body text of the blog post. Likewise, an author should at least have a name and an e-mail address. We can also

describe relationships between our models; for instance, in a blog, a Post has an Author, and an Author can have many Posts.

2) Template: It describes a general format for how we want to represent data to our users. For instance, every time we create a new blog post, we will want to show the user the post's title, when it was created, the author who wrote the post, and the post's body. We will also probably want to show the user a list of all the posts we have written. Since all posts follow the same format which would be Title, Author, published date and body, we can create a template that outlines how any post should be displayed. In web applications and in Django, this usually means an HTML. Therefore, we use:

- ☐ HTML to define the content of web pages
- ☐ CSS to specify the layout of web pages
- ☐ JavaScript to program the behaviour of web pages
- ☐ Bootstrap, which is a framework for developing responsive, mobile-first websites
- ☐ SQLite3 to store, manipulate and retrieve data in databases

3) View: In Django, a view has the concept of encapsulating the logic responsible for processing a user's request and for returning the response. It is just a function that knows what data to pull from our database (using a model) and what template to use to display that data. These layers would be calling the specific HTMLs which are supposed to show under respective URL. Combining data and templates is often referred to as "rendering a template", since we will replace parts of the template with actual data. As far as of now our website is local which runs only in a local server. In order to make it public, we would be using Git which is a version control system for tracking changes in computer files and coordinating work on those files among multiple people. GitHub, which is a hosting service for Git repositories, allows users to create and host personal websites and websites related to specific GitHub projects.

Who in your group is going to take responsibility for which part?

Juhi James	Admin Side Home Page C Programming Page
Johnson James	Python Page Register reCAPTCHA Design
Nikhil Baby	Django Page Sign In Comment Box Design