RnD Grants Management Portal

CP301 Development Engineering Project(AY 2023-24)

- Under the guidance of Dr. Puneet Goyal

Team T16

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Sreya:2020csb1087

Vishnu:2020csb1097

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https://rndgrantst16.onrender.com

http://172.30.8.212/

Idea Description

Project Topic: RnD Grants Management Portal

- The project aims to develop a web-based platform for managing and tracking research and development grants.
- The current system relies on manually updating Excel spreadsheets stored on local office computers, which becomes increasingly challenging as the number of projects and files grow.
- The lack of a centralized system also makes it hard for faculty members and academic office members to access the latest information on specific grants, and generating reports is a time-consuming and complex process.
- The new system will streamline grant management by providing a user-friendly interface for tracking and reporting grant information in real-time.

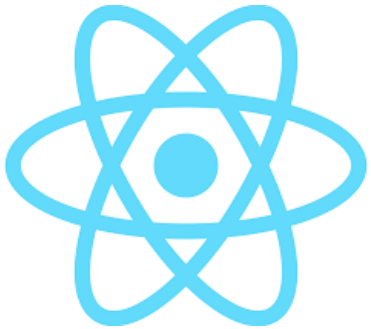
Expectations

- Our goal is to transform the existing R&D grant application into a web-based platform capable of effectively managing grants.
- Resolving any existing system issues to ensure smooth operation.
- Introducing new features, and implementing constraints and security measures to meet the standards set by our university.
- Finally bringing the portal to implementation by taking the feedback of the stakeholders.

Stakeholders

- RnD grands management section – as Admins
- Faculty – as professors
- Fellow

Tech stack or Technologies used



- FRONTEND

React JS

React Bootstrap

Material UI

Sheet JS

- BACKEND

Node JS

Express

Google oAuth

- DEPLOYMENT

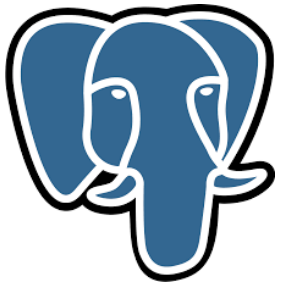
1.Render

2.Server

Nginx, PM2, PostgreSQL

- DATABASE

PostgreSQL

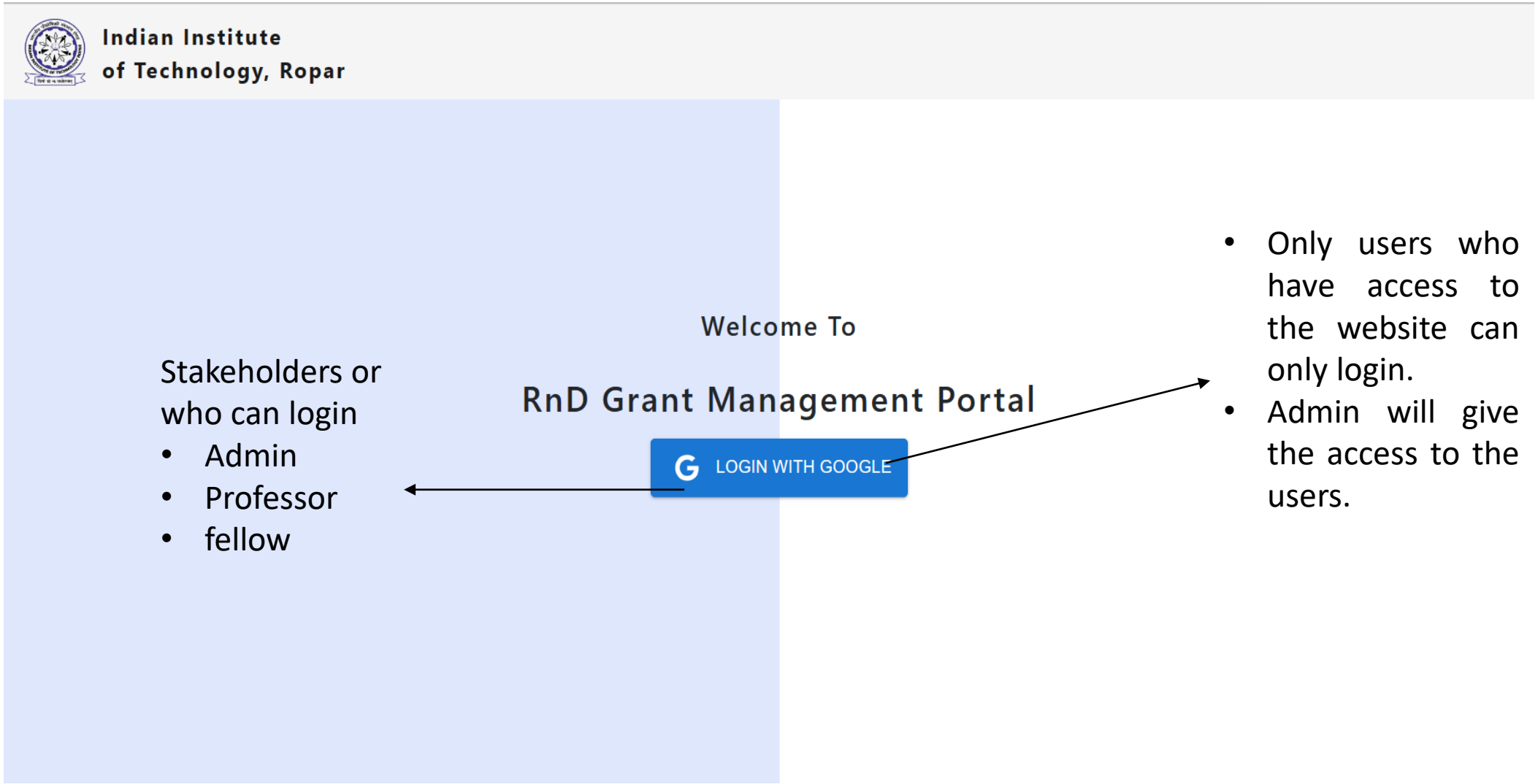


- Deployment status

ON RENDER

https://rndgrantst16.onrender.com

Functionality – *Login*



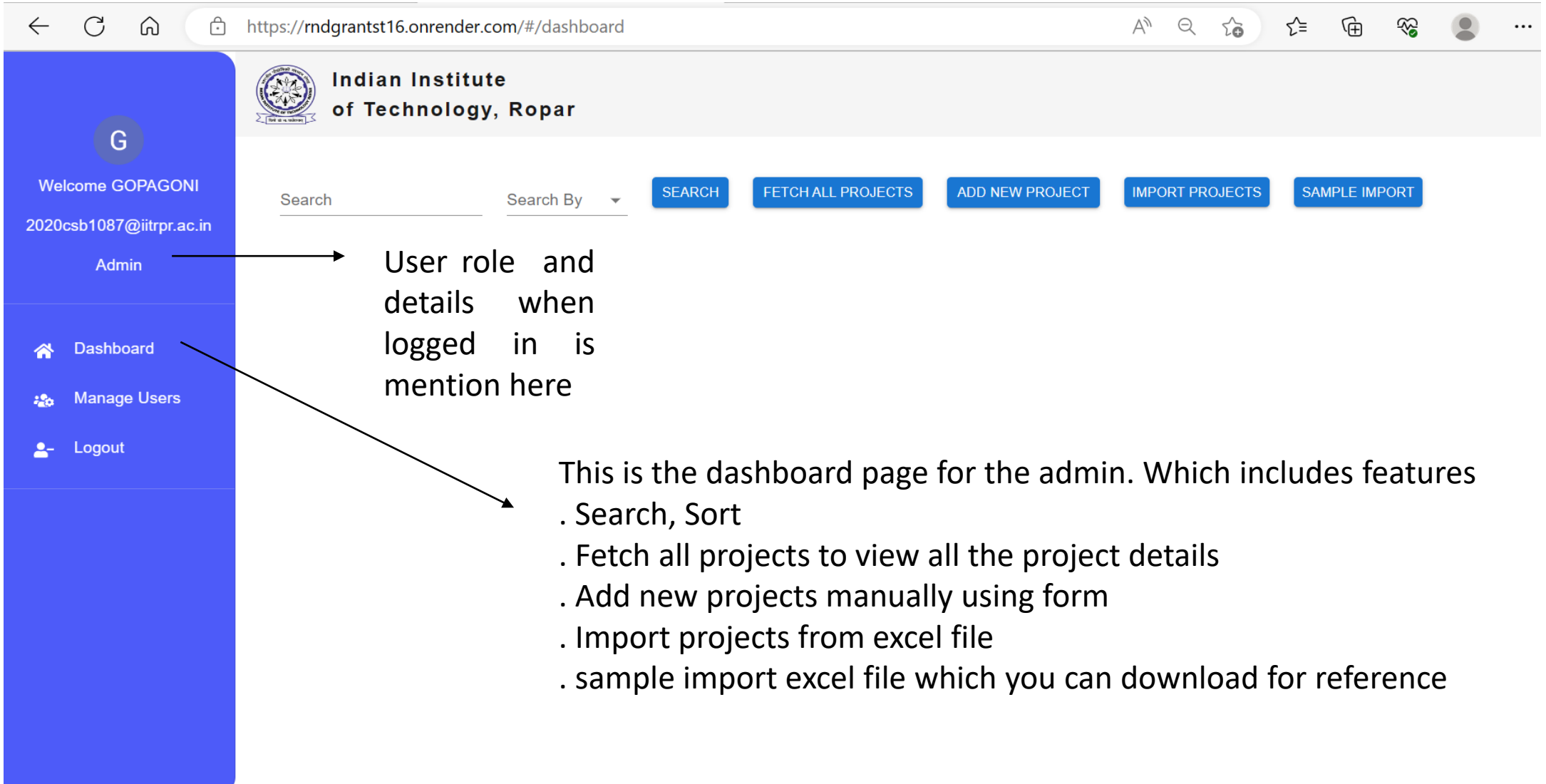
Stakeholders or who can login

- Admin
- Professor
- fellow

- Only users who have access to the website can only login.
- Admin will give the access to the users.

