PG PHD ADMISSION PORTAL

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AIM:

To create and implement a platform for PG, PhD admissions at IIT Ropar which will smoothen the admission process and make it easy for both the administration by providing them with filtered and selected students' data, and the student by giving them a better UI.

TECHNOLOGICAL STACK USED:

1. React JS, Tailwind CSS and the Material UI for the Frontend (client side).
2. Node JS for the Backend (or server side).
3. PSQL for the Database
4. GCP for file storage

WHAT HAVE WE DONE ?

1. Many node modules weren't working which were replaced like the jwt token and the nodemailer.
2. Created a 'how to apply' page.
3. Created multiple template data for the stakeholders (Admin, Faculty, Student) to test the website thoroughly.
4. Found and resolved the following errors:
   a. The documents uploaded can now be reviewed by faculty. Earlier, we were being redirected to the error page but it was resolved by using Google cloud bucket for uploading the documents.
   b. Admin/Faculty can upload results and the excel sheet dynamically keeps on updating, which was not the case earlier. Thereafter, the status of applications also gets updated. The error was resolved by matching the format of the uploaded file with what the portal expects.

    c. Multiple logins in the same window were corrected by maintaining cookies to temporarily store the user information and not allowing any other user to login until that cookie exists.

    d. The input columns of Aadhar number, Phone numbers, PIN codes etc. were accepting any input and not in their required respective formats. Regex patterns were added for the required formats.

    e. Many frontend errors were resolved such as redundant scroll bars, redundant staff role, updated sign out icon etc.

5. Deployed portal on Institute server (moreover, Frontend on Vercel and Backend on Render) .

USER INTERFACE SCREENSHOTS:

1. GENERAL HOME PAGE:

- A user can see the quick navigation options like **Home, How to apply, Openings, More Info, FAQs, Contact Us, Team, Signin and Signup** on the upper side of the home page.
- Moreover, **Signin** and **Signup** options are also made available in the center since they will be often used.
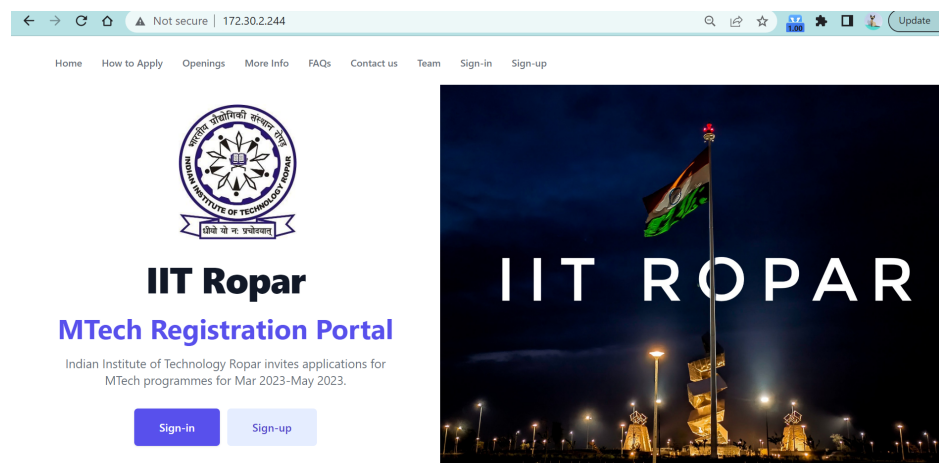
- **Footer:** a user friendly and interactive footer containing links to all the relevant information.

