

Internet and Web Programming

Course Code: CSE3002



VIT[®]

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

QUOVIT

An extended version of Quora for college

Team Members	Mounvi Podapati (19BCE0396)
Slot	L25 + L26 (G2)
Faculty	Prof. Lydia Jane

INTRODUCTION:

QuoVIT is a social media platform for VIT students. Offering various facilities which the students belonging to an educational institution need. It serves as an all in one. While providing multi-faceted facilities ranging from the traditional social media posts to more college/VIT specific functionalities like faculty reviews, doubt clarifications forum and more facilities. All of this comes under the umbrella of one website which caters to the needs of an enormous educational institution like VIT. To make sure not to apply the one-fits all model to digital networking platforms and have thus chosen to take it upon to provide institution specific functionalities on this portal. Quovit makes the lives of a student easier, by giving them one place for all their needs related to college. Be it discussions, socializing, information gathering; QuoVIT has it all. It aims to improve the quality of life and education by providing a vital support system to the average student in order to empower them to make well informed decisions and have better control over their fate.

AIM:

My Aim is to develop an application that acts as a single platform catering all the needs of students belonging a big educational institution like VIT. To come up with a system that specifically acts as a social media application exclusively for students of VIT along with providing other functionalities like a Question Bank system, Faculty reviews section, an Ideas sharing platform and a module to allow students to anonymously share their confessions.

OBJECTIVE:

Quovit's main objective is to act as a single reliable and sufficient application instead of relying on multiple different applications for daily student related requirements. To come up with a MERN stack application for the same.

TECH-STACK:

MongoDB : A NoSQL based Document Database

Express: Node.js web framework

React: Client side Javascript framework

NodeJS: Javascript based Web Server



MODULES:

1. Posts:

Typical to what posts on popular social media platforms look like, the posts on QuoVIT are aimed at increasing the social networking aspect of a student's internal college life. The posts can be made in the form of text or . This empowers a user to easily make the best use of their time and understand what his or her mates in college are doing. This would help in nurturing a professional yet very social and inclusive environment and culture in the institution.

2. Anonymous Confessions:

This is one for the public. A module where anyone can say something which holds a lot of value and truth but don't want to go public with your identity disclosed. This page is for those people looking to be heard but also avoid the heat. It offers a platform for users to convey their ideas/issues without disclosing their identities and thus keeping the heat off their backs. The existence of such a device simply calls for increased transparency withing the institution which would help it to flourish in the future.

3. Question bank:

This module is specifically designed to allow students to view and download question papers over the years, exam category wise so that they can get an idea of the pattern, type and level of the questions asked and the marking scheme and hence help students in testing their knowledge and practise various questions. Students will also be allowed to upload and help other students with the same in the future.

4. Idea sharing:

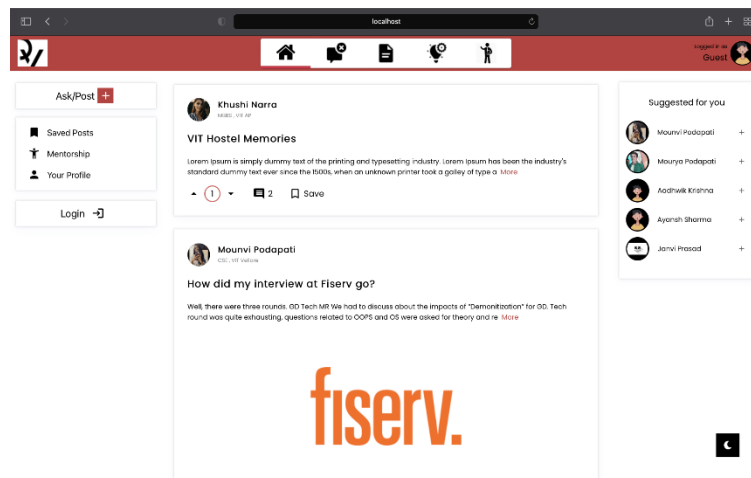
A module to allow students to share or putting out innovative ideas into the world just to see the response it gets? In that case, the ideas sharing portal is the place to be. Here the user can share his/her ideas and make sure it gets some audience since it automatically goes onto the institution's digital platform. This enables other users to make the choice of either helping in the solidification of the idea or just upvoting or supporting its progress.

5. Faculty Review:

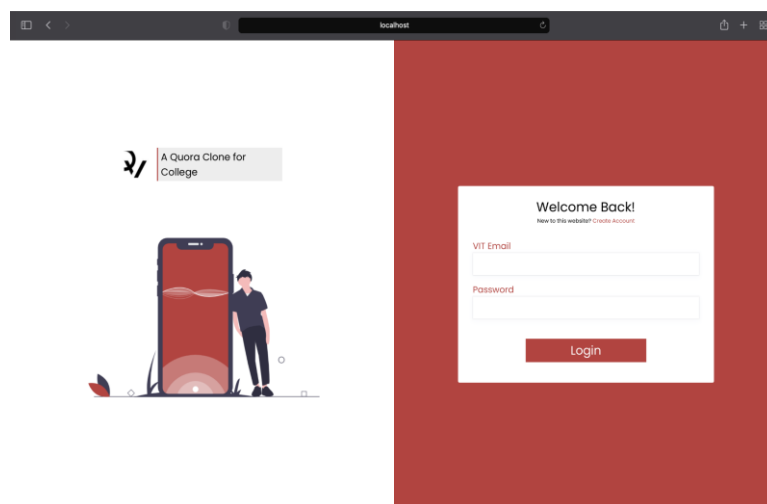
A module to allow students to select the right faculty during FFCS. This will help students to make the correct and well informed decision about taking the righ faculty and the right subject to help you in you adventurous and fruitful journey of your degree completion. Find overall rating on multiple faculties and make the best informed and logical choice.

SCREENSHOTS:

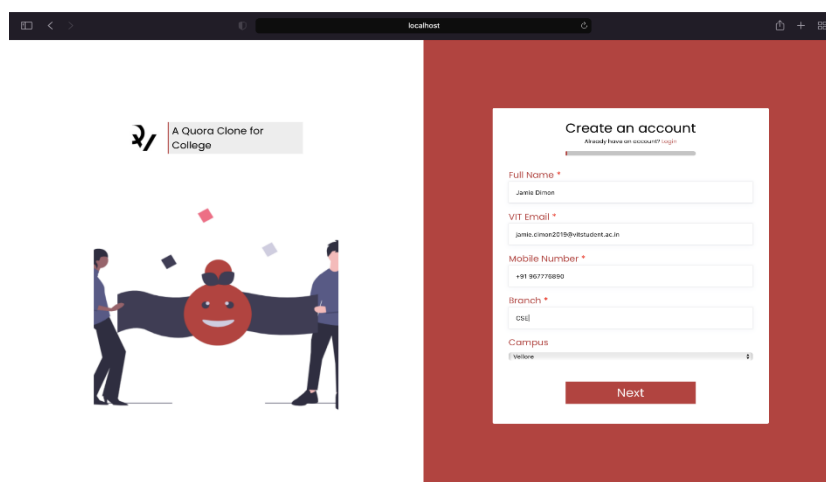
Landing Page:

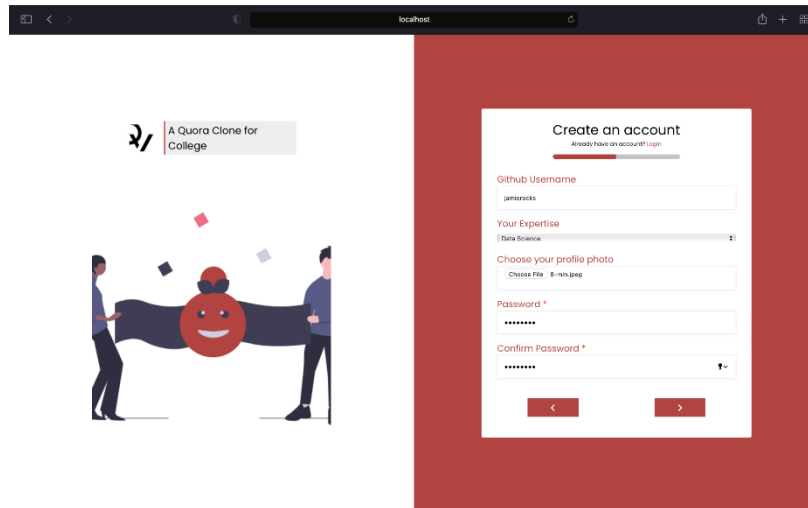


Clicking on the Upvote button on a post. (Redirected to login as the guest users are not allowed to react on any post, idea, confession, downloaded question papers or rate any faculties or follow and unfollow users)

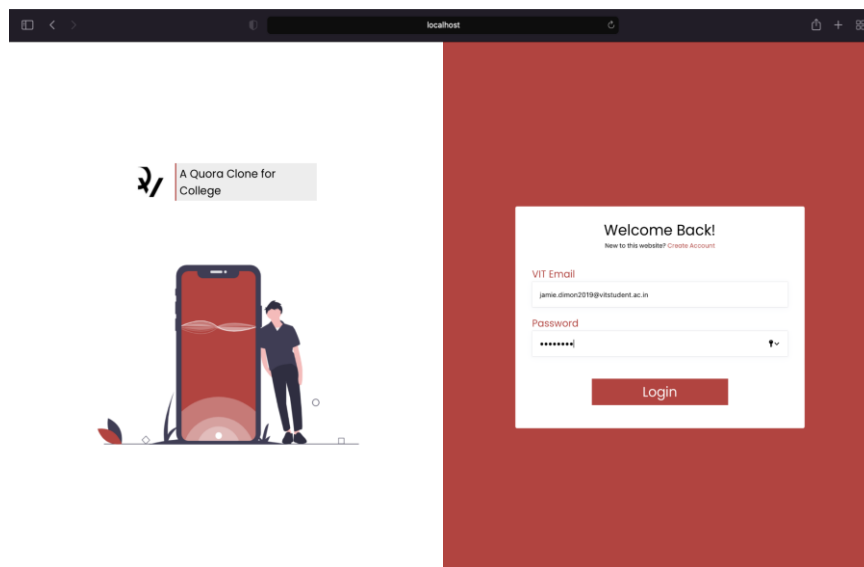


Clicking on Create Account and creating a new user.

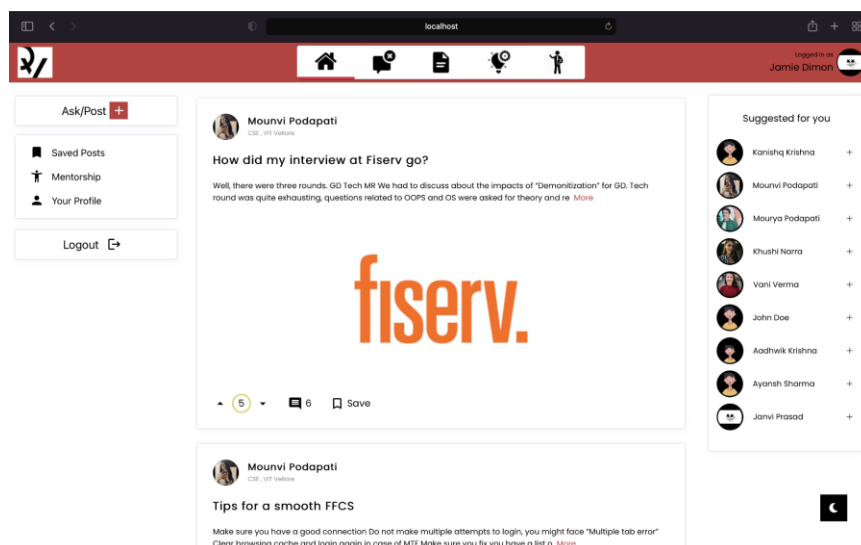




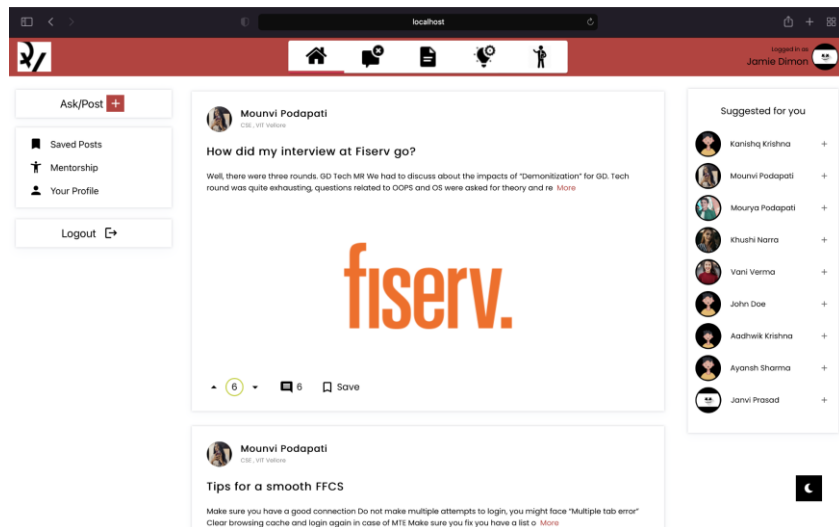
On successful creation of account, you will be redirected to the Login page