Admin Page

Functionality – *Admin (Dashboard)*

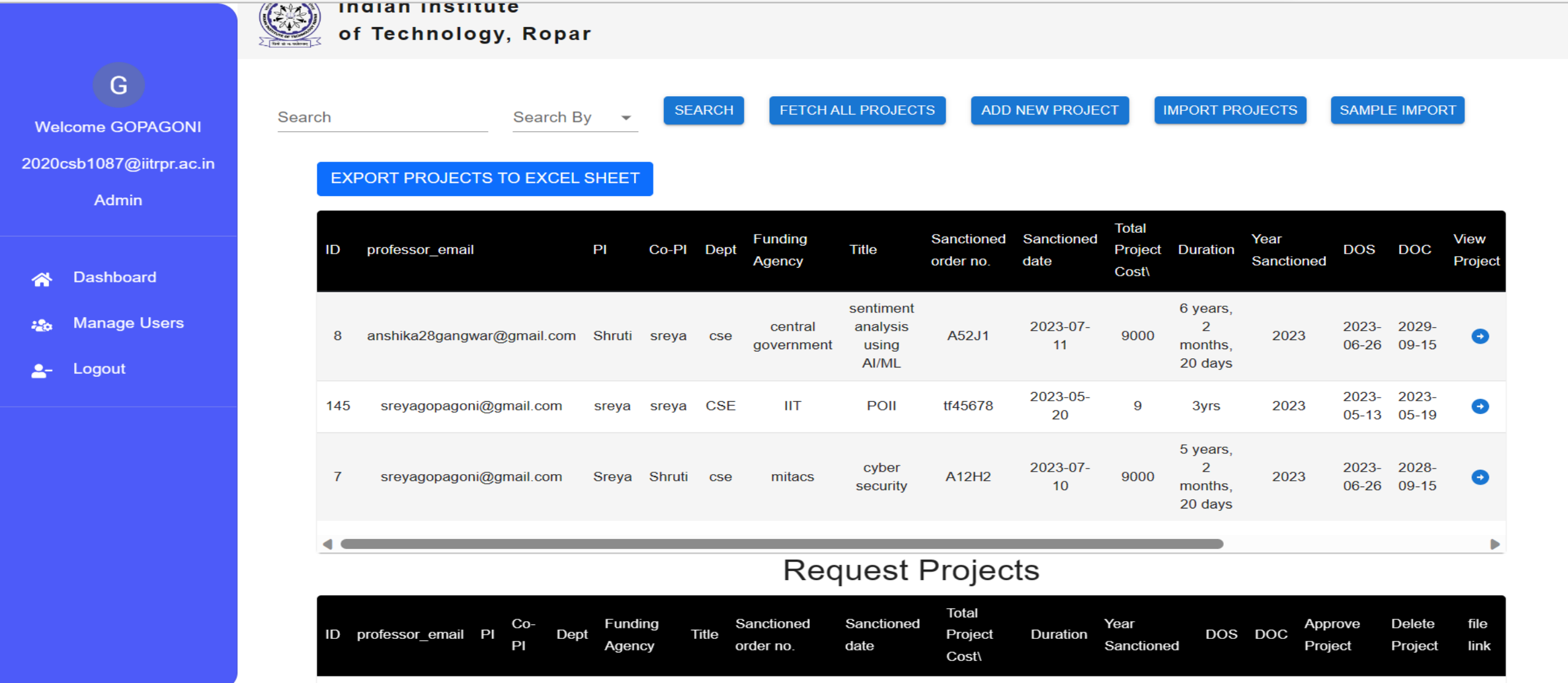


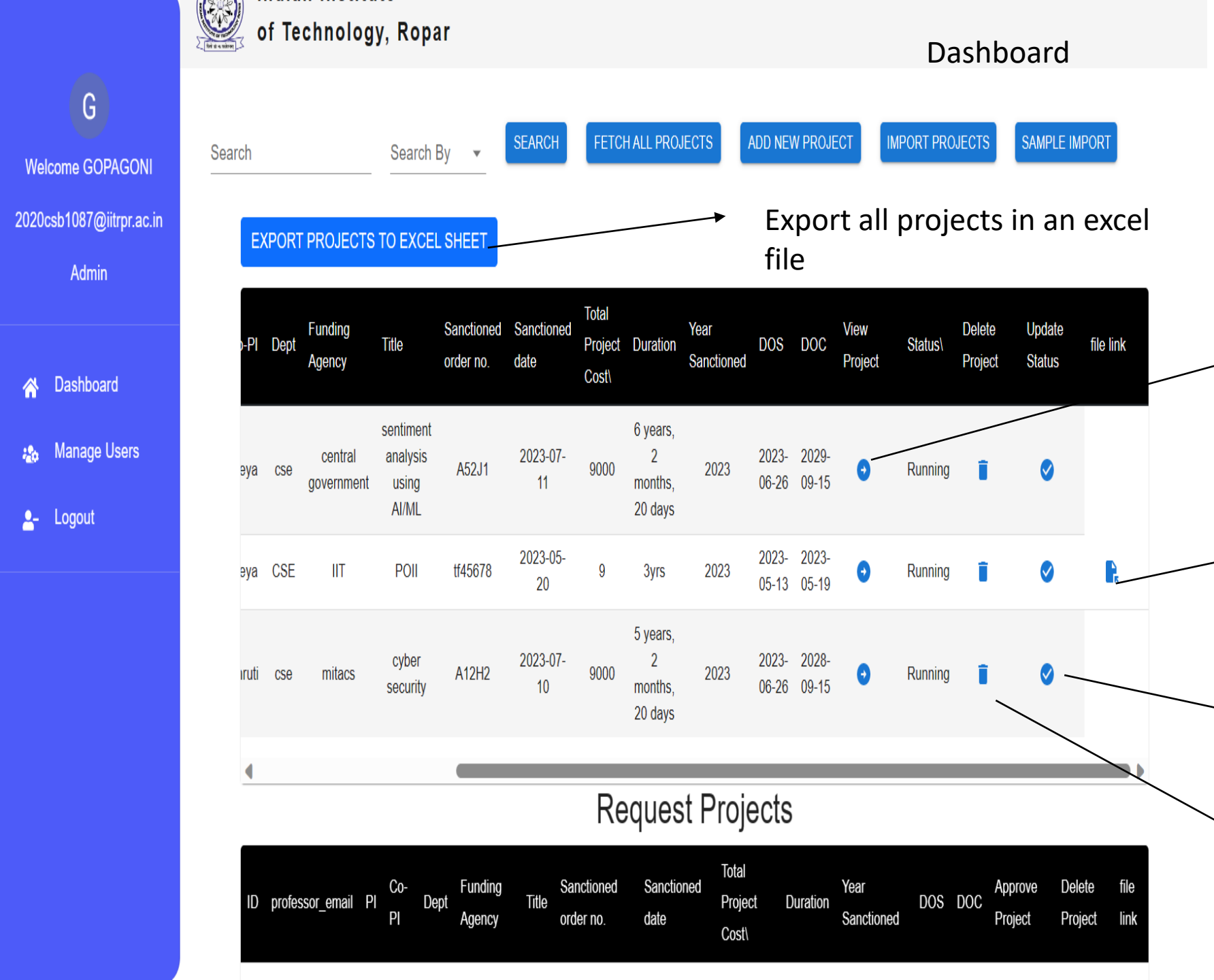
User role and details when logged in is mention here

This is the dashboard page for the admin. Which includes features

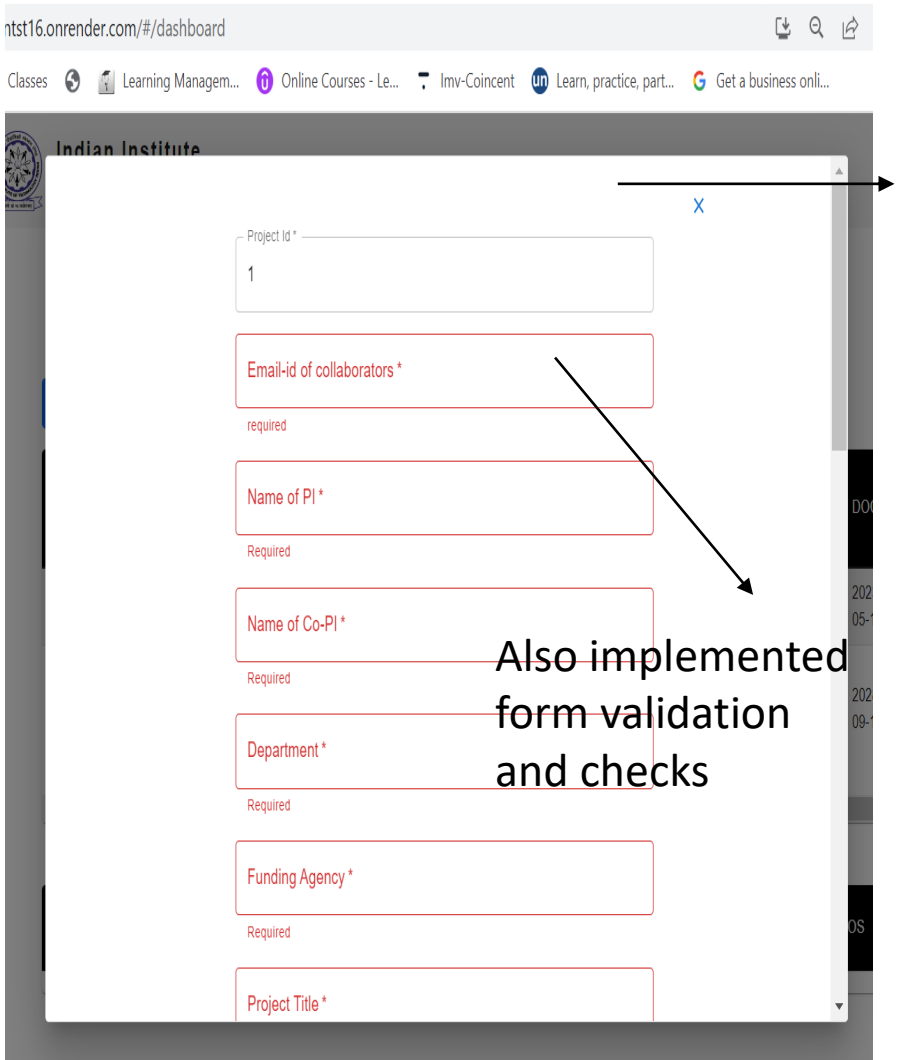
. Search, Sort
. Fetch all projects to view all the project details
. Add new projects manually using form
. Import projects from excel file
. sample import excel file which you can download for reference

