Project Unilib

A SHORT VIEW OF OUR PROJECT

Team Information

Group no: 08

Group name: Sneaky Stars

Team member 1:

Name: Nowshin Alam Owishi

Registration no.: 2018331022

Team member 2:

Name: Tahsina Bintay Azam

Registration no.: 2018331072

Motivation For Our Project

We were always fascinated by how websites were made . This project gave us the chance to turn our fascination into a reality. We were pretty sure that we were going to work with JavaScript but we were a little confused about choosing the framework and the database. As we saw MERN stack was gaining more and more popularity day by day we decided to work with that. But some features we thought would be a lot easier if we used PostgresSQL. So, we used both in our projects by combining them together. We wanted to make something useful but unique. Then we thought why don't we make a web app that would bring all the study-related components of our varsity life in one place. So, we proceeded with this idea and the outcome is this project.

Backend

Runtime Environment - Node(v14.18.1)

Rest API - Express (v4.17.1) - web framework for Node.js

GraphQL - Apollo Client (3.4.17)

Sending Mails - MailGun (v0.22.0)

Database –

- MongoDB Atlas

- PostgreSQL

Storage : (For uploading pdfs) – Firebase(v8.8.1)

Frontend

User interface – React v17.0.2

CSS framework – Bootstrap v5.1.3

File Upload-Multer v1.4.4

For Creating HTTP requests –Axios v0.22.0

Account Types

Admin

He controls the library management system, supervises user account, creates account for teacher.

User- Student

Basic user. He can communicate with other users through forums.

User - Teacher

Basic user. He can communicate with other users through forums.

The registration Process: Students

Click to register

Shows a form like this. Student must fill
every fields

The Verification and Login Process : Students
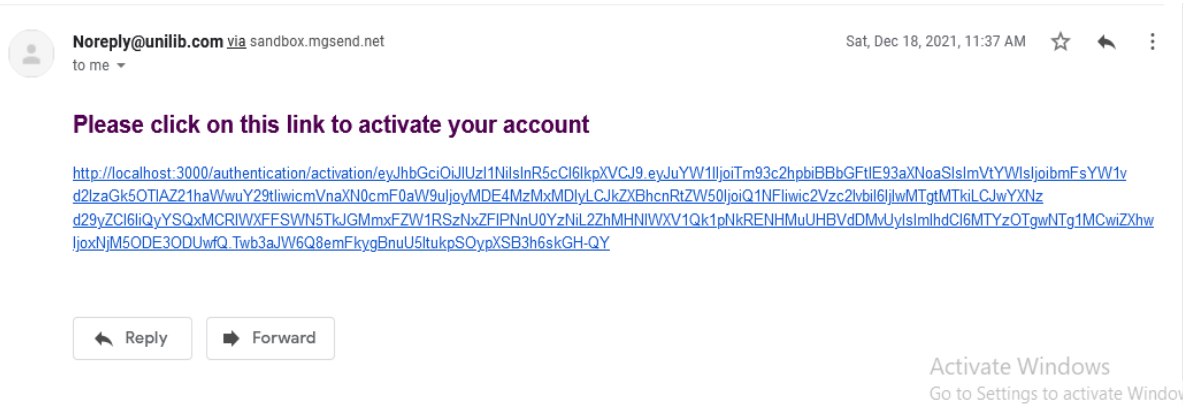
The activation link is sent to the provided email.
Click on the link.

That link directs you to the login page. Now
type your email and password and get started!

Email
✉ nowshin05.no@gmail.cor

Password
🔒 ••••••

Login

Login
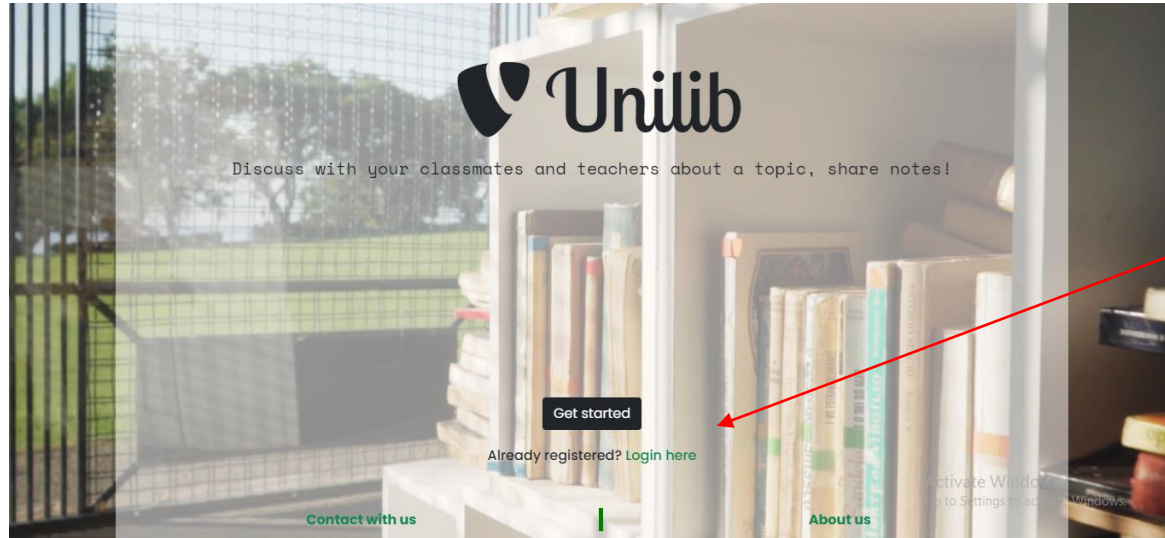
Registered user may enter the application by clicking here