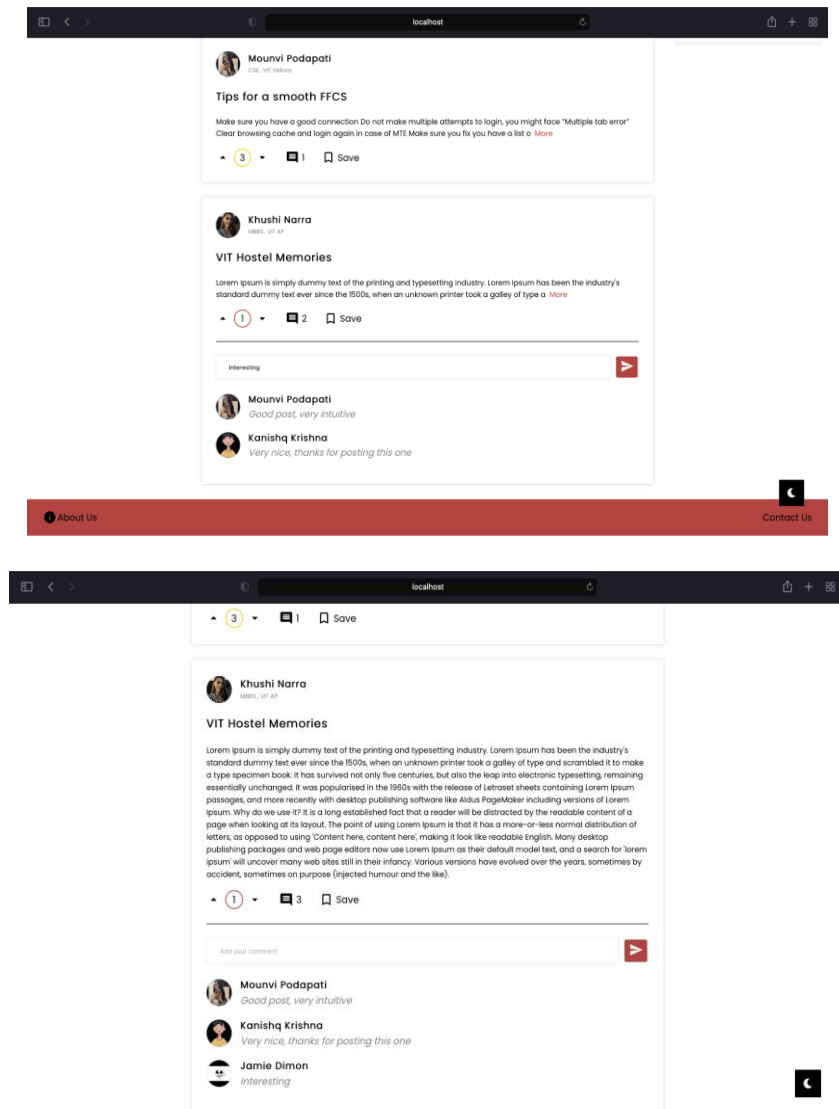
Logged in user:



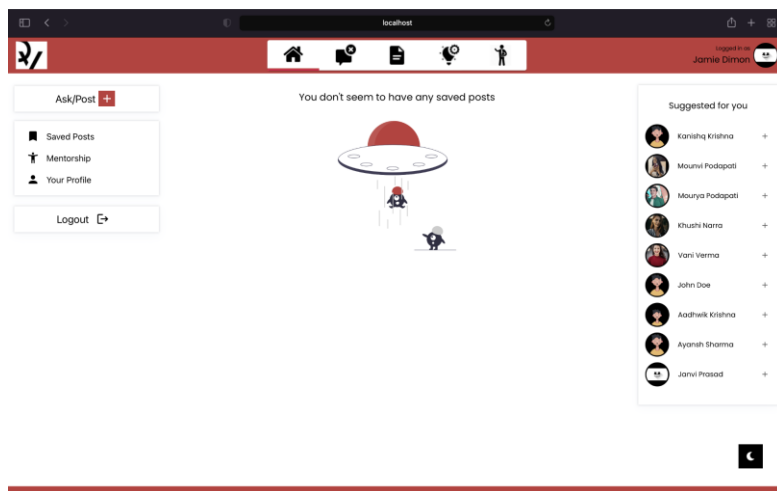
Upvoting on the first post:



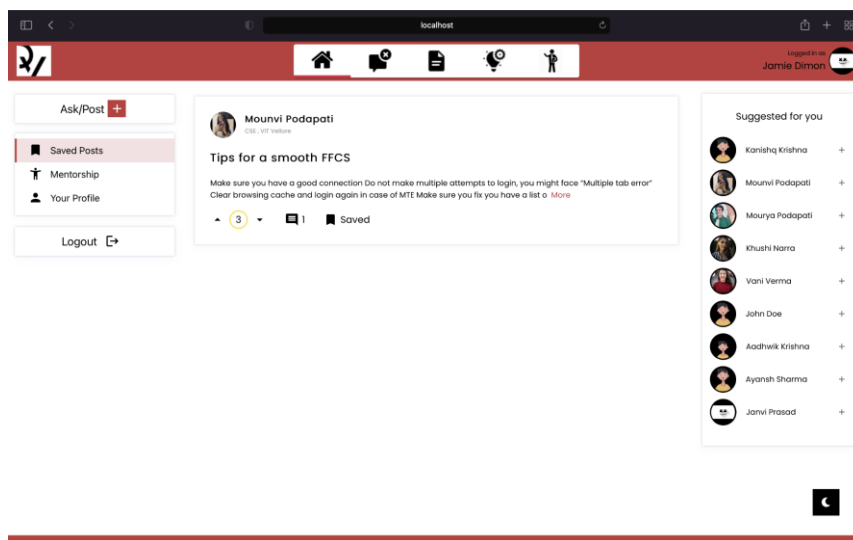
Commenting on the third post:



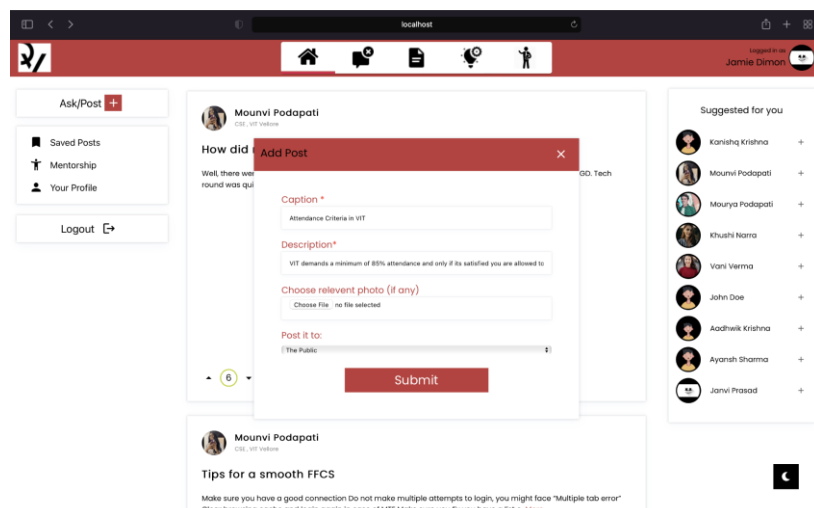
Saved posts page:

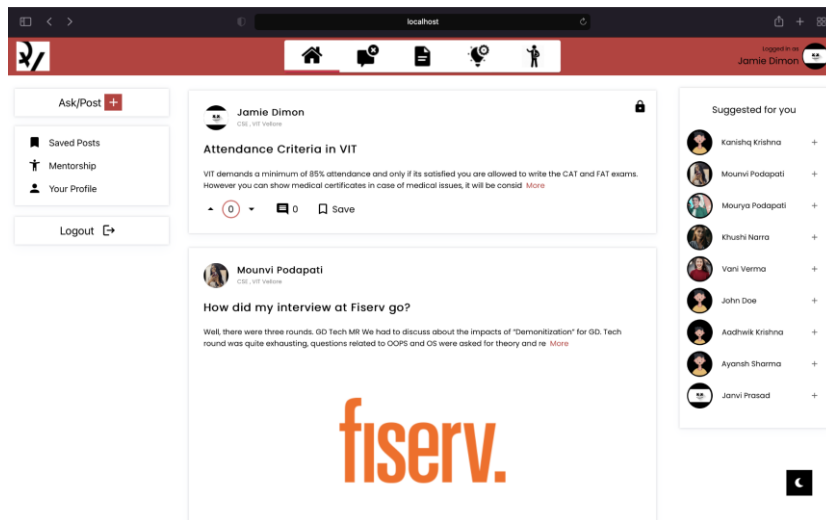


Going back to landing and saving the second post:

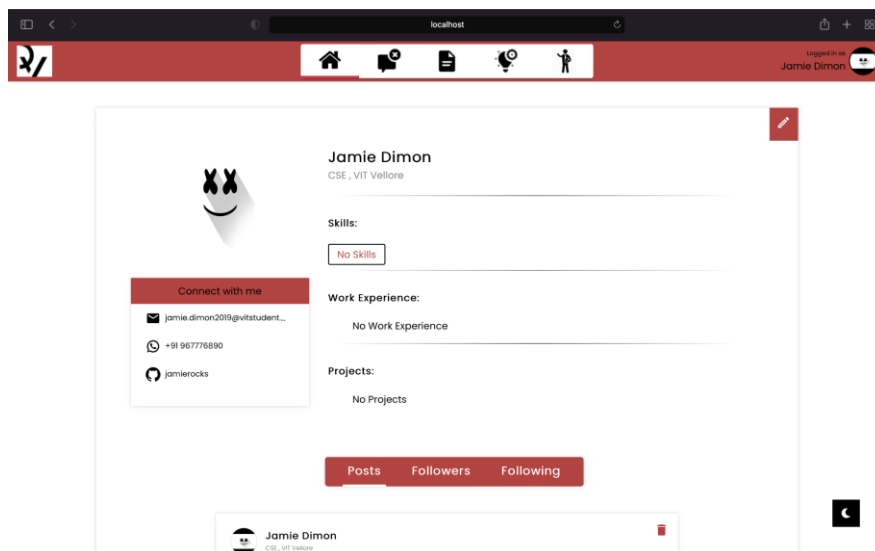


Creating a new post and posting to your followers only:

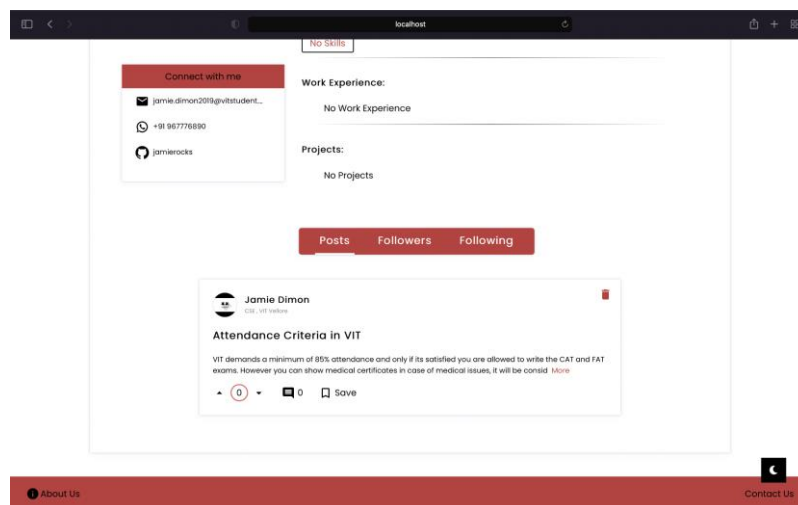




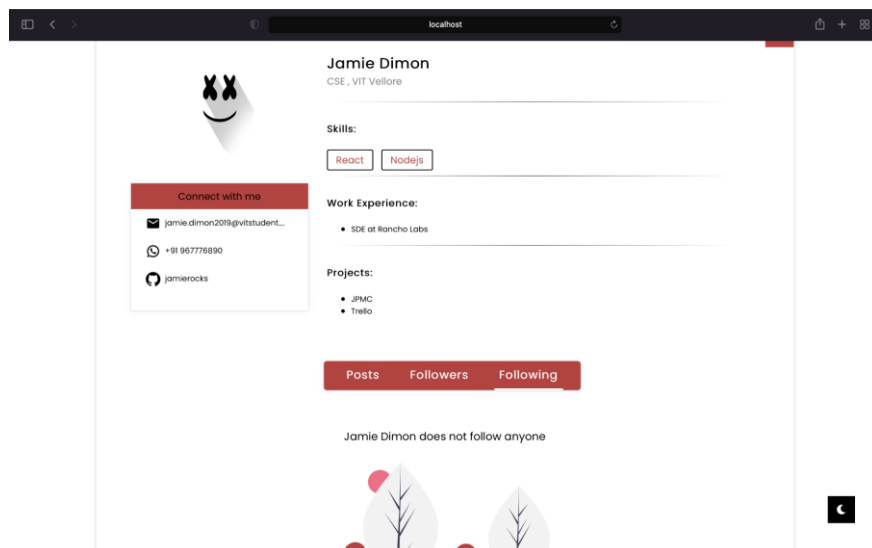
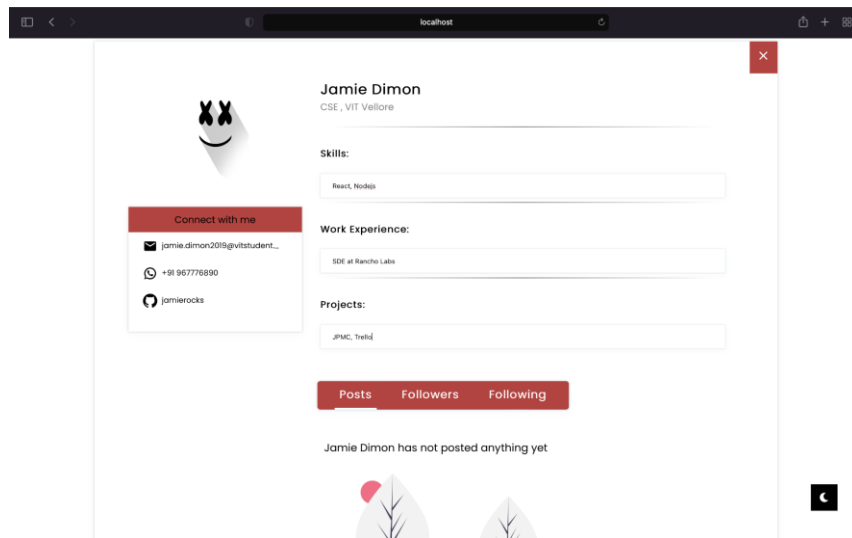
Clicking on Your Profile button