Functionality – *Admin (Fetch all projects)*



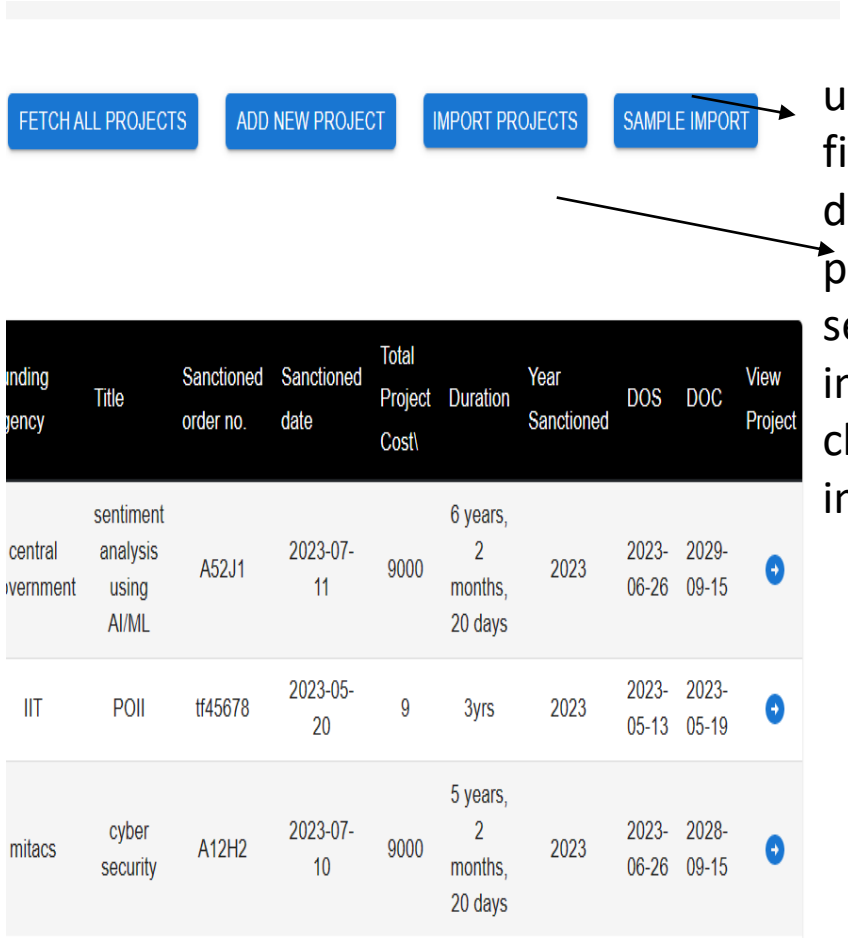

of Technology, Ropar
Dashboard
G
Welcome GOPAGONI
2020csb1087@iitrpr.ac.in
Admin
Dashboard
Manage Users
Logout
Search
Search By
SEARCH
FETCH ALL PROJECTS
ADD NEW PROJECT
IMPORT PROJECTS
SAMPLE IMPORT
EXPORT PROJECTS TO EXCEL SHEET
Export all projects in an excel file
-PI Dept Funding Agency Title Sanctioned order no. Sanctioned date Total Project Cost\ Duration Year Sanctioned DOS DOC View Project Status\ Delete Project Update Status file link
eya cse central government sentiment analysis using AI/ML A52J1 2023-07-11 9000 6 years, 2 months, 20 days 2023 2023-06-26 2029-09-15 Running
eya CSE IIT POII tf45678 2023-05-20 9 3yrs 2023 2023-05-13 2023-05-19 Running
ruti cse mitacs cyber security A12H2 2023-07-10 9000 5 years, 2 months, 20 days 2023 2023-06-26 2028-09-15 Running
View the details of the particular project
View the pdf of the sanctioned project details if provided.
Update the status of the project complete to running or running to complete
Only Admin can delete the project
Request Projects
ID professor_email PI Co-PI Dept Funding Agency Title Sanctioned order no. Sanctioned date Total Project Cost\ Duration Year Sanctioned DOS DOC Approve Project Delete Project file link

Functionality – *Admin (add new project)*



Manually add projects using form

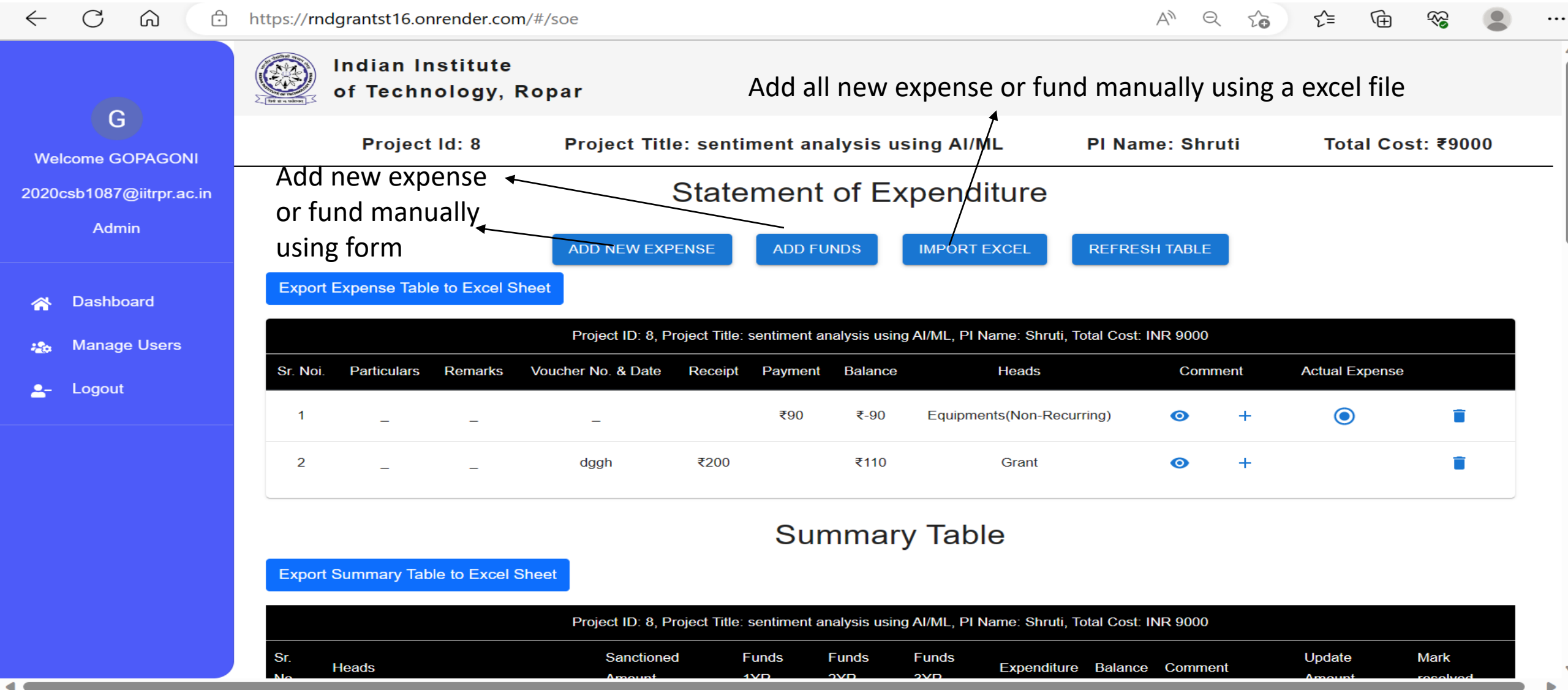
Also implemented form validation and checks



nding gency	Title	Sanctioned order no.	Sanctioned date	Total Project Cost\	Duration	Year Sanctioned	DOS	DOC	View Project
central vernment	sentiment analysis using AI/ML	A52J1	2023-07-11	9000	6 years, 2 months, 20 days	2023	2023-06-26	2029-09-15	
IIT	POII	tf45678	2023-05-20	9	3yrs	2023	2023-05-13	2023-05-19	
mitacs	cyber security	A12H2	2023-07-10	9000	5 years, 2 months, 20 days	2023	2023-06-26	2028-09-15	

upload the excel file which contain details of all the projects. If needed see the sample impot file by clicking the sample import button

Functionality – *Admin (view details of particular project)*



Dashboard

Export Summary Table to Excel Sheet

Summary Table

View or add comment

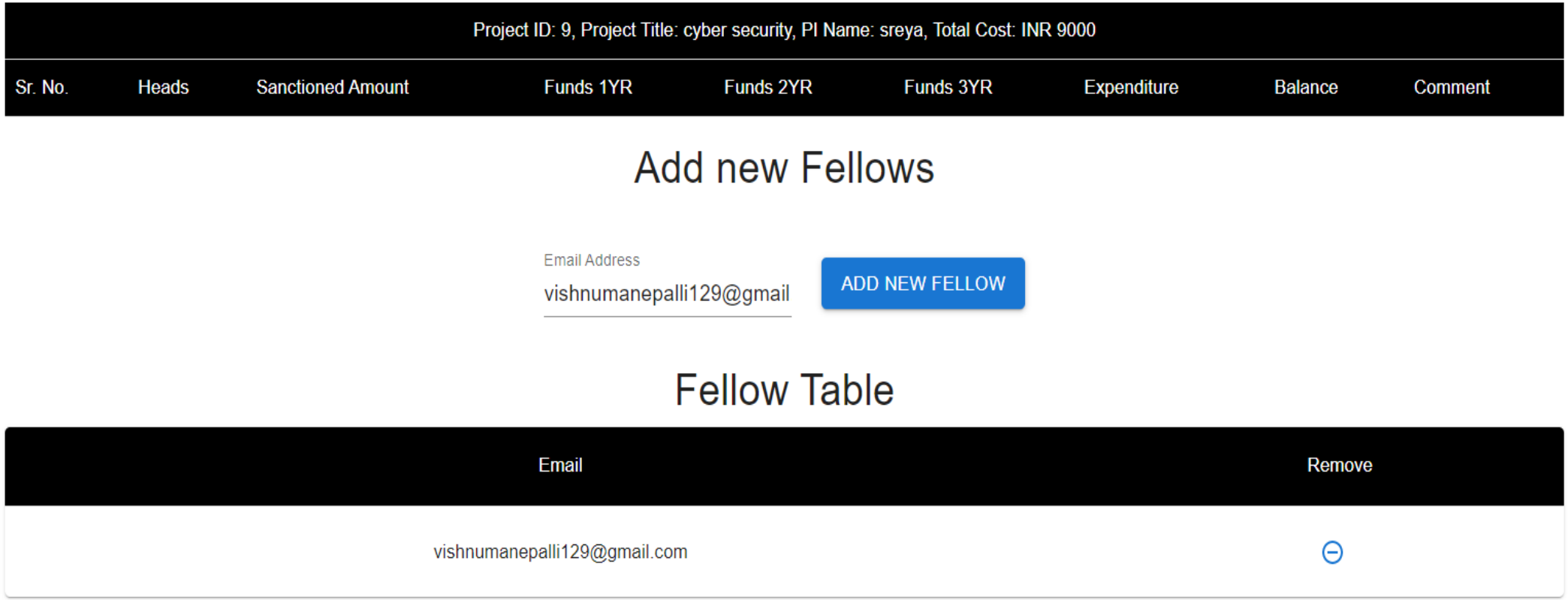
Edit the sanctioned amount

When seen the comment and want to resolve the comment

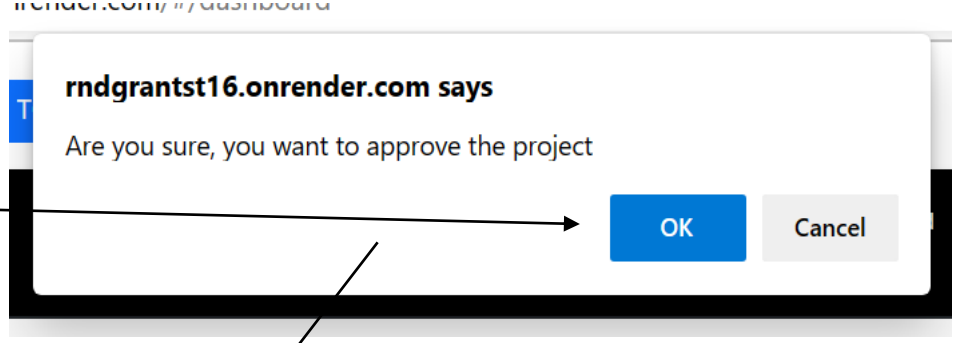
Project ID: 8, Project Title: sentiment analysis using AI/ML, PI Name: Shruti, Total Cost: INR 9000