That redirects to the login page. Fill out the fields and press login to enter the application.

Feature Details for Admin
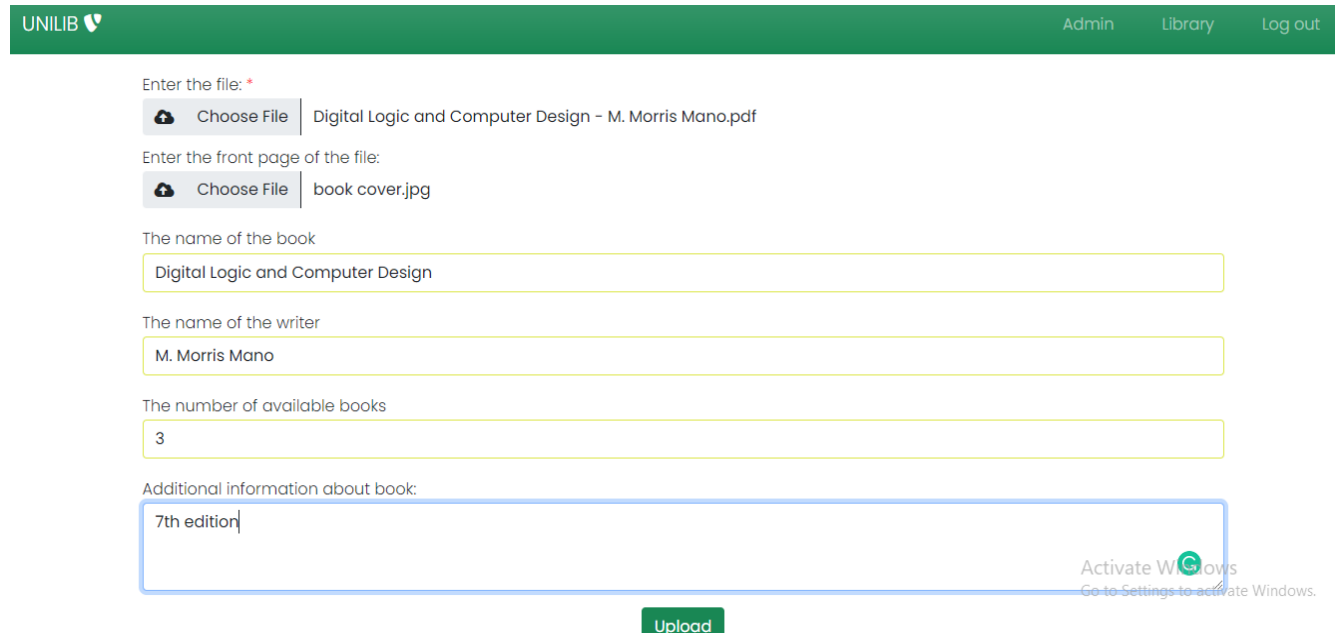
Admin Feature: Upload Books

Admins upload the first few pages of available hard copies with necessary information. In the case of soft copies, they can upload the whole book.

A popup messages arrives while the book is getting uploaded in the storage.
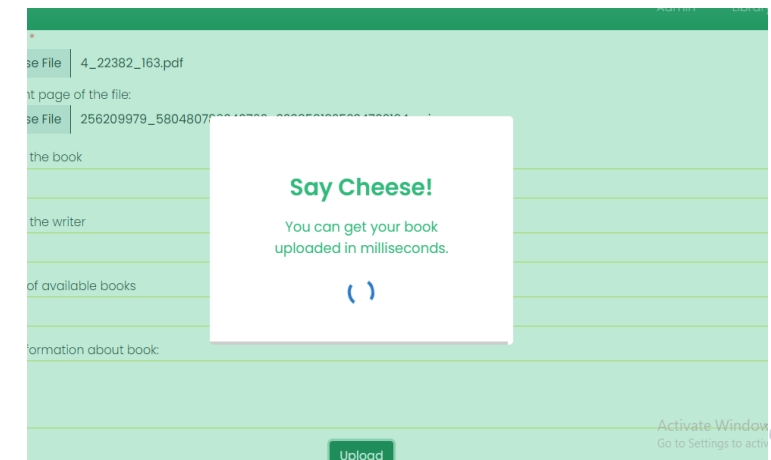
Admin Feature: Edit and Delete Books

Book's Informations

Title	Digital Logic and Computer Design
Author	M. Morris Mano
Number	3
Pdf Link	Click here to read the book
Description	7th edition

Edit Book **Delete Book**

Title

Digital Logic and Computer Design

Author

M. Morris Mano

Number of Books Available

5

Description

7th edition

Pdf Link

You cannot overwrite the link

Update Book

They can see and edit the book's details, or even delete them

Admin Feature: Issue Books

Name: R

Email:
nowshin22@student.sust.edu

Reg. number: 9684

Department: CSE

Issue This Book

Name: Q

Email: a@gmail.com

Reg. number: 2329

Department: 201

Issue This Book

Admin can issue books to any users.