- **How to apply section:** Information on how to use the portal to apply for an opening.
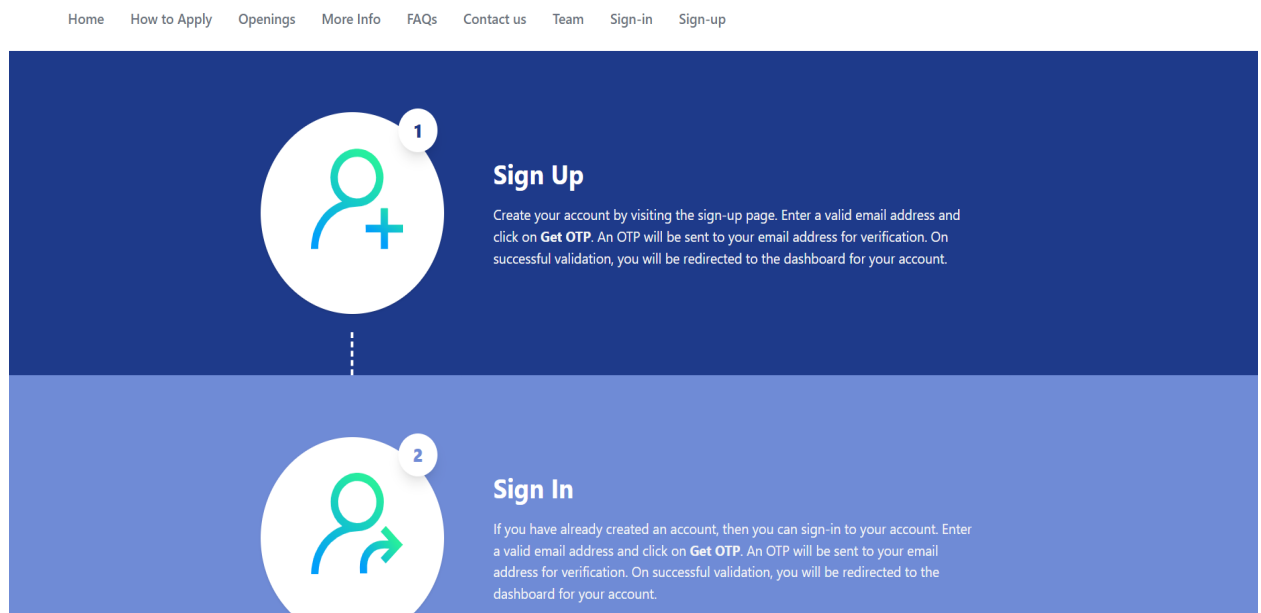
- **Openings section:** These are openings in which the student can apply. **Number of seats, GATE Code, the eligibility required by the student and the status of opening (Accepting/Closed)** is what a user can see in this section without signing in.

- **More Info section:** to help the user gather information about **selection criteria, fellowships/scholarships, reservations and final authority (MTech Admission Committee)**.

Home   How to Apply   Openings   More Info   FAQs   Contact us   Team   Sign-in   Sign-up

Selection

Selection will be based on the GATE performance for the year 2021/2022/2023. Please note that the candidates are required to register on "Common Offer and Acceptance Portal" (COAP) 2021(https://coap.iitd.ac.in/) before applying online to the Institute. You are required to look at COAP Website for all round of the offers.

Financial Assistance

GATE fellowship at the rate of Rs. 12400/- p.m. (tenable for a maximum period of 24 months) will be awarded to Indian Nationals doing the MTech Programmes, subject to Institute rules. They are required to assist the department for 8 hours of work per week related to academic activities of the department such as laboratory demonstration, tutorials, evaluation of assignments, test papers, seminars, research projects etc.

Reservation of Seats

Seats are reserved for Indian National under the categories, SC / ST / OBC(Non-creamy layer) / EWS(Economically Weaker Section) and PWD(Persons with Disability) according to the Government of India rules.

Final Authority

In all matters relating to the admission to MTech programme, the decision of the MTech Admission Committee is final.

- **FAQs section:** We have made it easy for users by adding the FAQs section to help him/her get some doubts solved which we think will most probably be asked by him/her.

Home   How to Apply   Openings   More Info   FAQs   Contact us   Team   Sign-in   Sign-up

How MS(R) program is different than an MTech program?   −

The basic idea of two programs are different. MTech program is oriented towards masters in engineering while MS(R) program is oriented towards research. Due to the basic approach of two programs, we see a couple of differences:

(a) MTech program has more course work then MS(R). A typical course work of MTech will spread over minimum two semesters.
(b) In MS(R) student spend most of the time in doing research. Due to nature of research, a student may take more than two years to graduate from MS(R) program.
(c) MS(R) is evaluated based on his/her research output (typically in form of publications). While for MTech, final project could be implementation or research, therefore, publications is not mandatory.

What are the career options after MS(R) or what are the job opportunities after MS(R)   +

As MS(R) is new in IIT Ropar, will it have good placements?   +

Is it actually better to do MS(R) or MTech   +

What are the research areas in the field of MS?   +

- **Contact us section:** In case of any assistance required by the user.