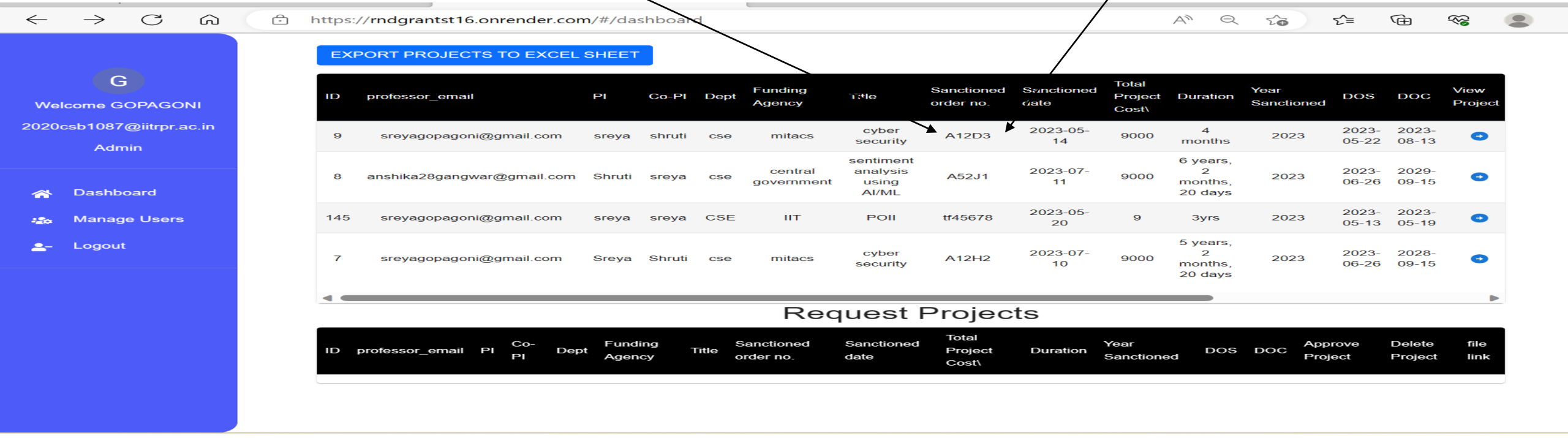
Sr. No.	Heads	Sanctioned Amount	Funds 1YR	Funds 2YR	Funds 3YR	Expenditure	Balance	Comment	Update Amount	Mark resolved
1	**Rec.**	**₹8000**	**₹100**	**₹0**	**₹0**	**₹0**	**₹100**			
2	**Non-Rec.**	**₹2000**	**₹100**	**₹0**	**₹0**	**₹90**	**₹10**			
3	Manpower(Recurring)	₹1000	₹0	₹0	₹0	₹0	₹0			
4	Consumables(Recurring)	₹1000	₹0	₹0	₹0	₹0	₹0			
5	Travel(Recurring)	₹1000	₹0	₹0	₹0	₹0	₹0			
6	Field Testing/Demo/Tranings(Recurring)	₹1000	₹0	₹0	₹0	₹0	₹0			

Functionality – *Admin (Add a fellow to the project)*



Functionality – *Admin (Approve project)*





Functionality – *Admin (Manage Usres)*

Only Admin has manage users page Which includes features

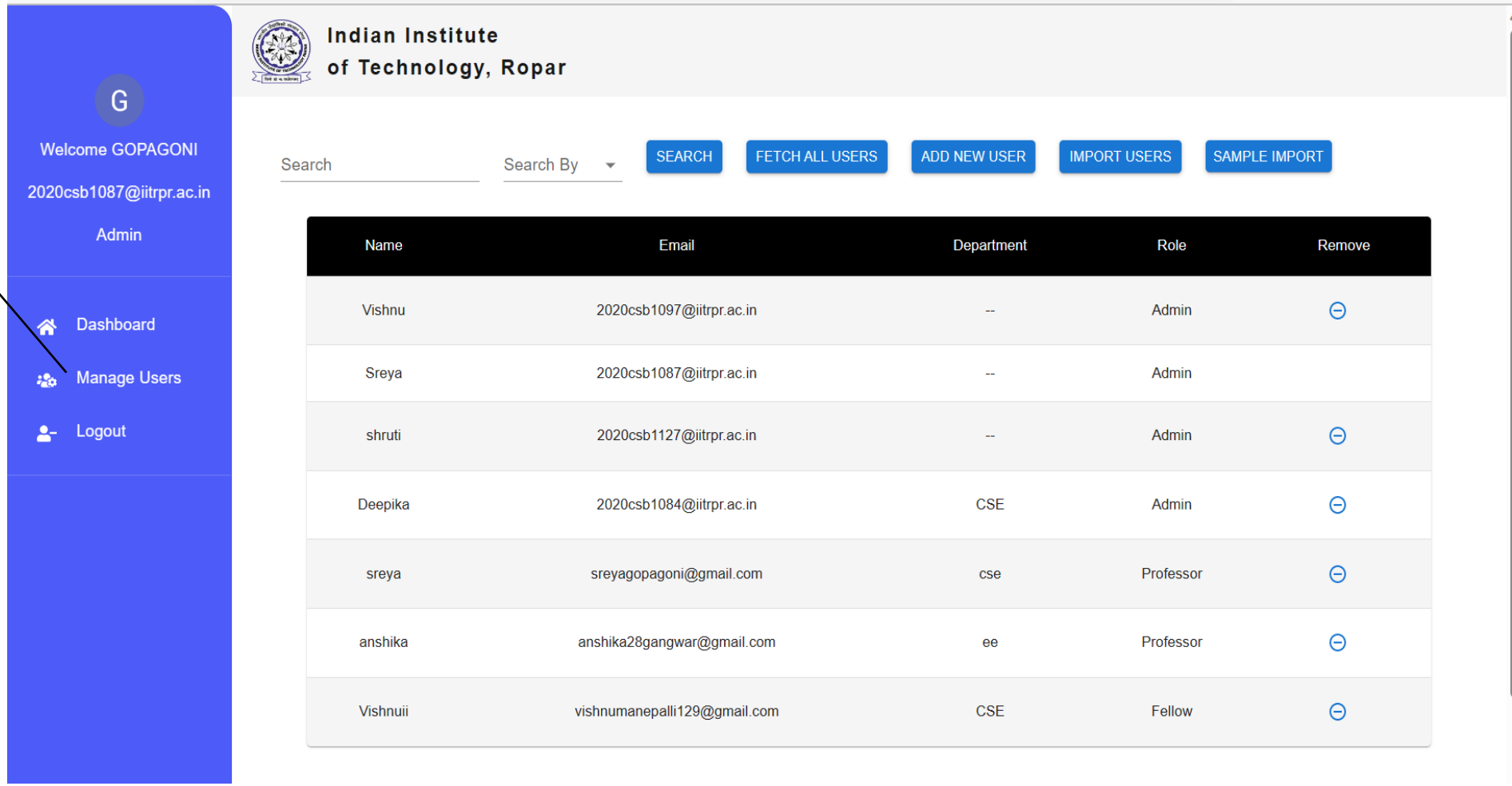
. Search

. Fetch all users to view all the user details

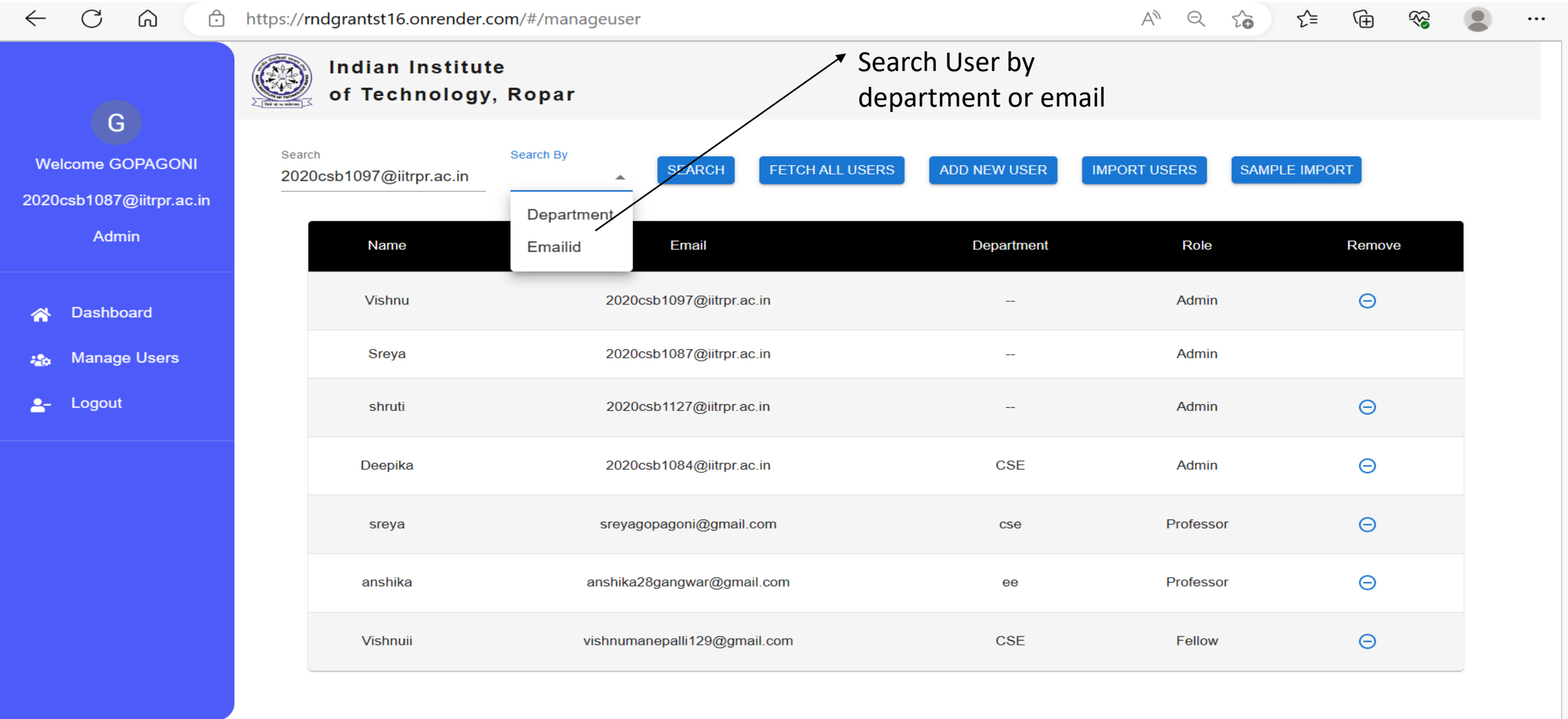
. Add new user manually using form.