Type here to search issues

User Email:
Nalamowishi999@Gmail.Com

Issued Book:
61c02be3ea18c5d50aa9d4a4

date: 2022-01-02

time: 20:44

status: returned

User Email: Atahsinam@Gmail.Com

Issued Book:
61c02aa3ea18c5d50aa9d488

date: 2022-01-02

time: 23:19

status: returned

User Email:
Tahsina.Sheeva@Gmail.Com

Issued Book:
61cf4605f86229cad10b69be

date: 2022-01-04

time: 23:36

status: returned

They can see and search in the lists of issued books and change status from issued to returned and inform user with a email that he got back the issued book.

Admin Feature: Check Reports

User Email:

Tahsina.Sheeva@Gmail.Com

Report Type: Request for a book

Subject: please increase the copies of this book.

Admin solve problems for other users, and examine user reports.
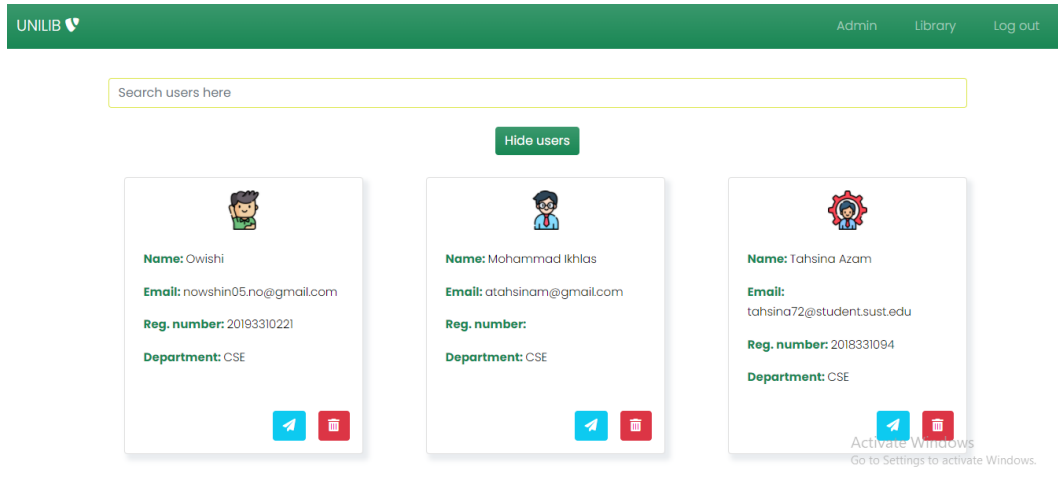
Write the subject of the email

Write the body of the email

Send

They respond to user reports and reply to them if needed.

Admin Feature: Managing Users

They can investigate all users, delete specific user accounts and contact with them if needed.

The message which is sent from admin, the user receives it in his email.

Admin Feature: Account Registration for Teachers

Name

Session

Email

Role

Department
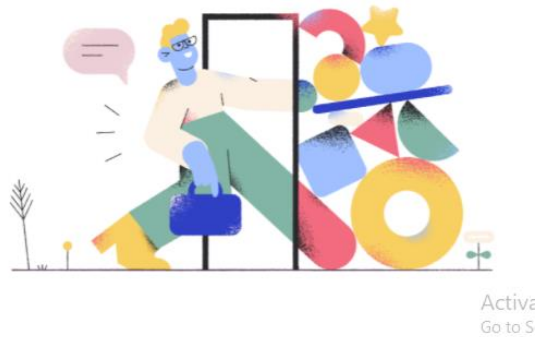
Admins fill out the forms for the teacher, where the role is Teacher. It will directly create account for teachers.

We must keep in mind that admin cannot create account for themselves. The developers are the creators of the admin account.

Feature Details: The Users

User feature: Getting Books from Library

Type here to search books

YOUR NAME

Author: mizuki
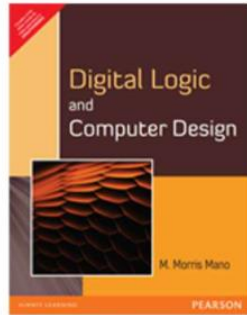
DIGITAL LOGIC AND
COMPUTER DESIGN

Author: M. Morris Mano

Users can search for a book. There is also a sorted book list where users can find out the recently uploaded books.