Home   How to Apply   Openings   More Info   FAQs   Contact us   Team   Sign-in   Sign-up

SEND US A MESSAGE

First Name*   Last Name

Email*   Phone*

Message*

SEND MESSAGE

CONTACT DETAILS

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Rupnagar, Punjab - 140001, India

Mail Us
coapcell@iitrpr.ac.in
info@iitrpr.ac.in

Call Us
Tel: +91-1881-231114
Tel: +91-1881-231169

- **Signin/Signup section:**
  a. After signing in, the user will be sent an OTP via the registered email. He/she needs to authenticate by entering in the OTP to get into the portal.
  b. After signing up, the user will be sent an OTP to the entered email. He/she needs to authenticate by entering in the OTP to get into the portal. After that, the user will be required to enter his/her information and personal details to complete the profile.
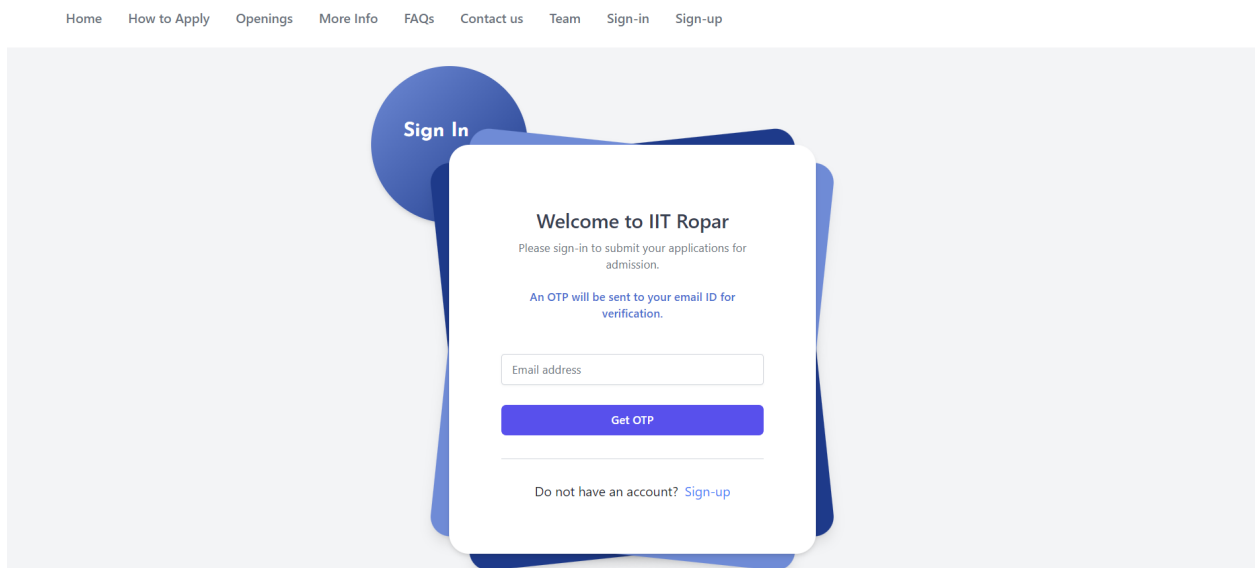
THIS IS WHAT A USER, WILLING TO LOG INTO IIT ROPAR PORTAL WILL SEE. WE HAVE MADE THE INTERFACE VERY USER FRIENDLY TO CATER TO HIS/HER REQUIREMENTS.

USER CAN LOGIN AS ADMIN/FACULTY/APPLICANT (STAKEHOLDERS).