. Import users from excel file

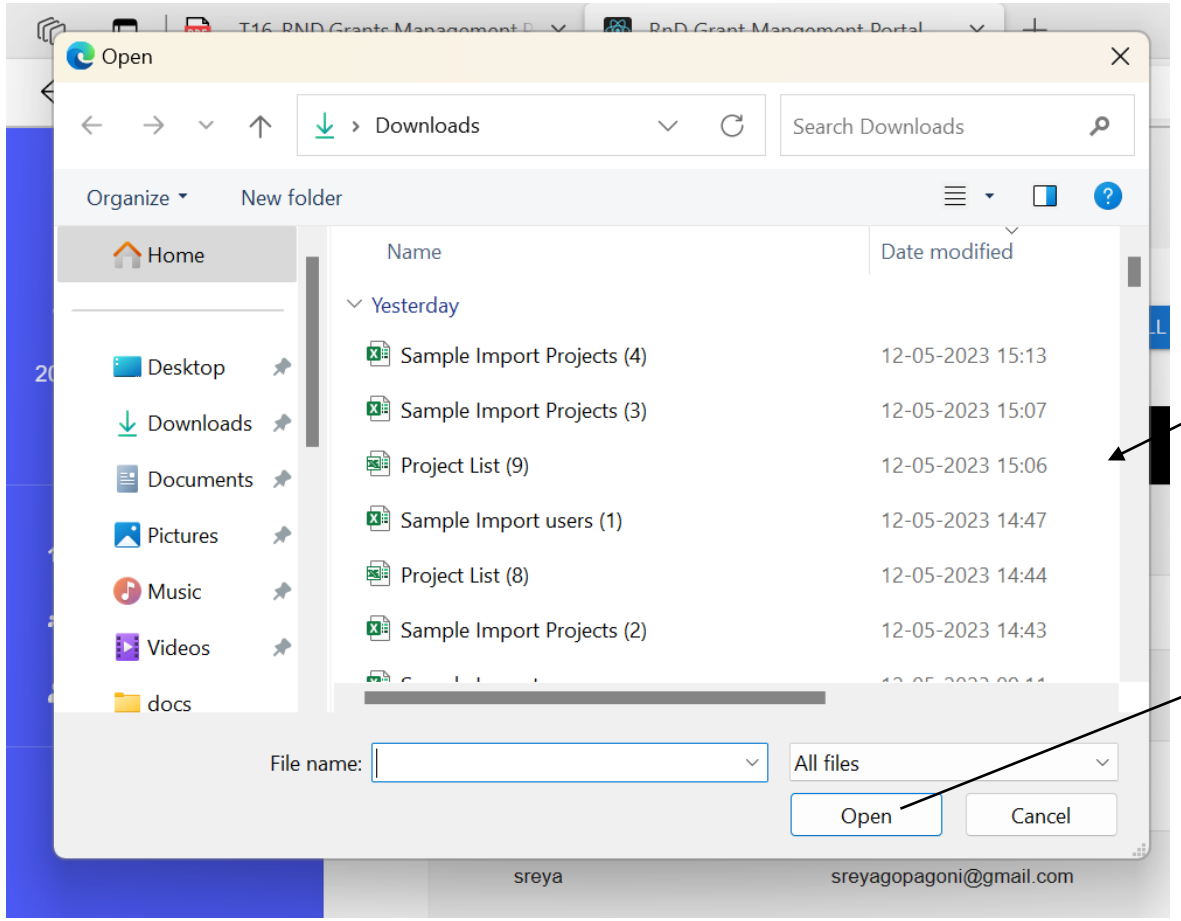
. sample import excel file which you can download for reference

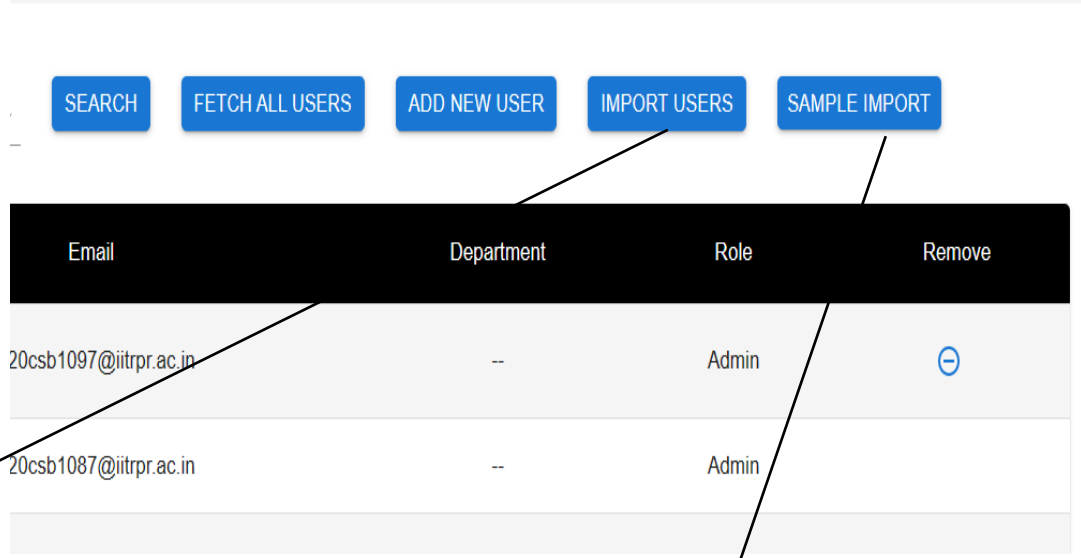


Functionality – *Admin (Search)*



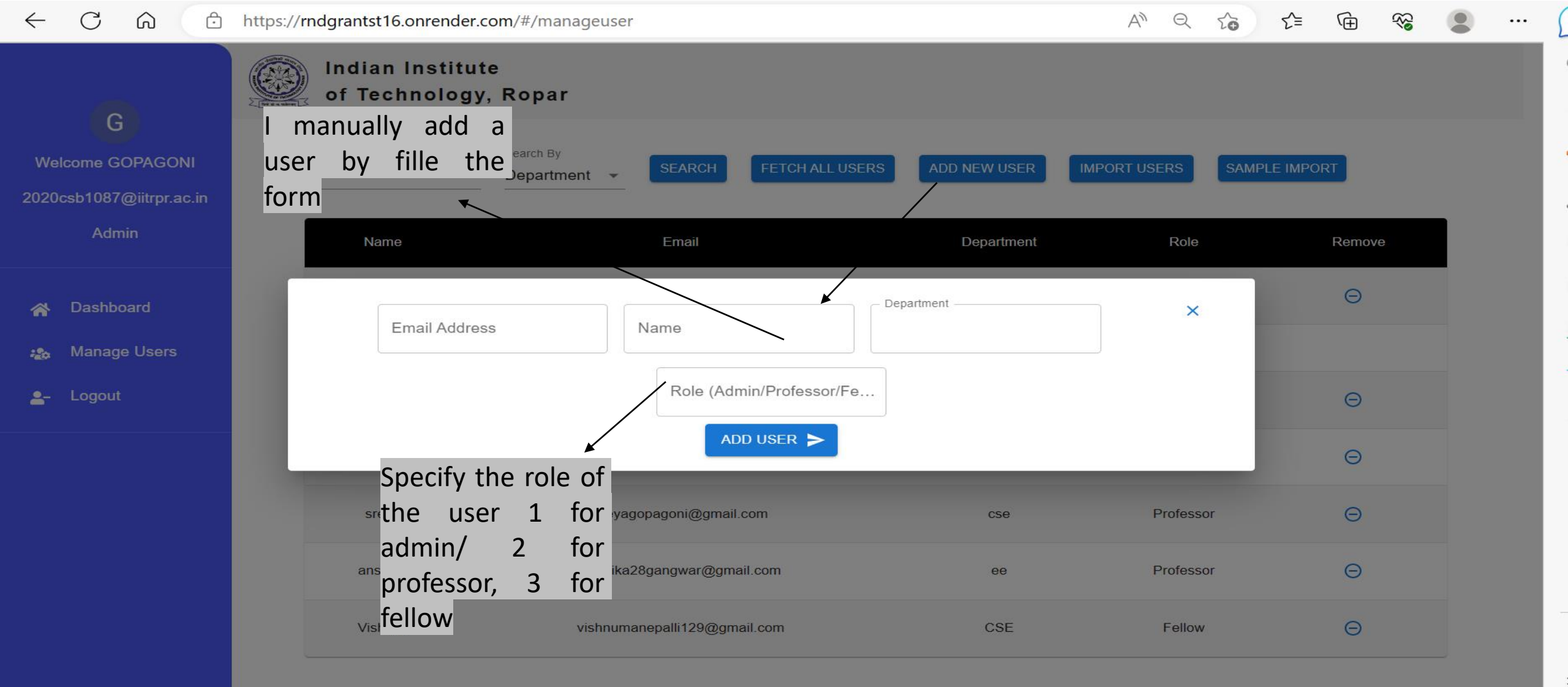
Functionality – *Admin (Import users and Sample import)*





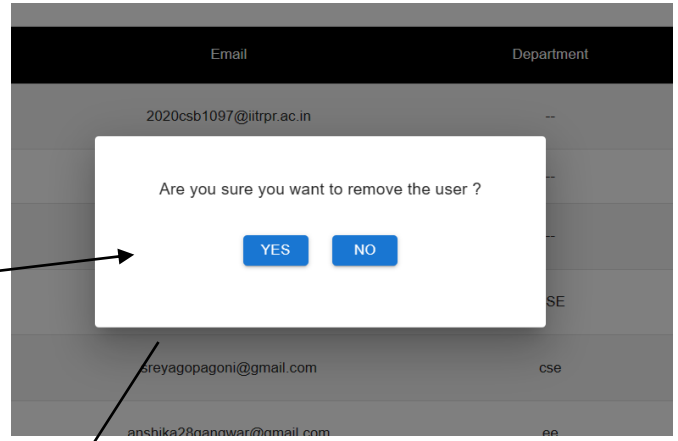
Open the excel file which contain details of all the users. If needed see the sample impot file by clicking the sample import button

