Gymkhana Nominations Portal

Summer Project - Programming Club

Aniket Pandey

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1 Acknowledgement

I would like to thank Programming Club for giving me the opportunity to create the portal and learn about backend web development in Django.

2 Repository

The project repository can be found **here** and the live project is hosted **here**.

2.1 Mentors

- Kunal Kapila
- Yash Srivastav
- Pratham Verma

3 Description

The main aim of the project is to develop a portal through which admins can release nominations for their child posts. The target group can apply for the same. The portal can keep track of each and every process the application goes through, e.g release, submission, approval from higher authority, interview remarks, final selection and increment in power if selected. The detailed documentation can be found *here*.

4 Timeline

4.1 Week 1

1. We started off by creating a simple web-app about a library through which normal users can issue a book and depending on the availability, librarian (aka admin) can either reject or accept the issuance. This was meant as an exercise for the actual project, and to get familiar with django.

2. Learnt about custom backends and integrated IIT K user authentication by overriding the default authentication. So that users can login through their CC id. However, we were not able to fetch their profile data, e.g Name, Roll No, etc.

3. Decided to implement Model Forms and Generic Views in the code. This decision led to easy editing and adding of user profile (fixed #2).

4. Extended user model by importing current user and adding few required fields. Final code till now looks clean and user friendly.

4.2 Week 2

1. After creating the basic template, we implemented *Dynamic Forms* as a separate app. It is possible to add various kind of questions in the form. After the form was finished, we integrated it into the nominations app.

2. Created the topmost(independent) Club Model. Interlinked Users, Clubs and Posts. Now user can create multiple post nominations within a particular club.

3. Created a filter for User Profile so that while releasing a nomination, it is possible to specify the target group (e.g users who are supposed to apply for the post). It remains to combine Forms and Filters for a nomination request.

4.3 Week 3

1. I created a separate view for all the Clubs, in which it is possible to have a look at the current post holders in all the clubs. Although the clubs don't have the typical heirarchial structure, they are just used to differentiate between the posts at the same level.

2. We finally integrated the Filters with Nomination form. Using that, it is possible to specify for whom this nomination is being released. On completion of Backend, we discussed the possiblity of using *Angular 2* as a front end framework, however, due to some compatibility issue of Angular with Dynamic Forms, we had to use Bootstrap for writing frontend.

3. Finished off the nomination heirarchy, now all the nominations that are released are first sent to the parent post, then on his approval , the process continues till it reaches the Gen-Sec. On his approval, the nominations are released to the public for applying. Meanwhile, the nomination creator and all the approving authority can view the applicants' answers.

4. Created the responsive template for the Index, Profile and the Nomination-Detail view. Replaced the original with the new template.

4.4 Week 4

1. Completed the frontend templates, replaced all the previous templates with the new one. Bootstrapped all the forms to make it look attractive.

2. Fixed the error in which the new user was not able to see his index view after logging in. Passed the username before the user logged-in, so as to create a user instance and allowing him to update his profile.

3. Added commenting functionality in the nominee's filled form. So during the interview, panel can record comments about the candidate.

4. Finished off the main structure of the project, only thing that remains to be done is to enhance the look by altering the font-sizes, background colour etc.

5. Started writing an API-refernce of the code for future maintenance.