2. ADMIN SIDE:

- **Dashboard:** Admins can view the total number of applications as per categories and gender.
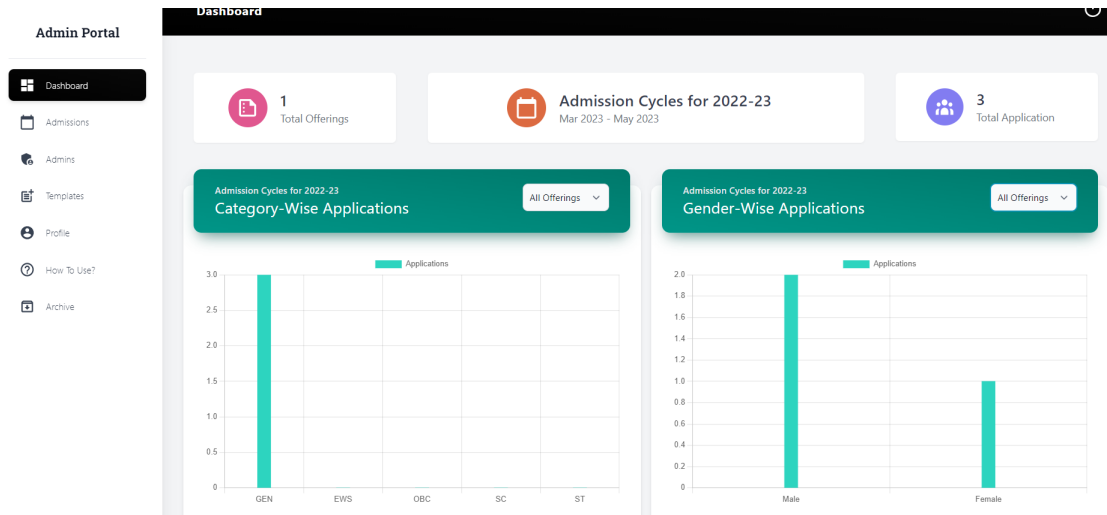
- **Admission Cycle:** Admin has the ability to add/delete admission cycles. Admin will create a new cycle for the ongoing/coming admission process.
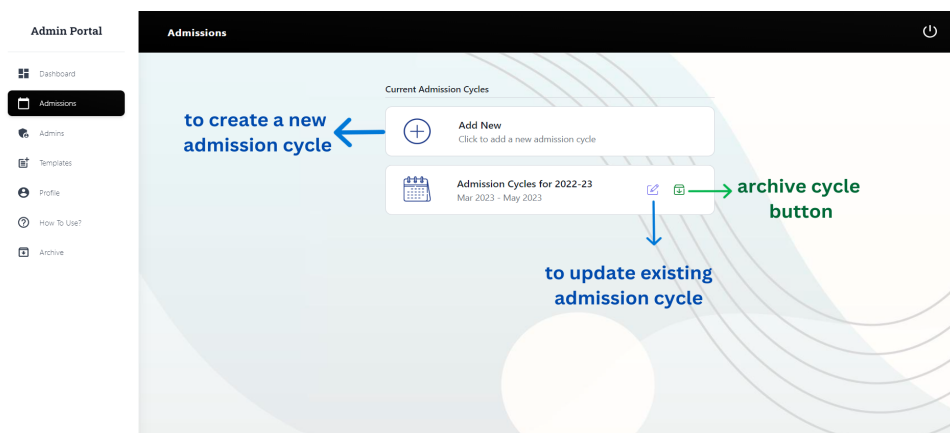
- **Information on the Admission Cycle going to be rolled out:** Admin needs to fill this data. The columns ask the admin to fill in the necessary inputs that will be visible to the applicants.

Current Admission Cycles

New Admission Cycle ×

Name

Admissions for AY 2022-23

Duration

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Category-wise Application Fees

GEN   OBC   EWS

SC   ST   PWD

Brochure for M.Tech. Admissions

Public URL of the brochure PDF

GATE opening and closing score

Public URL of the opening-closing-score PDF

Make Current Admission Cycle

Add new cycle

- **Offerings information shown to Admin:** Admin can view/add offerings. Moreover, he can edit current offerings and view **eligibility criteria, departments, status of offerings** etc. from the panel.

- **Applicant information shown:** Number of applicants alongwith their data is shown to admin. Accordingly, there are two prompts on the right (**eye** for viewing applications and **trash** for deleting applications).

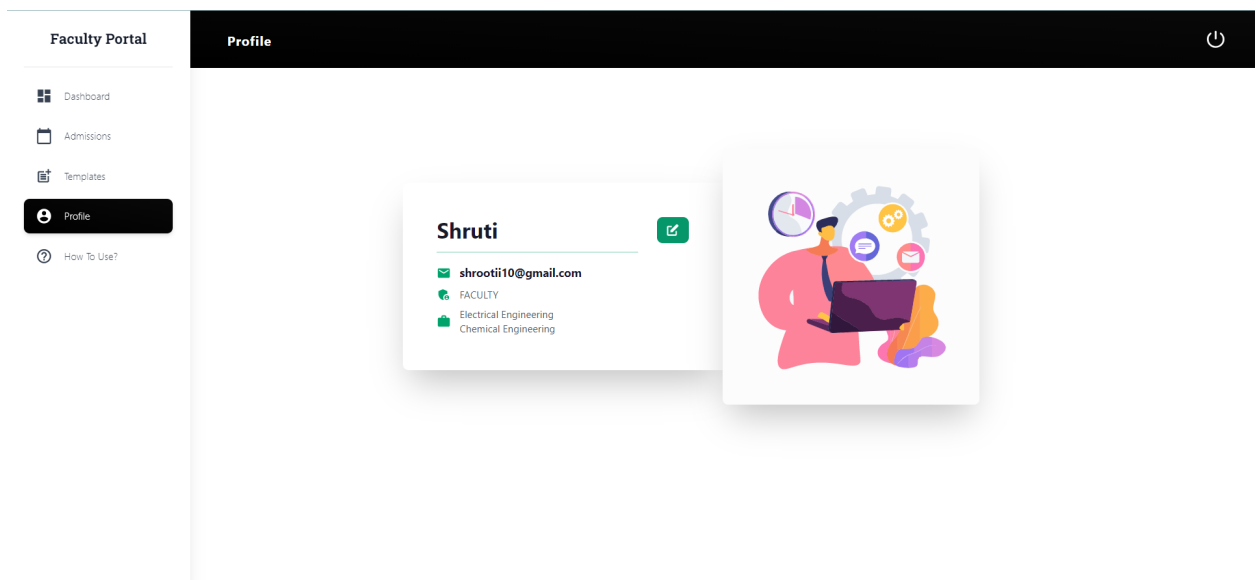- **Generate merit list:** for branches that admin wishes to be eligible for application.