Book's Informations

Title	Java
Author	Sheeva
Number	3
Pdf Link	Click here to read the book
Description	A great book for learning Java

They can read about the book's information by clicking on the name.

User Feature: Reading Books
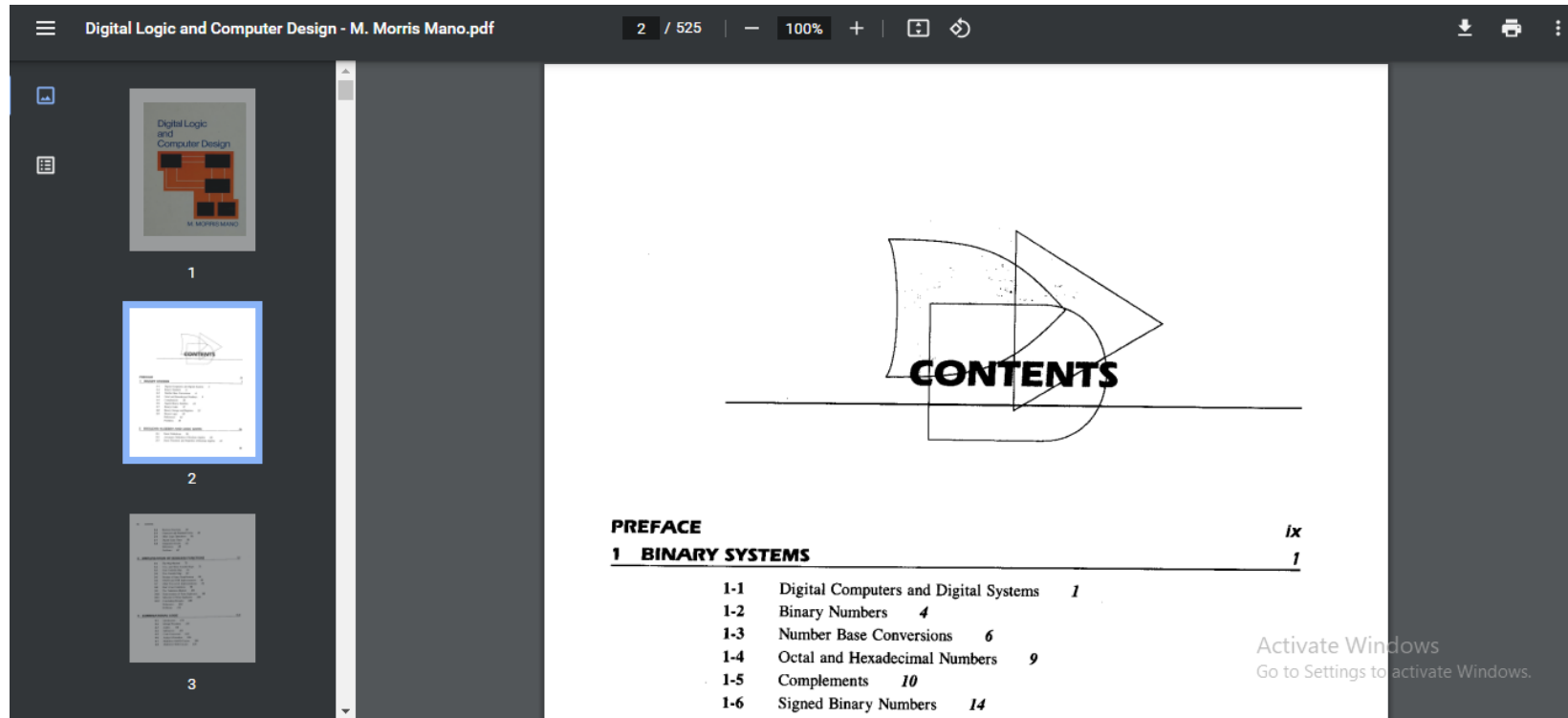
They can see the pdf, even download the pdf if they want.