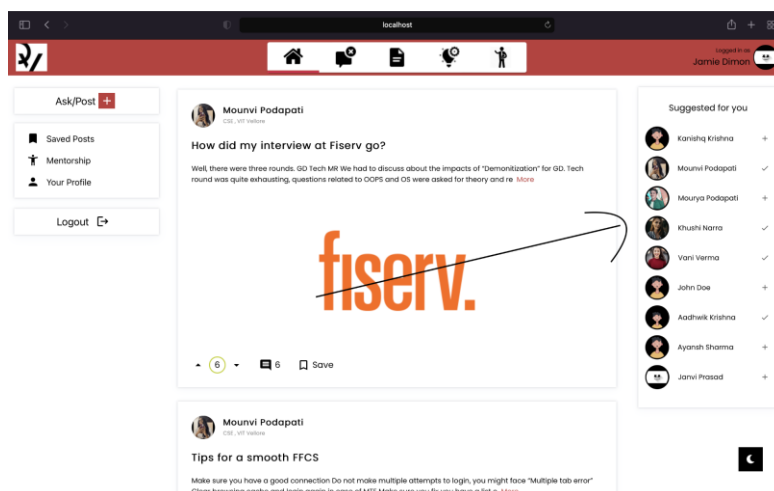
Deleting the post we made previously



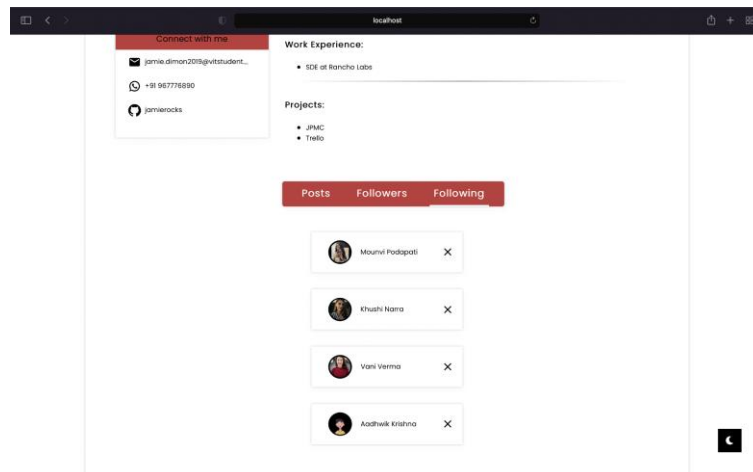
Editing to add new skills:



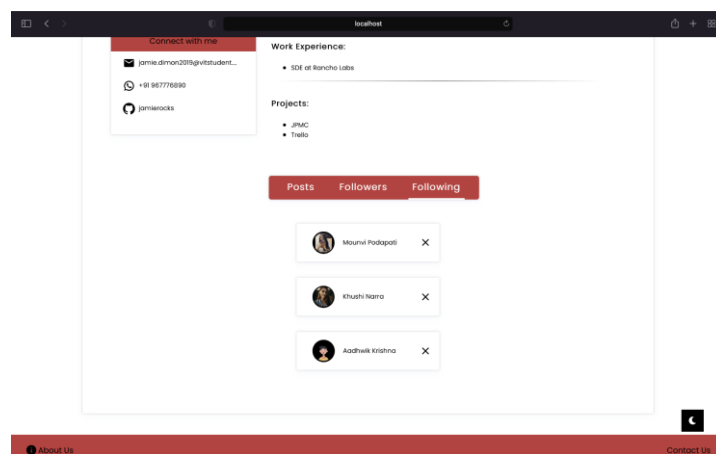
Following users shown in suggestions:



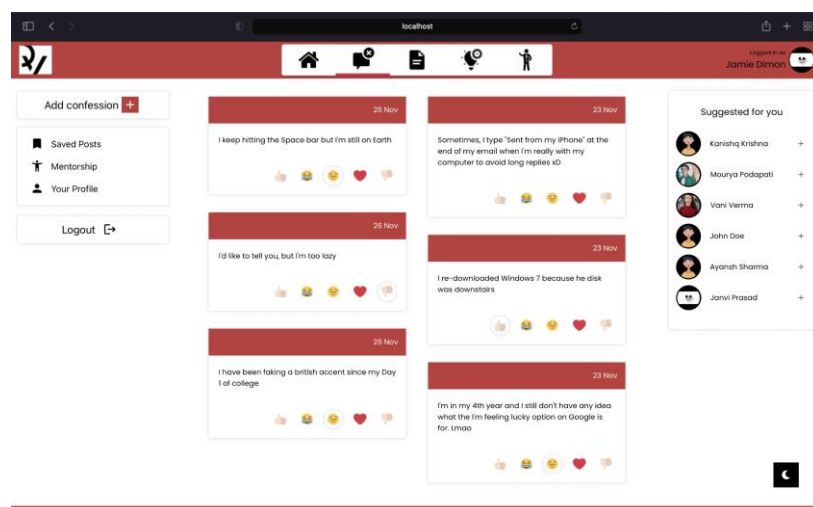
It will now be reflected in the profile page under following:



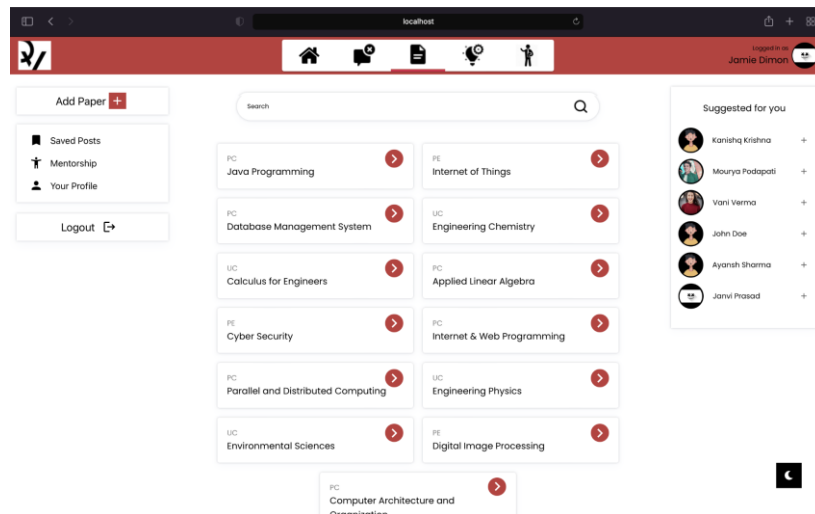
Users can be unfollowed by clicking on cross symbol: Unfollowing user Vani Verma



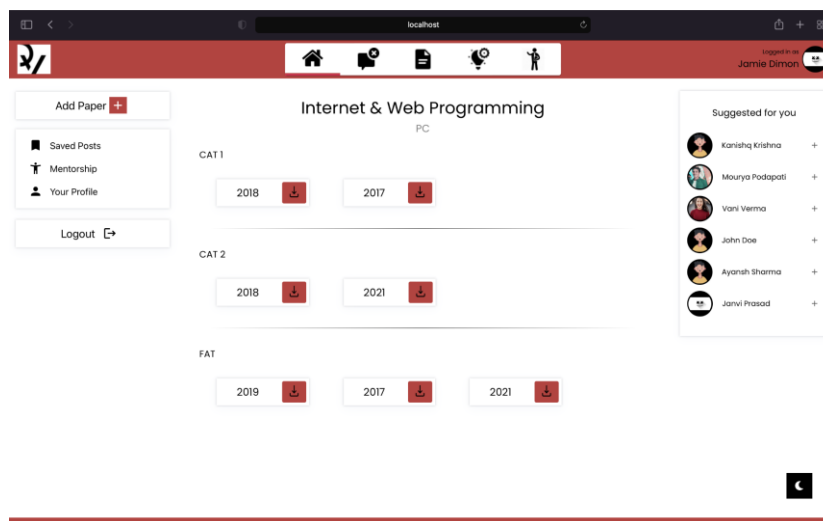
Anonymous confessions page: Reacting to multiple confessions:



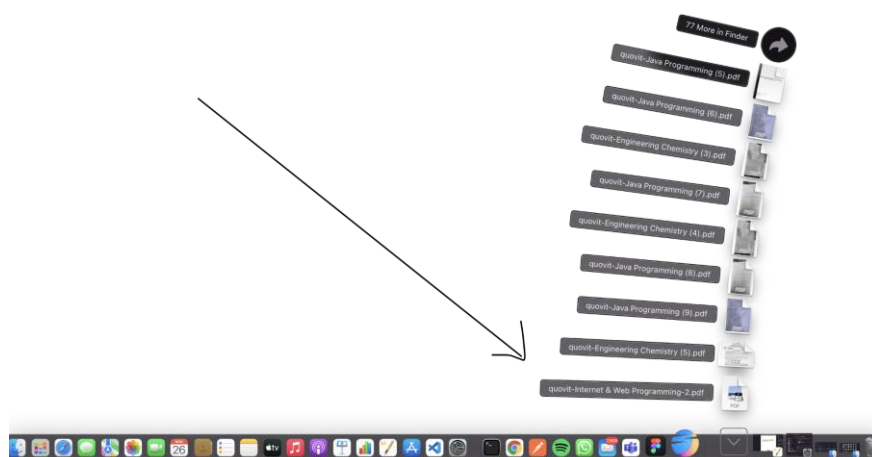
Question Bank:



Clicking on Internet and Web Programming:



Question papers can be downloaded on clicking on the download icon:



Adding a new course:

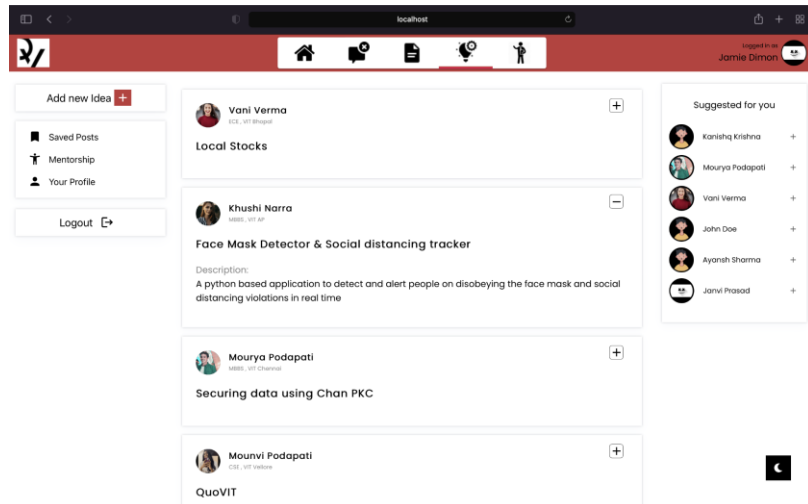
The screenshot shows a web application interface for adding a new course. The top navigation bar is red with a logo on the left and user information 'Logged in as Jamie Dimon' on the right. A sidebar on the left contains links: 'Add Paper +', 'Saved Posts', 'Mentorship', 'Your Profile', and 'Logout'. The main content area features a search bar and a grid of course categories. A modal form titled 'Add Paper' is open, containing the following fields: 'Course Name' (Microprocessors and Interfacing), 'Course Category' (PC), 'Year' (2021), and 'Upload Paper' (Choose File: VL2021220604614_AST08.pdf). Below these fields are radio buttons for 'Cat 1' (selected), 'Cat 2', and 'Fat', followed by a red 'Submit' button. The right sidebar shows a 'Suggested for you' list with user avatars and names.

The screenshot displays the details of the course 'Microprocessors and Interfacing' under the 'PC' category. The top navigation bar and sidebar are identical to the previous screenshot. The main content area shows the course title and category. Below this, there are sections for 'CAT 1' and 'CAT 2'. The 'CAT 1' section shows the year '2021' with a download icon. The 'CAT 2' and 'FAT' sections both display the message 'No papers found'. The right sidebar shows the same 'Suggested for you' list.

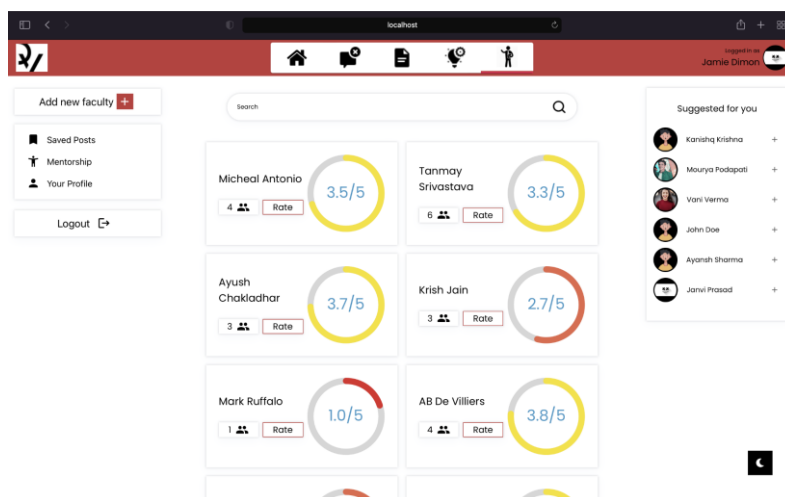
Searching for a course:

The screenshot shows the search results for the query 'chē'. The top navigation bar and sidebar are consistent. The search bar at the top contains the text 'chē'. Below the search bar, a red button labeled 'Engineering Chemistry' is visible. The main content area displays a grid of course cards, each with a category icon and a title: 'Java Programming', 'Internet of Things', 'Database Management System', 'Engineering Chemistry', 'Calculus for Engineers', 'Applied Linear Algebra', 'Cyber Security', 'Internet & Web Programming', 'Parallel and Distributed Computing', 'Engineering Physics', and 'Engineering Chemistry'. The right sidebar shows the 'Suggested for you' list.