- **Upload result:** of selected applicants as excel file. Admin needs to choose the right upload file format to what the portal expects. Otherwise, the excel sheet won't get updated.

- **List of admins:** view all the admins. The image explains the prompts seen in the admin panel.

- **Add admin:** An admin is also given the power to add new admins.

- **Template list:** List of templates is shown to the admin for review. The image explains the prompts seen in the panel.
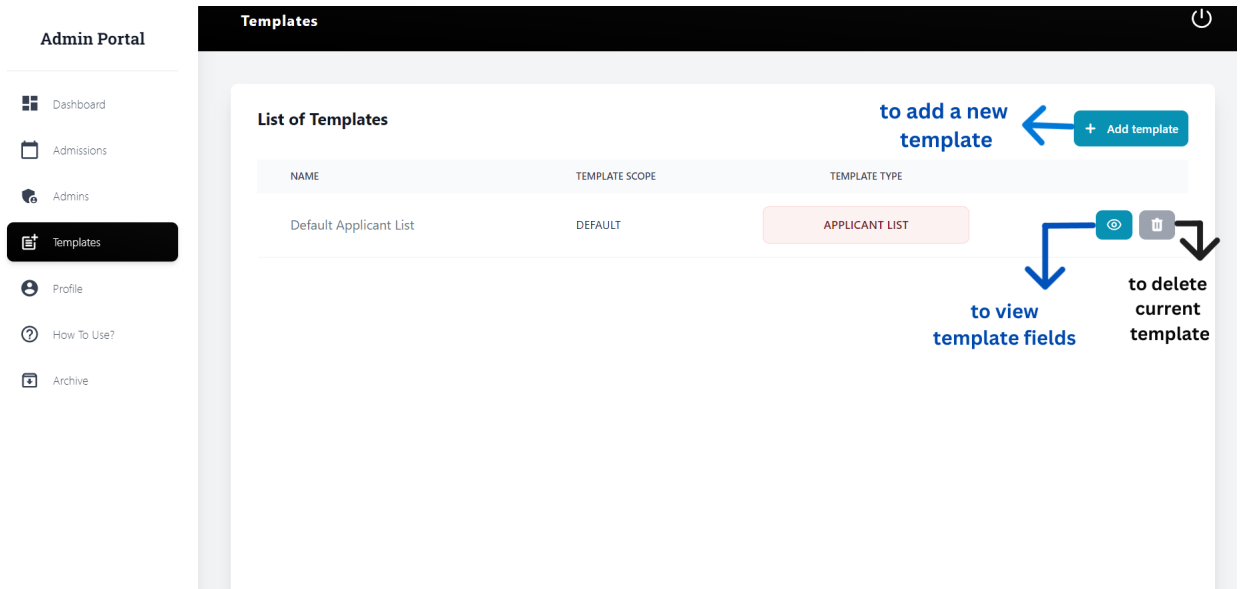
- **Add new template:** Add templates after filling in the required information.

- **Admin Profile:** To view profile of admin user.

- **To check previous admission cycles :** An admission cycle can be archived once completed. This helps keep a record of the previous admission cycles.