User feature: Visiting Other Users
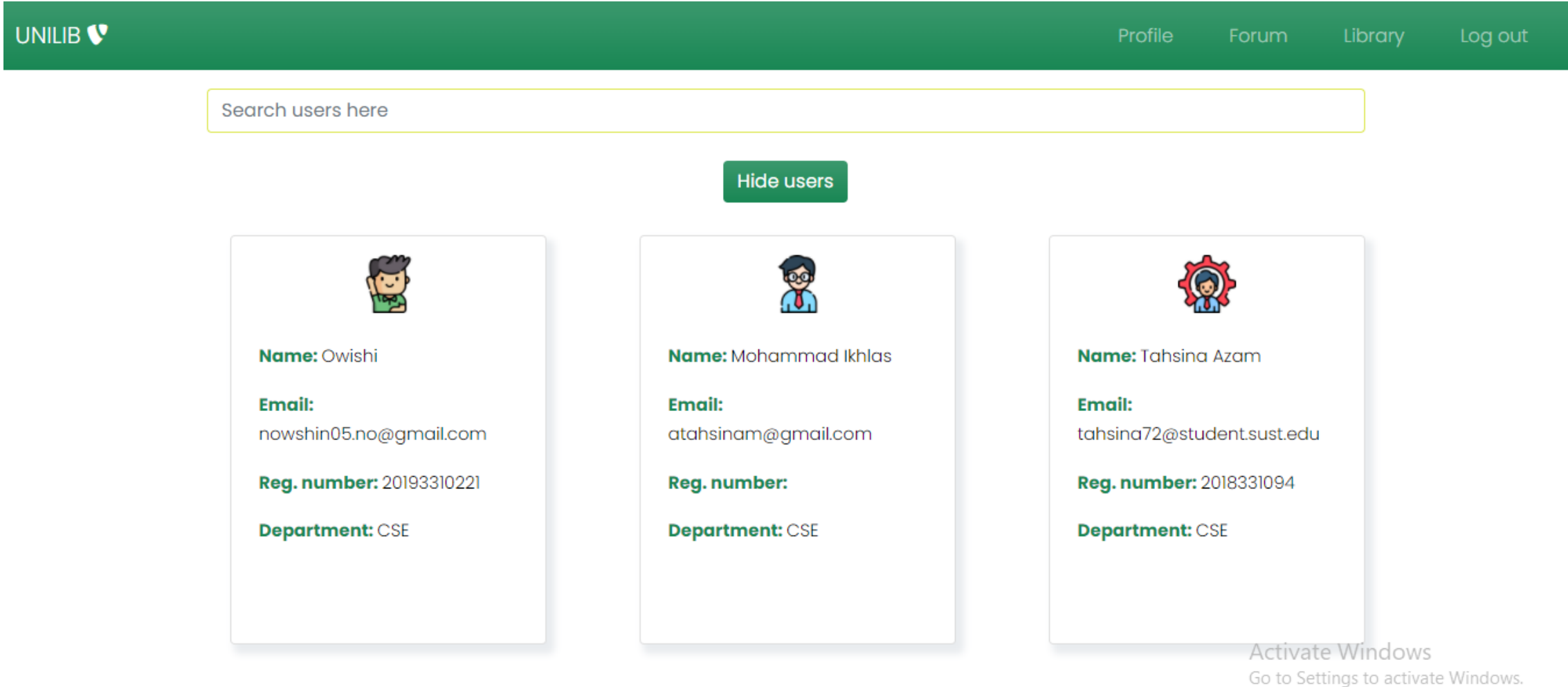
Users can see other users. They can search for specific users or admins.

User Feature: The Forum
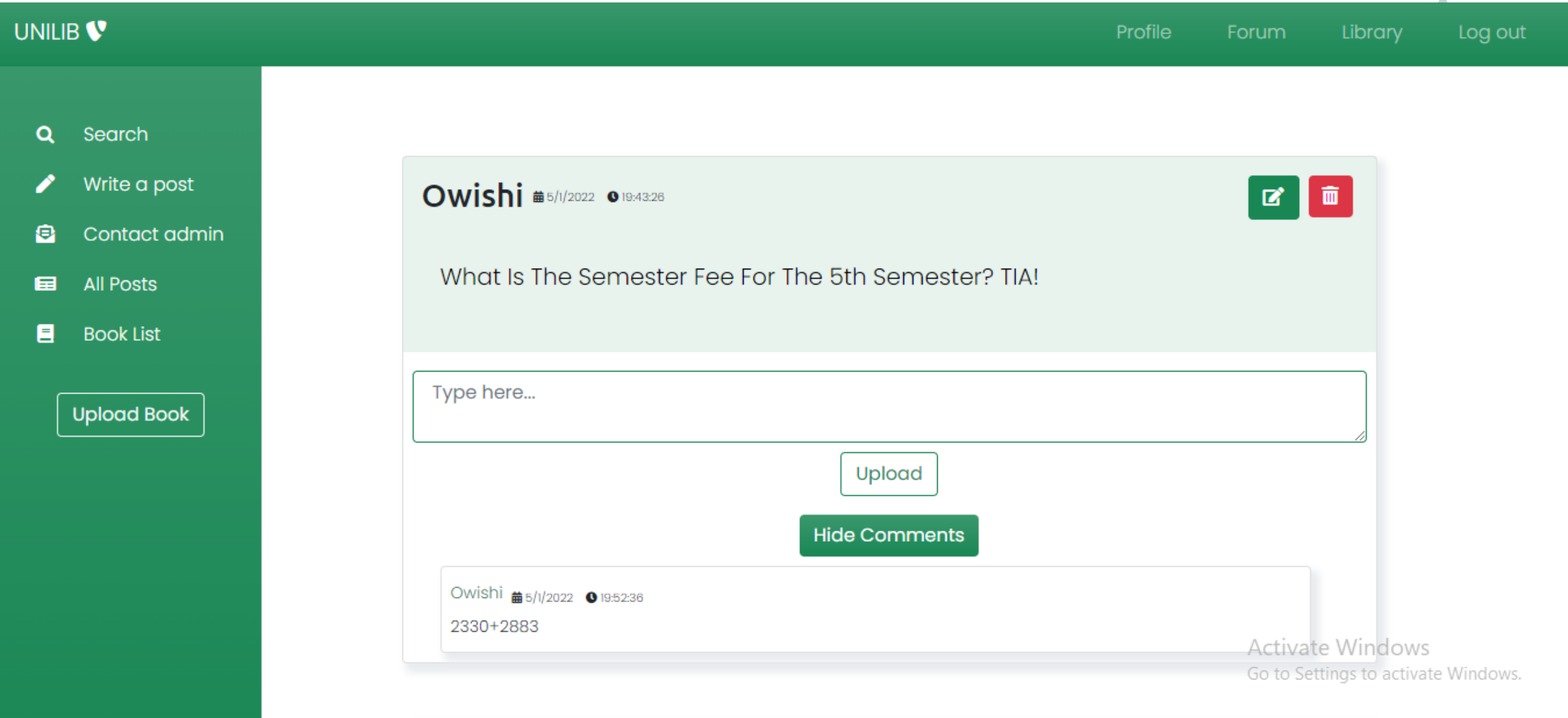
Forum Feature: Uploading Posts and Comments