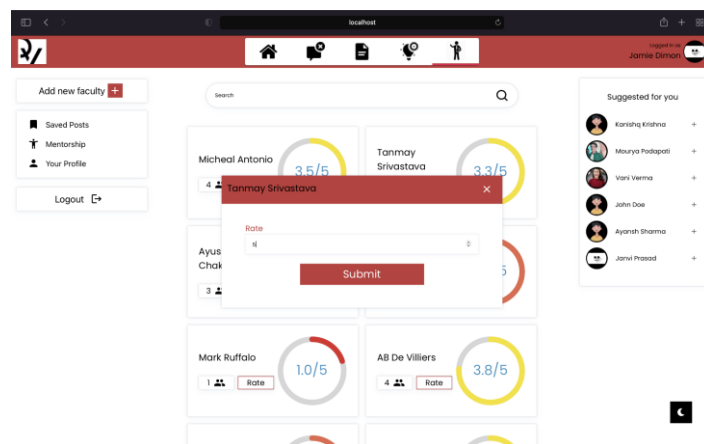
Ideas sharing platform: Description can be viewed by clicking on the + icon:



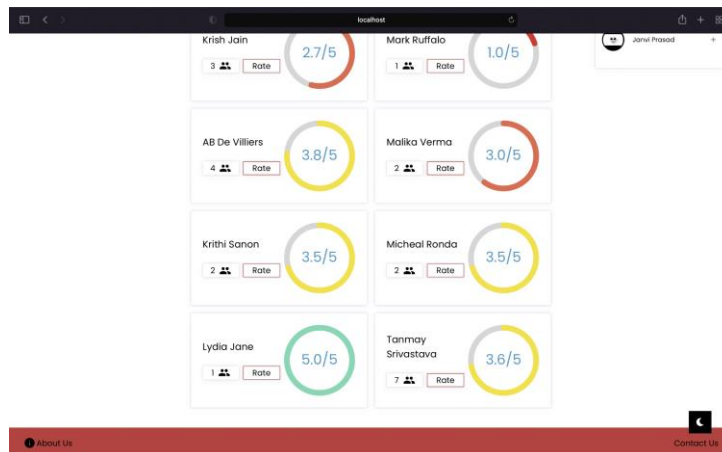
Faculty Reviews Page:



Rating a faculty: Tanmay Srivastava

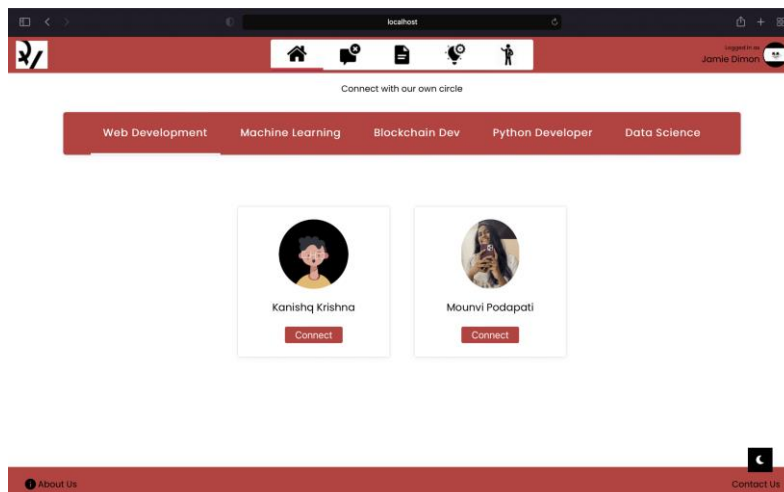


Faculty Votes and overall rating has been updated

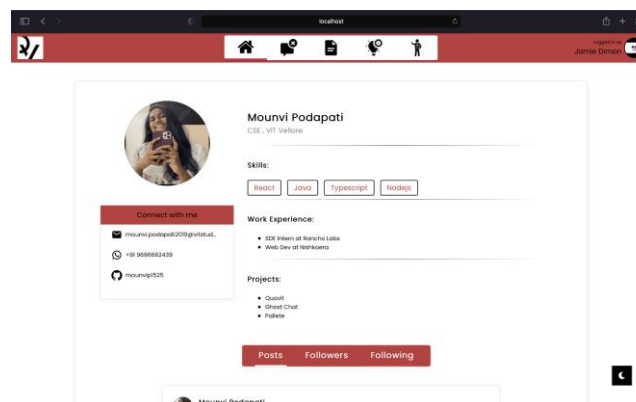


Clicking on mentorship button in the sidebar:

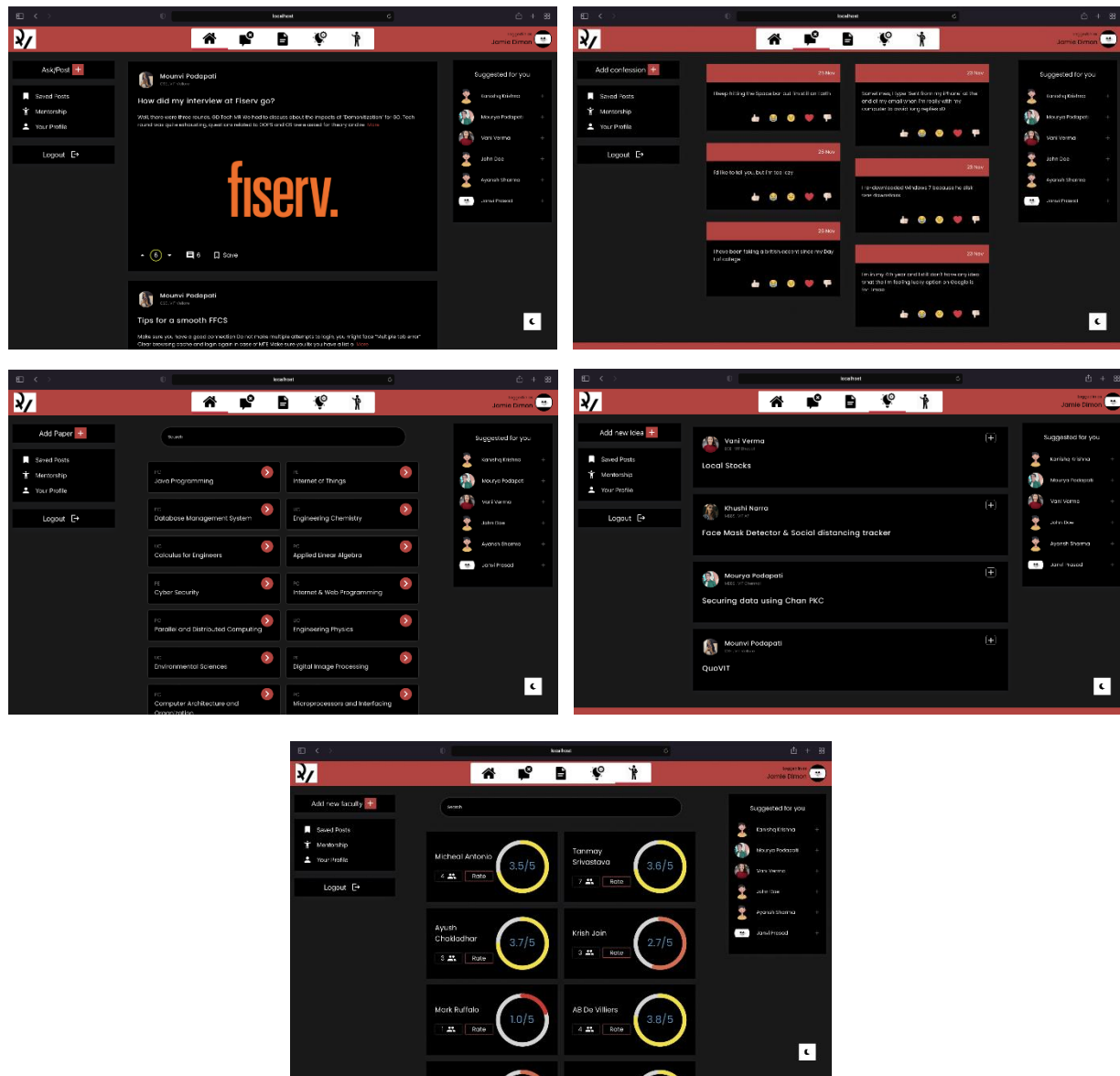
Users are filtered according to different domains so that beginners can connect to them