3. FACULTY SIDE:

- **Dashboard:** Faculties can also view the total number of applications as per categories and gender.
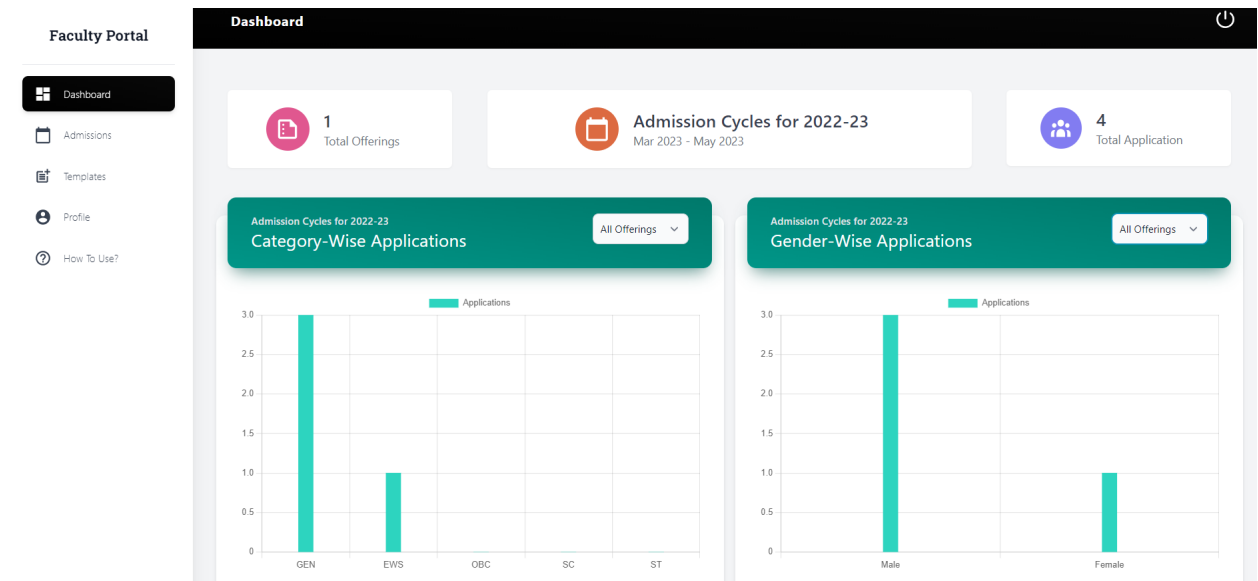
- **View admission cycle:** Faculty can not edit an admission cycle. He/she can only view it.
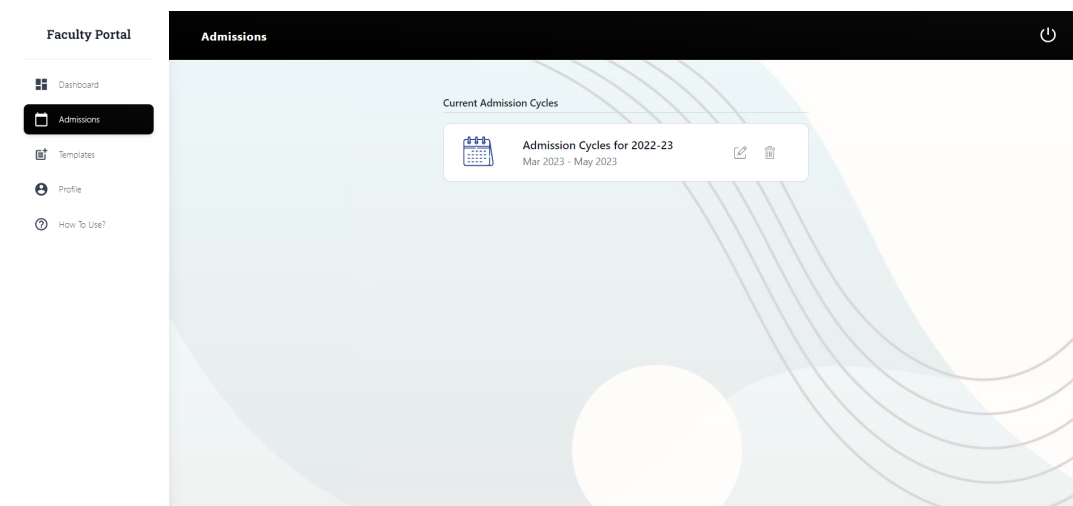
- **Offerings shown to faculty:** Offerings are handled by the faculty according to the department they specialize in. The prompts shown allow the same actions to faculty to perform (edit offerings).
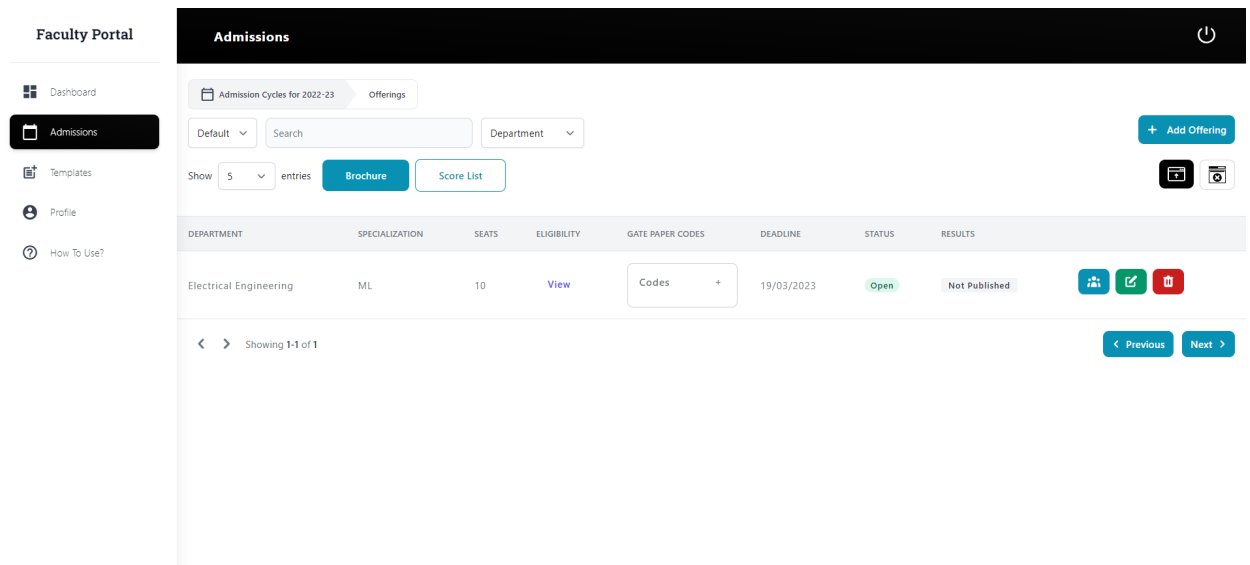
- **Add offering:** Add offerings like the admin after filling in the required information.