Functionality – *Admin (Add new user using form)*



Functionality – *Admin (Delete user)*

Deepika	2020csb1084@iitrpr.ac.in	CSE	Admin	⊖
sreya	sreyagopagoni@gmail.com	cse	Professor	⊖
anshika	anshika28gangwar@gmail.com	ee	Professor	⊖
Vishnuii	vishnumanepalli129@gmail.com	CSE	Fellow	⊖

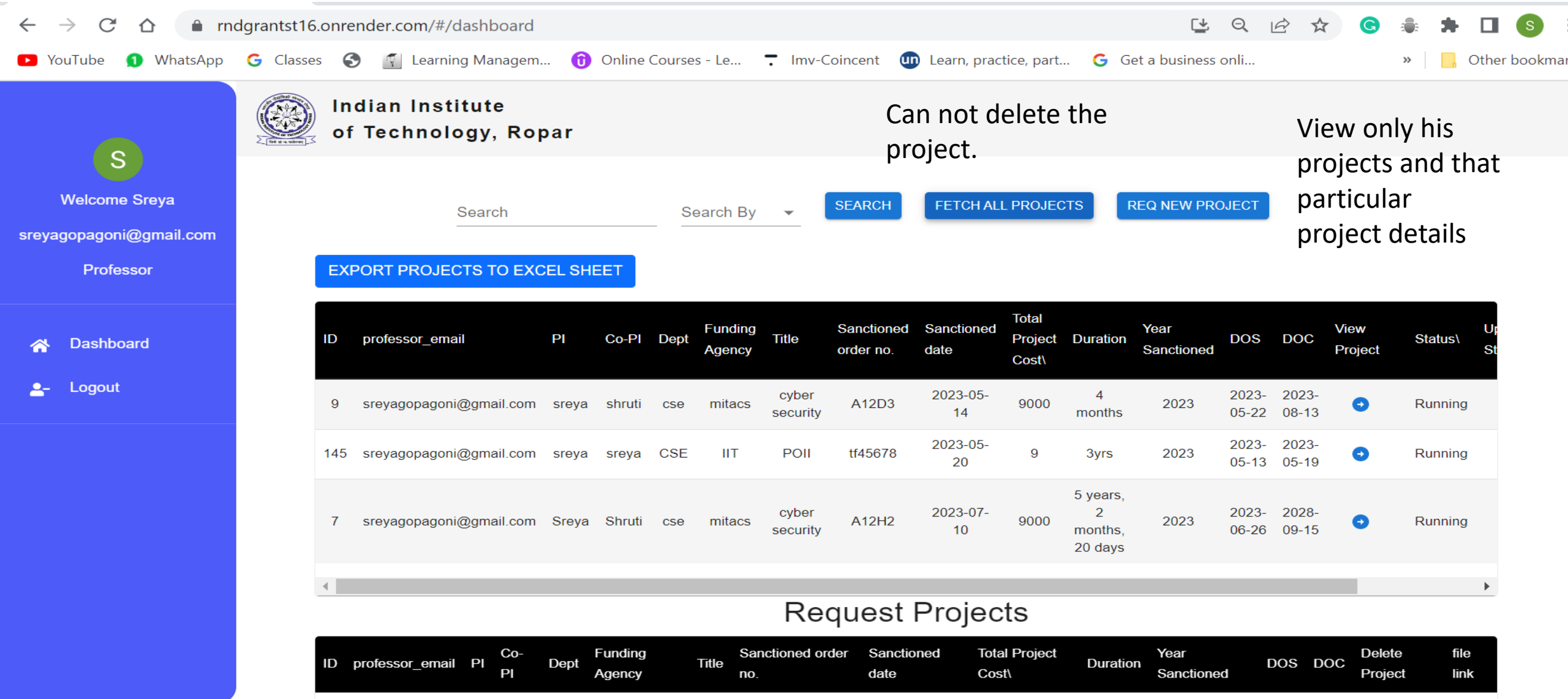


Name	Email	Department	Role	Remove
Vishnu	2020csb1097@iitrpr.ac.in	--	Admin	⊖
Sreya	2020csb1087@iitrpr.ac.in	--	Admin	
shruti	2020csb1127@iitrpr.ac.in	--	Admin	⊖
Deepika	2020csb1084@iitrpr.ac.in	CSE	Admin	⊖
sreya	sreyagopagoni@gmail.com	cse	Professor	⊖
Vishnuii	vishnumanepalli129@gmail.com	CSE	Fellow	⊖