What Is The Semester Fee For The 5th Semester? TIA!

Post now

Users can upload a post and other users can comment down.

Owishi 📅5/1/2022 🕐19:43:26

What Is The Semester Fee For The 5th Semester? TIA!

Write a comment

Upload

Hide Comments

Owishi 📅5/1/2022 🕐19:52:36

2330+2883
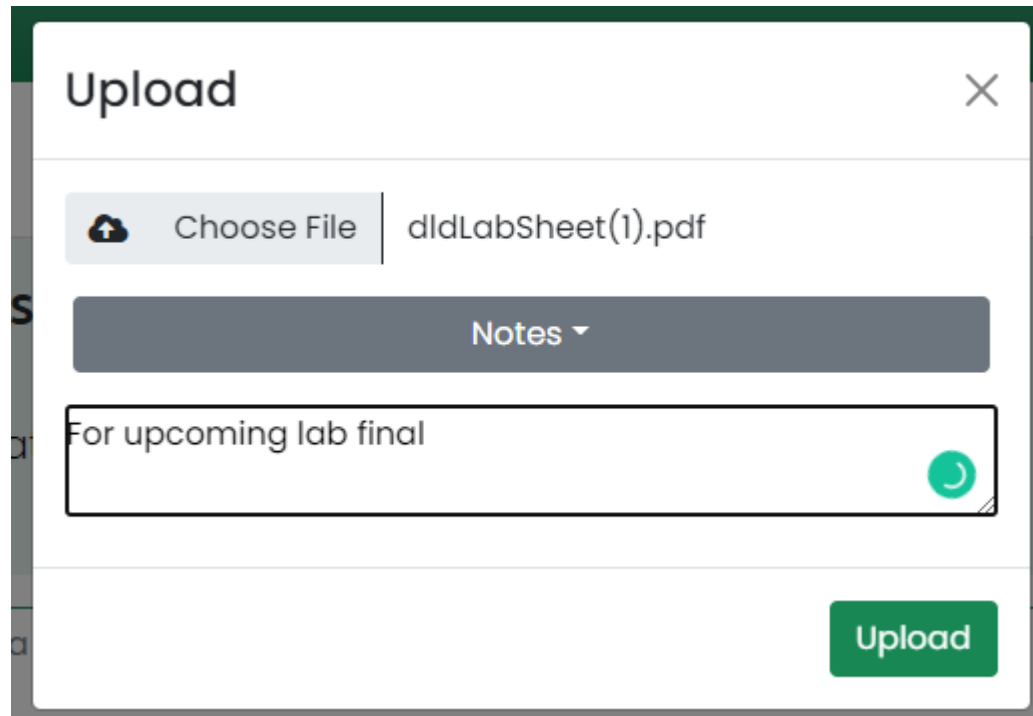
Forum Feature: Updating and Deleting Posts

Users can update or delete the post later if they want.

Forum Feature: Updating and Reading Books

UNILIB

- Search
- Write a post
- Contact admin
- All Posts
- Book List
- Books
- Notes
- Previous year questions
- Reaserch paper