- **Generate Merit List (Results button):** This power is given to the faculty. If he/she wishes to, he/she can also upload the results or save it as draft for future.

- **Results upload:** of selected applicants as excel file. Faculty needs to choose the right upload file format to what the portal expects. Otherwise, the excel sheet won't get updated.

- **Templates section:** List of templates is shown to the faculty for review. E.g. Here, the faculty can view templates of the applicant list by clicking on eye. Default Application List is a global template and he/she can only view it but can't delete it. But the faculty can edit/delete the personal templates created by him/her.
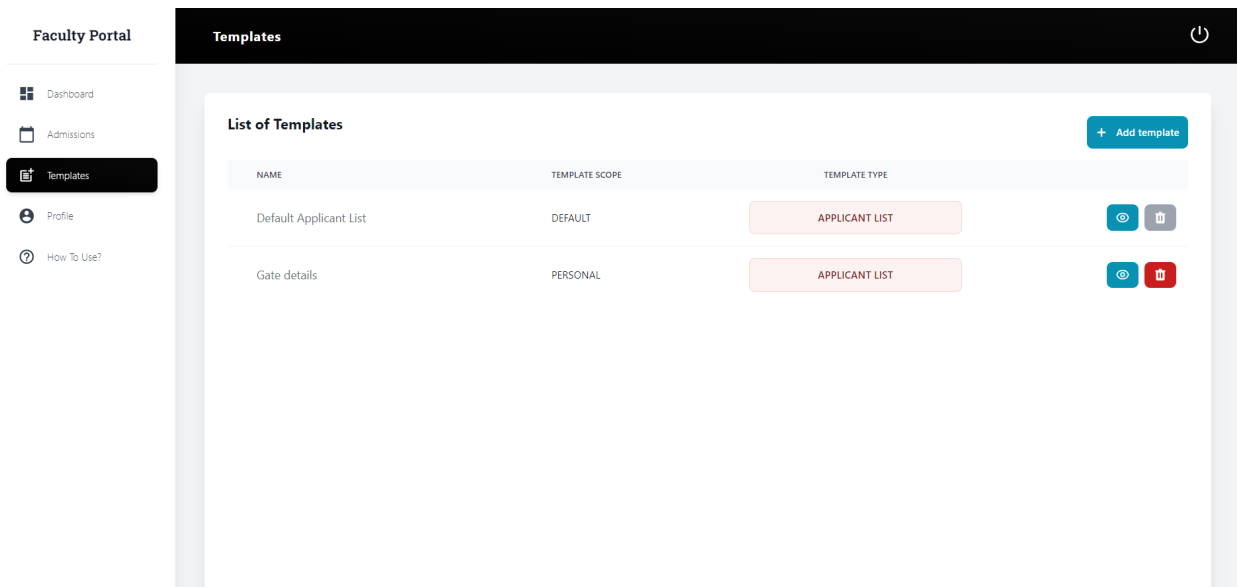
- **Faculty profile:** To view the profile of the faculty user.

