

BLOGS IN LIFE@IITK

PROBLEM DESCRIPTION

To develop a blog feature for the Life@IITK App where various cells and clubs can put up their blogs for the students and campus community in general.

In such a vast campus of Indian Institute of Technology Kanpur full of activities and something going on around every corner, it sometime becomes really difficult to keep a track of events, academics, mess, college fests, placements, nominations etc.

Life@IITK being developed keeping in mind the above problems of the campus community, it becomes really important to integrate it with a Blog-Spot feature to help Clubs, Gymkhana, Placement Office etc. to spread valuable information, articles, brochures, insights of seniors etc. to the respective subscribers in the campus.

GOALS

BLOG SECTION ON DASHBOARD

Displays the blogs pertaining to the subscribed channels (SPO/Gymkhana etc.) by the user.

Displays blogs in chronologically decreasing order of posting Date/Timestamp with most recent ones stacked on the top.

USER INTERFACE IN APP FOR BLOG CONTRIBUTORS & MODERATORS

Each channel/portal will have a moderator to add or remove contributors of the blogs for that channel.

The moderators will also have the power to approve/reject a blog from being posted. Only after they approve, the blog will be posted.

The contributors will have a UI which will help them create blogs containing various data types including text, images, links, downloadable attachments, email ids of the contributors to help people contact them for more details etc.

REAL TIME NOTIFICATION FEATURE

Whenever a blog will be written, the contributor will mention the targeted channels (like a blog by General Secretary Cultural channel may be relevant to channels of dance club, music club etc. too)

Hence, as soon as the blog is posted, all the subscribers of the channels which the contributor of the blog has targeted will receive a notification on their devices regarding the blog.

SPAM CONTROL

Since a user may subscribe multiple channels like both Dance club and Music Club. Hence if suppose a blog is written targeting both these clubs, there should be only one post of the blog on the dashboard listing all the targeted channels.

Also the user should receive only one notification.

This feature will really prove to be useful as the number of subscribed channels matching the targeted channels of the blog goes above five.

MULTIPLE LANGUAGE SUPPORT

In a National Level institute like IIT Kanpur where people come from varied cultures and backgrounds, it would be best to make blogs available in vernacular languages which will help them spread much more effectively and would make Blog Section the Daily Digest of the campus community.

PROJECT DESCRIPTION

The entire Blog Section will be developed using Django framework in the backend.

React and basic HTML5, CSS and JavaScript may be used to create the frontend.

Although the technologies and frameworks may be altered as per the convenience and functionalities they offer. It hardly takes me two days to get accustomed to new framework, technology etc.

Initially the work progress may be slow but the rate of progress will rise eventually as I become accustomed to the framework and workflow.

Documentation will be completed simultaneously alongside development. A detailed timeline has been devised by me which includes time slots for coding separate modules, testing the code, buffer slots to schedule delays/cleanup processes etc.

TIMELINE (IST: UTC + 5:30)

END SEMESTER EXAMINATIONS

17th November to 27th November 2019

Little work to be expected due to low productivity.

COMMUNITY BONDING PERIOD

28th November to 3rd December 2019

Discussion of the project with the mentor in length and setting up of communication channels among the team members and the mentor.

SETTING UP THE ENVIRONMENT AND DEVELOPING PROTOTYPES

4th December to 6th December 2019

Setting up the working environment, templates for documentation work, installing the framework libraries and other dependencies.

Creating prototype using basic HTML pages and backend server to display the functionalities.

DEVELOPING THE BLOG SECTION

7th December to 13th December 2019

UI FOR CONTRIBUTORS & MODERATORS

14th December to 17th December 2019

UI FOR CONTRIBUTORS & MODERATORS + SPAM CONTROL AND LANGUAGE SUPPORT

18th December to 23rd December 2019

NOTIFICATION FEATURE + OTHER REMAINING TASKS

24th December to 28th December 2019

BUFFER PERIOD/DEBUGGING/CLEANUP/RUNNING TEST CASES

29th December to 4th January 2020 (Happy New Year)

FINAL TOUCHES/DEBUGGING/CLEANUP/COMPLETION OF PROJECT

5th January to 10th January 2020

ABOUT ME

WHY YOU SHOULD PICK ME?

I have developed a similar kind of Blog-Spot in my Summer of Code 2019 project TechAtFarm (we won the First Prize) and that too using Django. Have a look at the Blog-Spot section in the homepage of our project website (tinyurl.com/techatfarm).

I am the kind of person who likes to work out innovative solutions to the most complex problems from just day to day experiences and real life examples.

I am workaholic and if I really get interested in something, it doesn't take me long to dive deep into it and work it out till the end.

I am good with people and love to make new friends while working on a project. This enhances my efficiency and keeps me interested throughout.

PROJECTS AND PAST EXPERIENCE WITH WEB DEVELOPMENT AND PROGRAMMING

Take a look at : <https://github.com/yashvardhanraizada>

Our project (We were a team of five students) TechAtFarm won the First Prize in the Summer of Code 2019. **The project was built using Django as the backend server and SQLite Database. It is hosted on Amazon Web Services instance.**

GitHub repository : <https://github.com/Ishanh2000/TechAtFarm> (I am one of the 5 contributors in this master repository)

In it we also had a blog section where the blog team can post blogs for users. We also had multiple language support in the entire website.

Check out: tinyurl.com/techatfarm | Jump to the Blog-Spot section.

If the above link doesn't work follow :

<http://ec2-52-15-97-130.us-east-2.compute.amazonaws.com/dbms/>

Apart from Django & DB SQLite3, I have programming experience with major frameworks and languages taught during the Summer of Code 2019 including React, Node.js, JavaScript, JQuery, Flutter, Android app development etc., database technologies like MySQL, Mongo DB, servers like Apache, NGINX and cloud hosting facilities like AWS (Amazon Web Services), Heroku etc.

I am comfortable working with C, C++ and Python. (Of course I can learn more as per use)

Last winter (December 2018) I also created a game of Tic-Tac-Toe using only C and C++.

I have worked with HTML, CSS, XML and C++ since my schooldays.

WHY LIFE@IITK?

According to me the best reason to work for development of open source Life@IITK is the tremendous amount of effect it will have on the Campus Community once it is deployed. And the code written by us will actually be put to practical use and its effect would be visible to us.

Also it is something we should do for the citizens of our alma-mater being proud students of the IITK Community.

Finally it is one of the best opportunities to learn how to put Web Development technologies to practical uses in apps and websites. It also gives us the opportunity to work with mentors whose insights help us to become good people apart from good developers.

Also it would act as a fruitful guide towards other Open Source Development programmes like Google Summer of Code etc.

PLANS APART FROM IITK WINTER OF CODE 2019-20

I have no such plans apart from WOC19. I will most probably stay at home during the entire coding period. I live in Kanpur only, so in case of genuine reasons, I can come to the campus for discussions/meeting with the mentor/team.