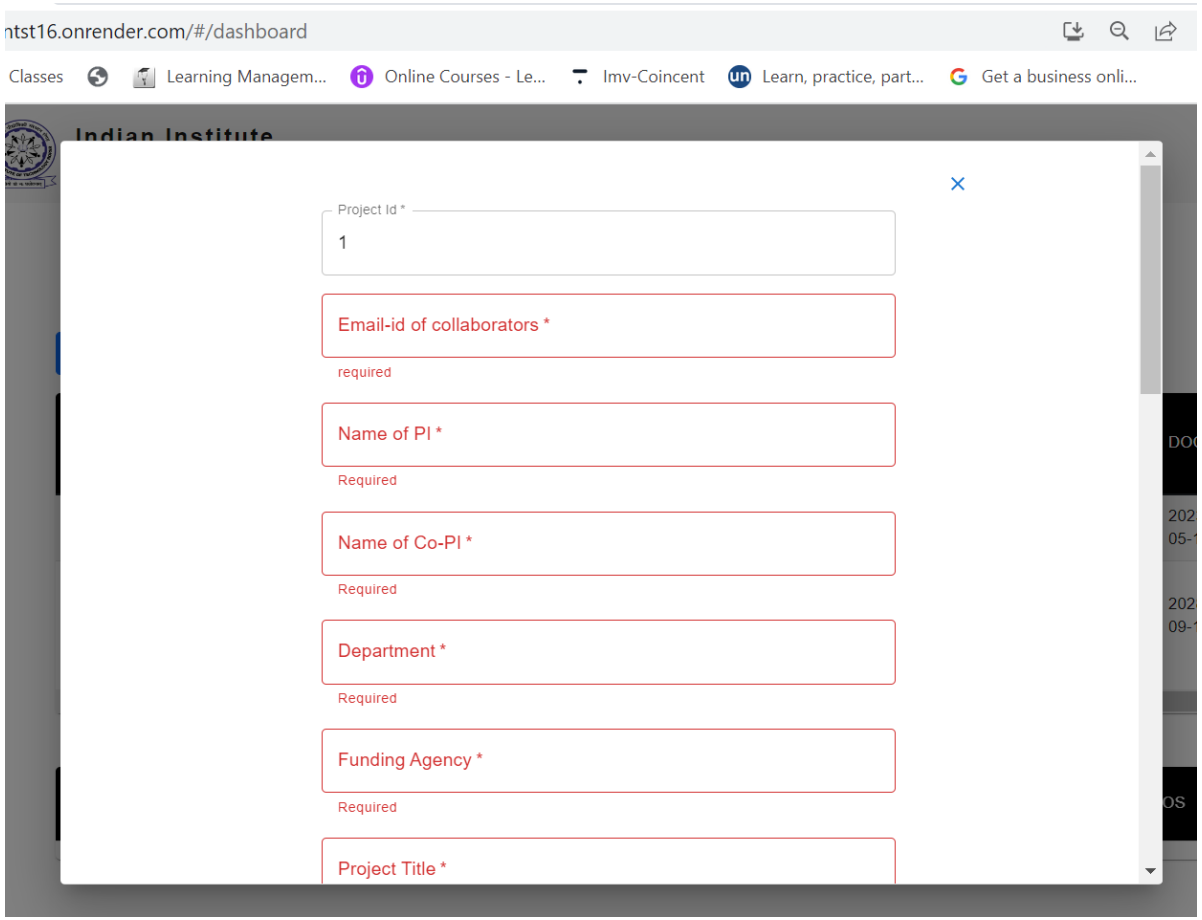
Anishka user got deleted

Professor Page

Functionality – *Professor(Dashboard)*



Functionality – *Professor(Request new project)*

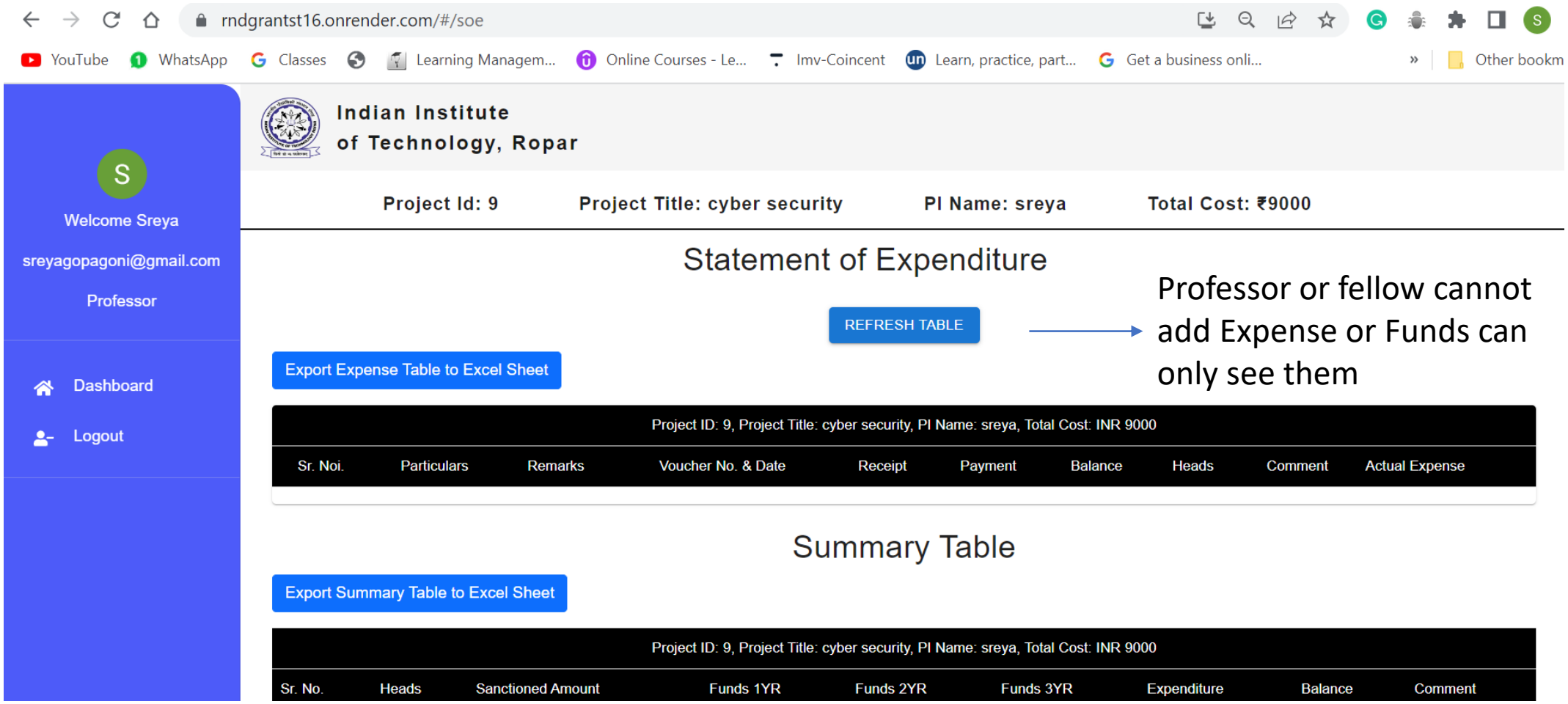


Also implement form validation and checks

Manually add projects using form

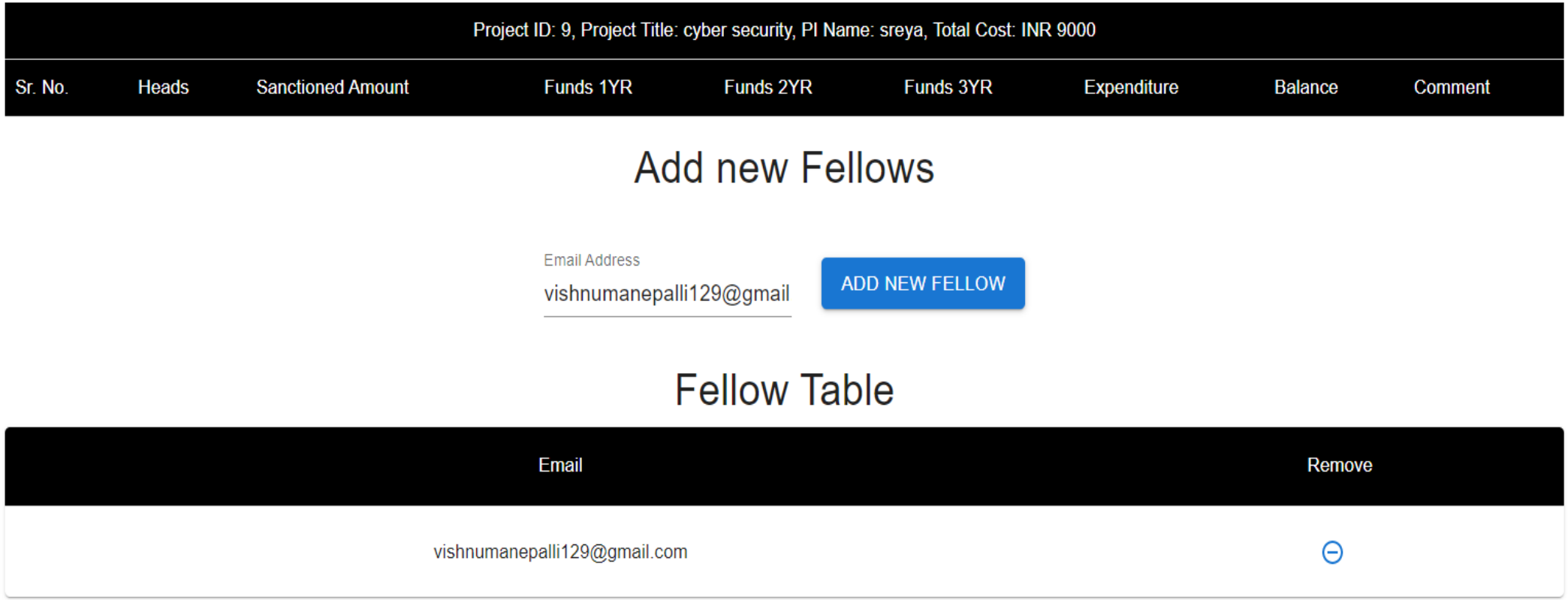
Professor can only request the project and admin approves it

Functionality – *Professor(View Project details)*

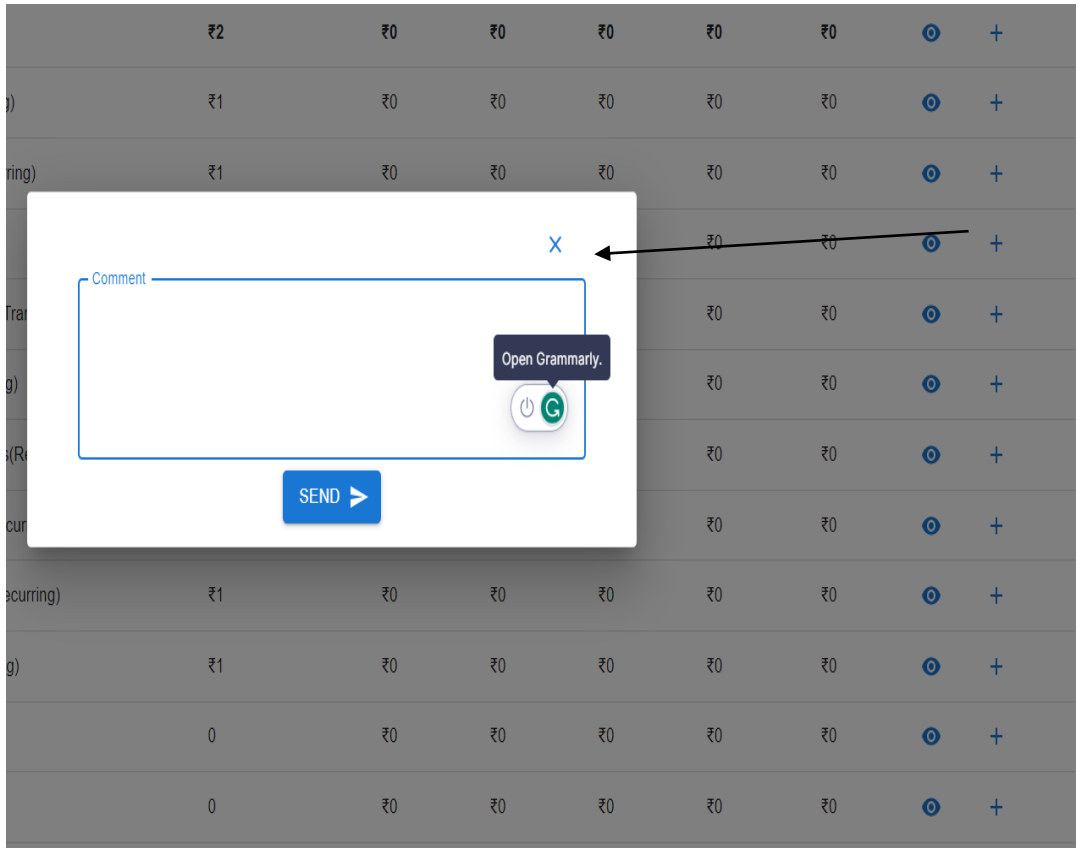


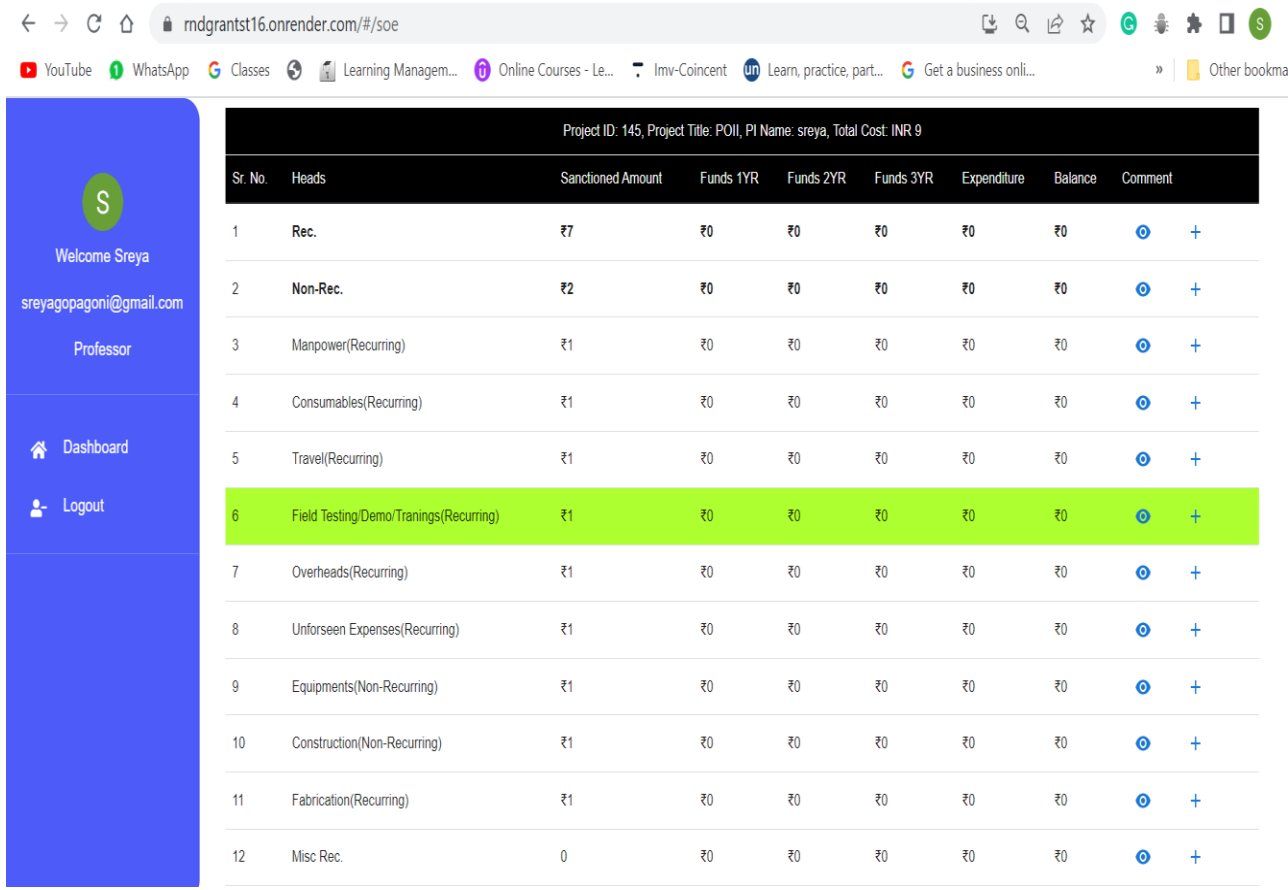
Professor or fellow cannot add Expense or Funds can only see them