4. STUDENT SIDE:

- **Student profile:** Users can see the details filled out by them in the portal profile.

- **Home page when no position is opened:**

- **Home page when positions are opened:** They can be applied through the apply button.
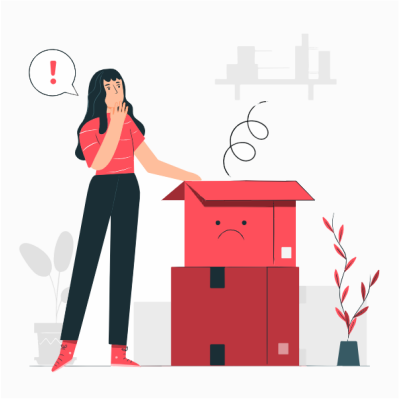
- **Check submitted applications:** The applicant can check the application submitted by him/her along with the application status (accepted or not).

- **Applicant form:** It asks for the GATE details.

- **Fee details:** Asks the applicant for the category as the fee structure is different for different categories. Also, the applicant is required to fill in the bank details.

● **Declaration required before application:** for the correctness of details provided, and abide by institute decision on admitting the applicant or not.

● **Review the application:** Review the form details filled during application.

- **Check submitted applications:** Check what is submitted by the applicant. The image explains the prompts seen in the panel.
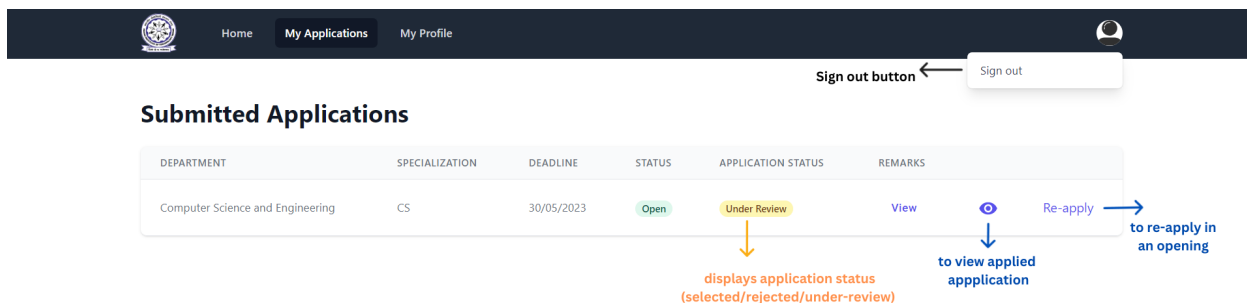
- If the application is successful, then an acknowledgement email is sent to the applicant which contains the relevant information of the applicant like **Application ID, Department and Specialisation of the registered offering.**

DEPLOYMENT:

We have deployed the web app on our local institute server and the app is running fine on M-Tech Admission.

INDIVIDUAL CONTRIBUTIONS:

1. **Rohit:** Resolved errors of sign-in/sign-up OTP, upload results, and gcp file storage, made some minor frontend changes in landing page, resolved the issue of base-url and deployed the site on the local institute server, and also on Vercel and render.
2. **Tanish:** Tested the site thoroughly. Resolved the errors of incorrect input acceptance in various columns like phone numbers, Aadhar number, PIN Codes etc by adding regex pattern matching, created the presentation for the mid semester report.
3. **Sushil:** Helped in solving errors in the code, result uploading and helped in hosting on render and created the demo video.
4. **Shruti:** Tested the site thoroughly. Removed the redundant scroll bars and toggles, created the presentation for the mid semester report.

FUTURE GOALS:

- In coming weeks we will be testing the app thoroughly and adding a logger to it for better detection of errors that may occur any time in future.
- We will be completing the issue of gcp storage.
- We will try to refactor the code as much as possible to make it more efficient and easy to read.

THANK YOU