Upload Book
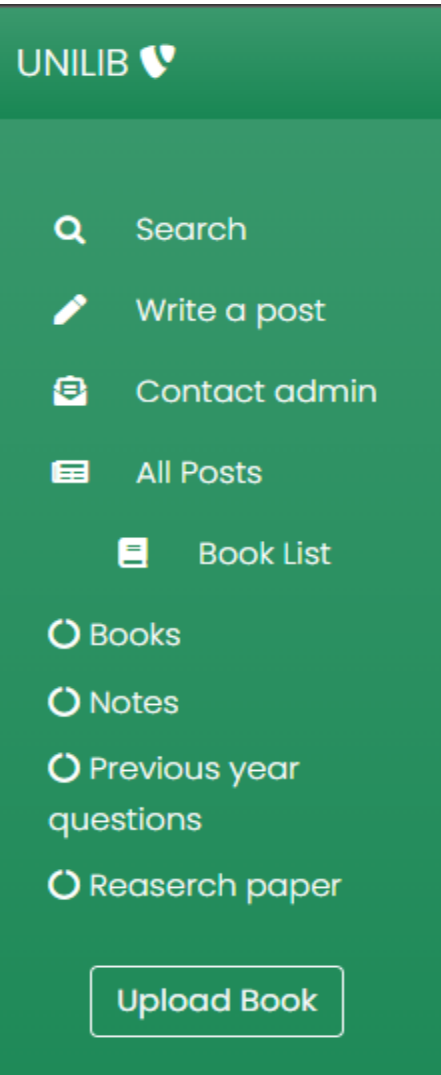
Users can upload a book. The categories are sorted and shown in the sidebar.

Upload

Choose File | dldLabSheet(1).pdf

Notes ▾

For upcoming lab final

Upload

User can read or download files by clicking on the screen.

Branch-and-Bound Algorithm.pptx

📅 31/12/2021 🕐 21:39:38

Uploader: Owishi

Description:
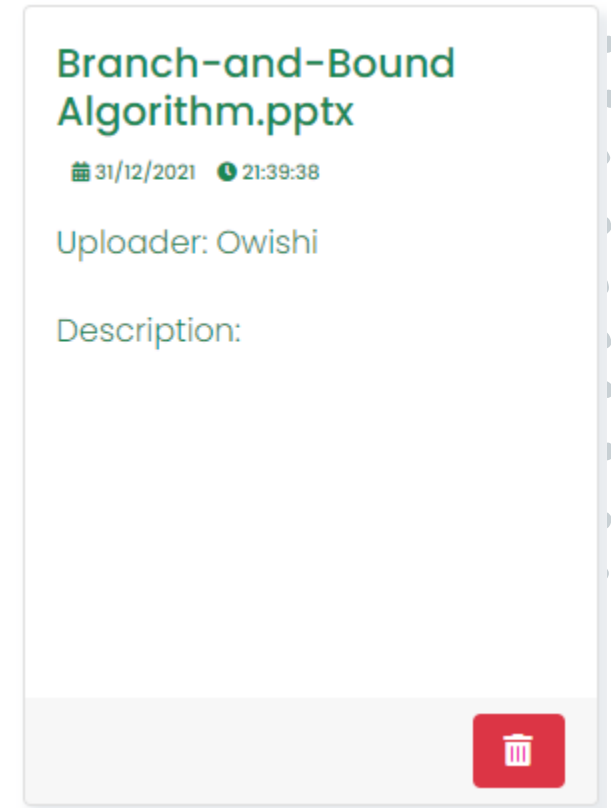
Forum Feature: Contacting With Admin
Profile Feature: Seeing The Other Users

Choose category ▾

Request for a book

Feedback on a book

Report a user

Others

⮡ Send

They can conduct with admins. They can search, request, recommend, or even report on books or other users.

Search users here

Hide users

They can search or see other user profiles

Name: Owishi

Email: nowshin05.no@gmail.com

Reg. number: 20193310221

Department: CSE

Name: Mohammad Ikhlas

Email: atahsinam@gmail.com

Reg. number:

Department: CSE

Name: Tahsina Azam

Email: tahsina72@student.sust.edu

Reg. number: 2018331094

Department: CSE

User Feature: Visiting Account History
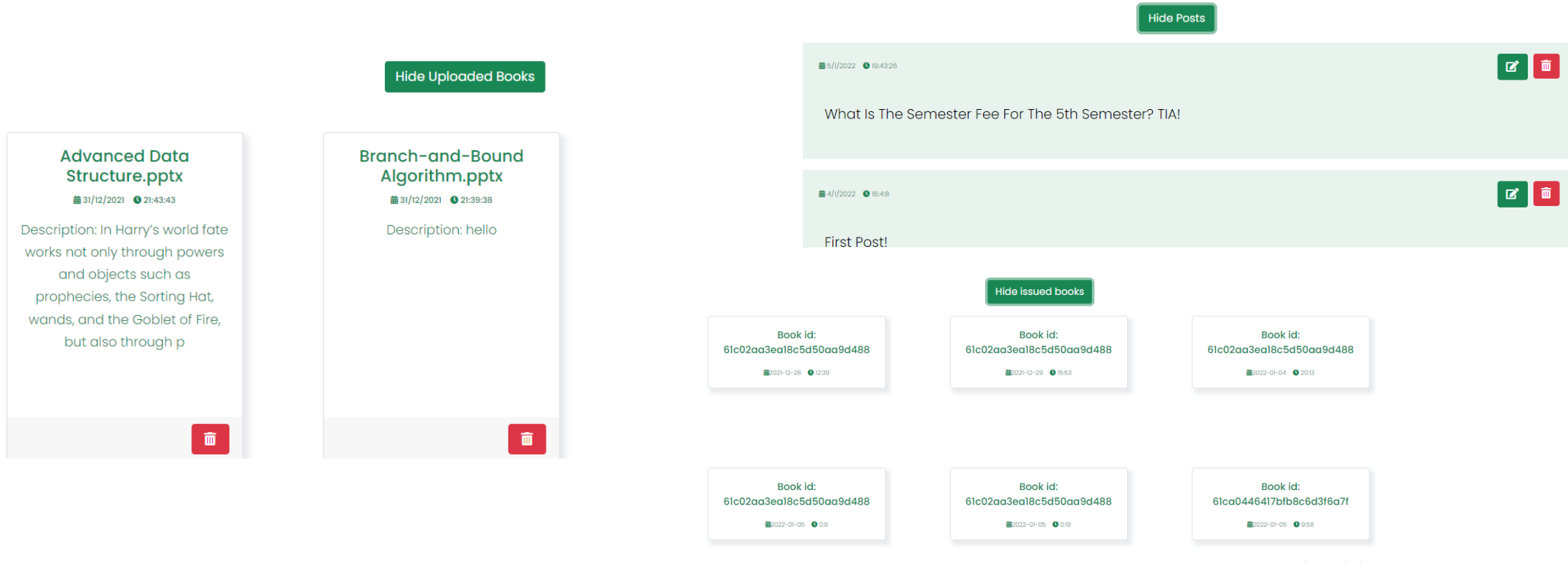
User can visit his account history. They can see all the books issued from library and the posts uploaded by them. They can modify the uploaded files and even delete them.

Common Feature of Users and Admin: Editing Profile

Name

owishi

Session

2018-19

Email

nowshin05.no@gmail.com

Registration Number

20193310221

Department

cse

Update

Both types of the users can edit and modify their profile.

Homepage footers

Leave us a message here

Send

Any person can send message to the admins, and they can share their opinion about the project in contact with us. Again, we described our motto and features in 'about us' to provide a clear idea about the project

An Extra Feature To Fulfil The Aim of Unilib:

It is not just a conduct system between users and libraries. It is more than that. To make it more flexible for users, we introduced Forum. It is free from the admin's supervision.

Features of Forum:

- Users can search for books by title and author.
- They can share notes, books, research papers with users.
- They can delete books uploaded by them.
- They can download the pdfs from the library.
- They are free to discuss their academic issues. They can search or delete posts.

We tried our best to implement all the features perfectly. In the end, Unilib is a user-friendly library and resource management system. It assembles a swift media for academic help for both students and teachers.

Contributors: Nowshin Alam Owishi   Tahsina Bintay Azam
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Implemented features

Students and Teachers - the users

- Access the library to view all the books.
- Update their account details.
- Access the given pdf link to read the index or first few pages of the books.
- Search books by name/writer's name and even subject (if given in the description).
- Also check the availability of books in the library and all the other details.
- See the list of books they have been issued with date and time and details.
- Search for other users by their name/role /department /email.
- Write posts in forum.
- Delete their posts in forum.
- Update their posts in forum.
- Comment on their and others posts in forum.
- Search out posts of a specific person and also resources from forum.
- Contact admin from forum.
- When users return the issued book from library they get a confirmation mail about returning the book.
- All the resources in the forum would be available in one place and students and teachers can upload any type of file in the forum.
- Users can read those uploaded books online and even download them.

Admins

- Admin account is created by the administrator who has direct access to the database.
- Log in with the same page as users.
- Register users directly.
- Update their account details.
- See other users with account.
- Delete the account of a person if reported and verified fake.
- Also delete his own account.
- Directly contact a user via email from the manage user section.
- Admins have a separate library.
- Add new books in the library (with their pdfs and picture of the front page of the book).
- See the details of the books and edit them and delete them.
- Issue books and see all the issued books in one place.
- Search issued book history by issue dates and they can change the book status from issued to returned.
- View all the reports sent to them.
- Delete reports .
- Reply to the reports if they consider the report important.
- Search other users in their list by their name/role /department /email in manage user section.

- Cookie-based authentication.
- Completely hashed passwords.
- Protected routes.

Unimplemented Features

- User can't delete their accounts. Only admin can.
- Voting (upvoting/downvoting) options in the post.

Contribution

Team member 1 – Nowshin Alam Owishi
In 55% submission –
      Backend and frontend of Forum
In 100% submission –
1. Frontend of the whole project – 70%
2. Backend and frontend of the Forum part

Team member 2 – Tahsina Bintay Azam
In 55% submission –
      Backend and frontend except Forum
In 100% submission –
1. Frontend of the whole project – 30%
2. Backend except the Forum part

It is a rough calculation of our contribution. Basically we participated and practiced more or less in every field as required. We couldn't create an accurate picture as contributions are mixed up.