Functionality – *Professor (Add a fellow to the project)*



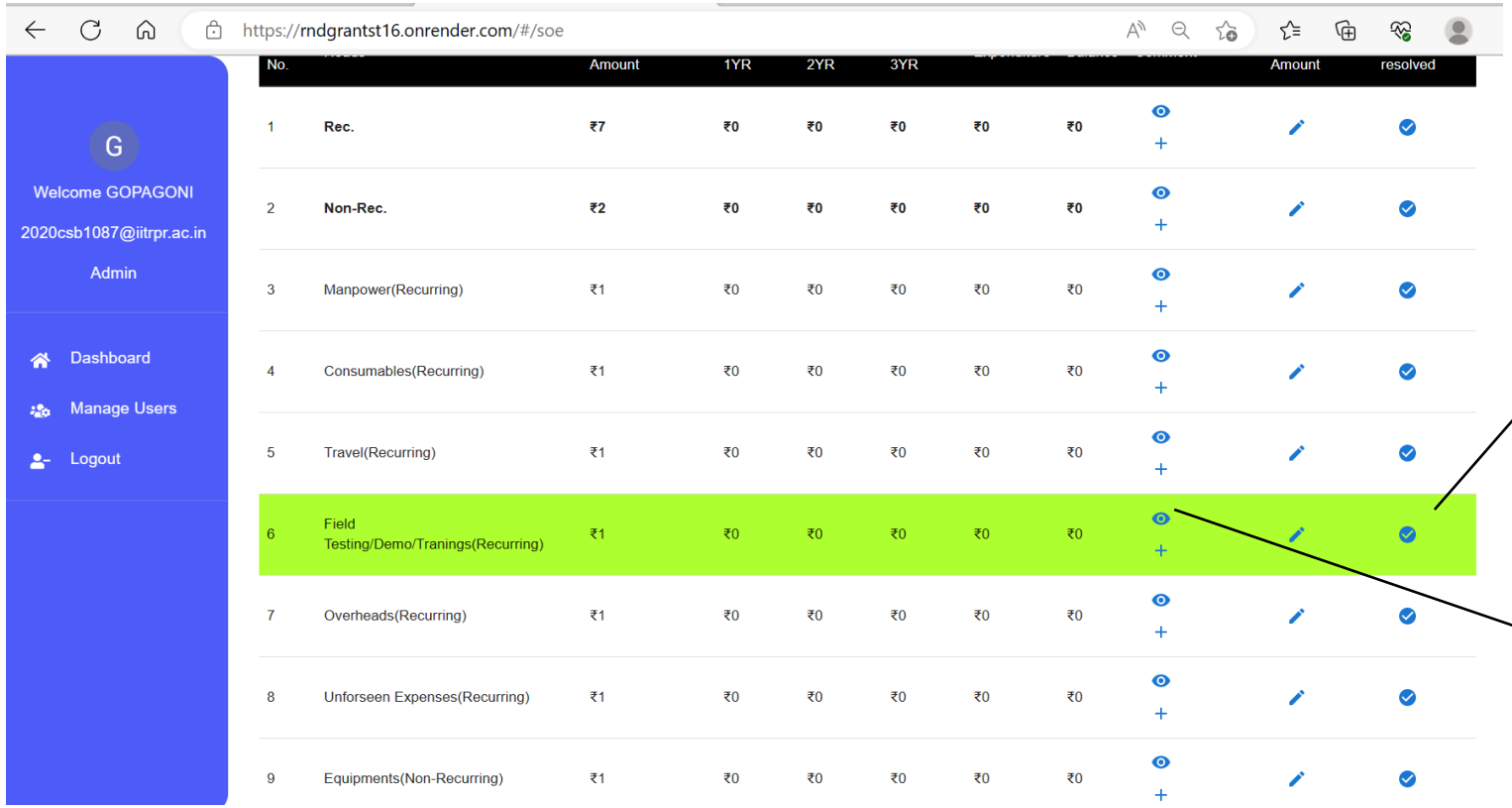
Functionality – *Professor or Fellow(comment)*

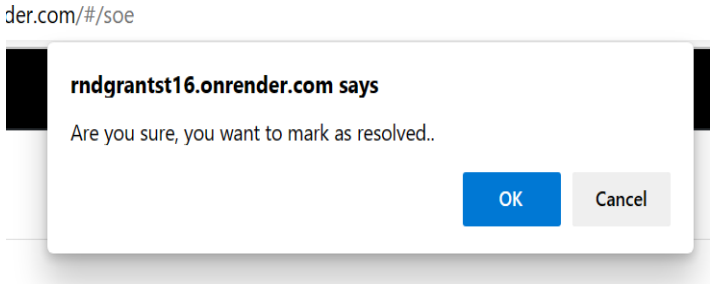




Sr. No.	Heads	Sanctioned Amount	Funds 1YR	Funds 2YR	Funds 3YR	Expenditure	Balance	Comment
1	**Rec.**	**₹7**	**₹0**	**₹0**	**₹0**	**₹0**	**₹0**	
2	**Non-Rec.**	**₹2**	**₹0**	**₹0**	**₹0**	**₹0**	**₹0**	
3	Manpower(Recurring)	₹1	₹0	₹0	₹0	₹0	₹0	
4	Consumables(Recurring)	₹1	₹0	₹0	₹0	₹0	₹0	
5	Travel(Recurring)	₹1	₹0	₹0	₹0	₹0	₹0	
6	Field Testing/Demo/Tranings(Recurring)	₹1	₹0	₹0	₹0	₹0	₹0	
7	Overheads(Recurring)	₹1	₹0	₹0	₹0	₹0	₹0	
8	Unforseen Expenses(Recurring)	₹1	₹0	₹0	₹0	₹0	₹0	
9	Equipments(Non-Recurring)	₹1	₹0	₹0	₹0	₹0	₹0	
10	Construction(Non-Recurring)	₹1	₹0	₹0	₹0	₹0	₹0	
11	Fabrication(Recurring)	₹1	₹0	₹0	₹0	₹0	₹0	
12	Misc Rec.	0	₹0	₹0	₹0	₹0	₹0	

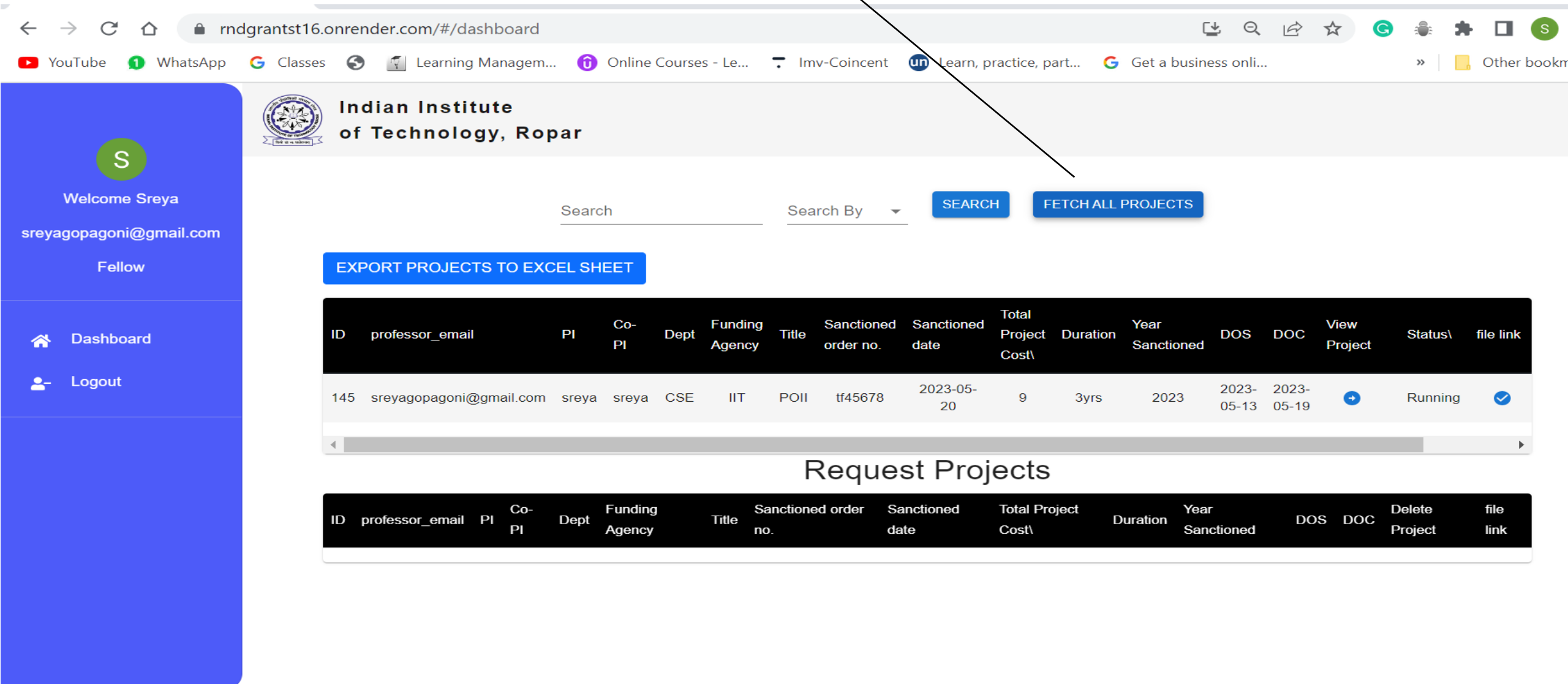
Functionality – *Admin(comment)*





Fellow page

Can only view the projects in which he was added as a fellow and cannot delete or add projects



Feedback from our Stakeholders

Good evening sir,

I have seen the RnD grants management portal made by the team T16(lashyanth, sreya, vishnu, shruti). It is quiet good and is converging with the actual working of our rnd department and it is resolving many issues which we are facing due to manual processing. They have improved the working of their application with our continuous feedback and it now a ready to use portal.

Acknowledgement

We would like to take this opportunity to express our sincere gratitude to all those who have supported us in the completion of this project.

- First and foremost, we would like to thank my supervisor, Dr. Puneet Goyal for his invaluable guidance throughout the project. His expertise and insights have been instrumental in shaping the direction of this work.
- we would like to express our gratitude to our seniors Vishwam Datta, Ayush Verma, Anshu Kumar, Himanshu Yadav whose project we extended.
- Further we would also like to thank our stakeholders Rnd management section who helped us with continues and valuable feedbacks.

Thank you all for your motivation throughout the course of this project.

Thank you