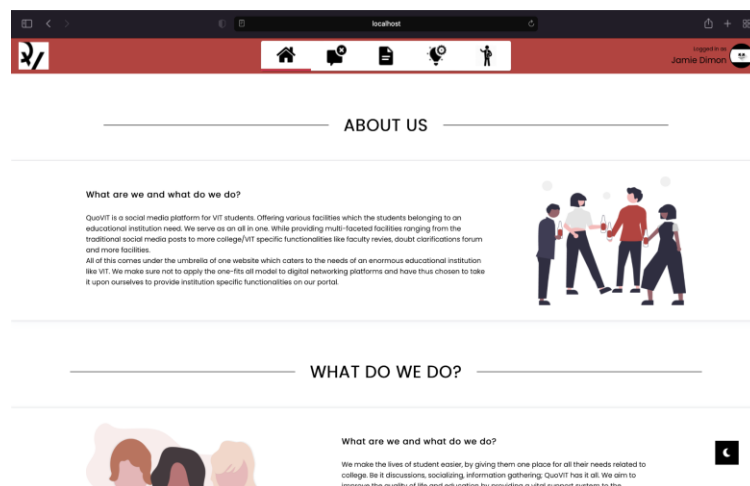
Clicking on connect button: will be redirected to their profile page:



Dark mode added as well:



About us page:



This message will be sent as an email to the admin

The screenshot shows a Gmail inbox on a desktop browser. The top navigation bar includes the Gmail logo, a search bar, and a 'Compose' button. The inbox list shows a single email from 'Formsfree' with the subject 'New submission from Contact Form'. The email is open, displaying the 'New form submission' header and the message content. The message states that a form was submitted using 'formsfree.io' and provides the submitter's details: name 'Jamie Dimon', email 'jamie.dimon2019@vitsstudent.ac.in', and phone number '+91 978889345'. A message from the sender says 'There's a bug in the profile page loader, hoping you could fix that'. The email was submitted on 07:55 AM - 26 November 2021.

From	Subject	Time
Formsfree <nonreply@formsfree.io> Unsubscribe to me	New submission from Contact Form	1:25 PM (3 minutes ago)

New form submission
 Someone just submitted a form using formsfree.io. Wooh

name
Jamie Dimon

email
jamie.dimon2019@vitsstudent.ac.in

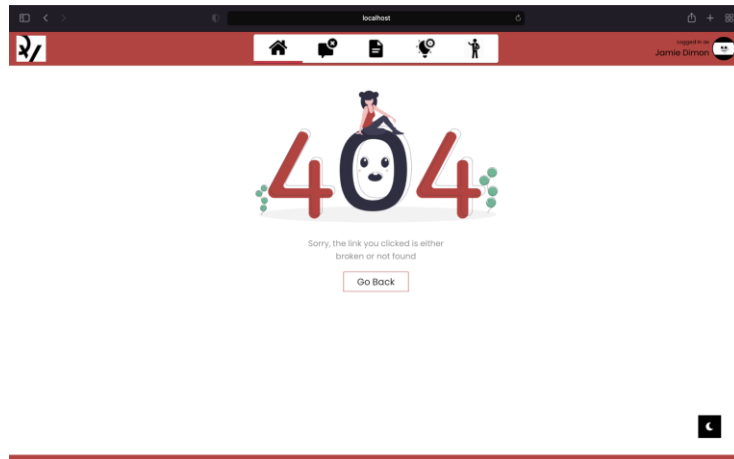
phone
+91 978889345

message
 There's a bug in the profile page loader, hoping you could fix that

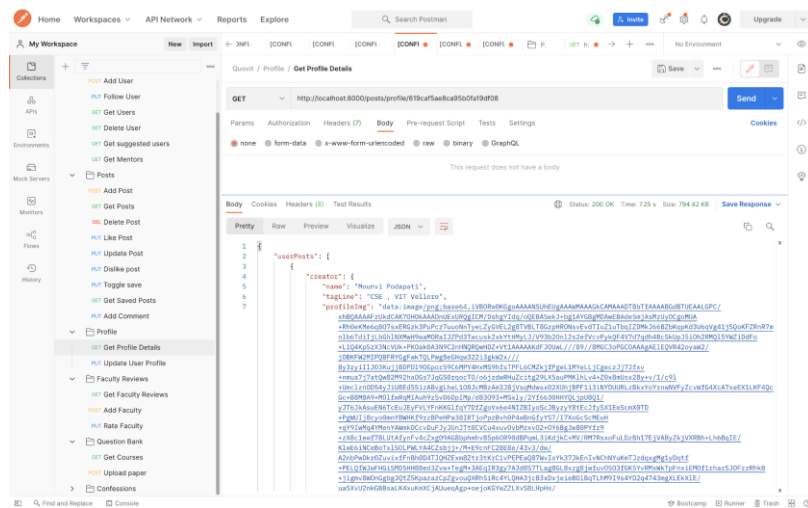
query
report

Submitted 07:55 AM - 26 November 2021

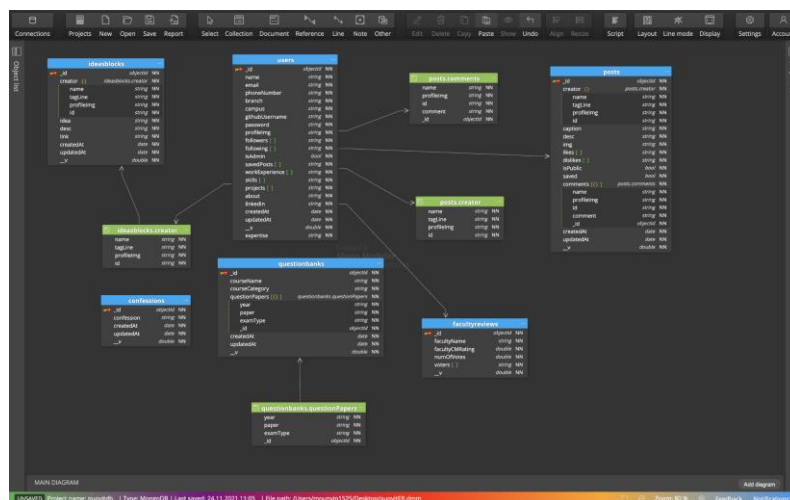
Trying to access a link that doesn't exist:



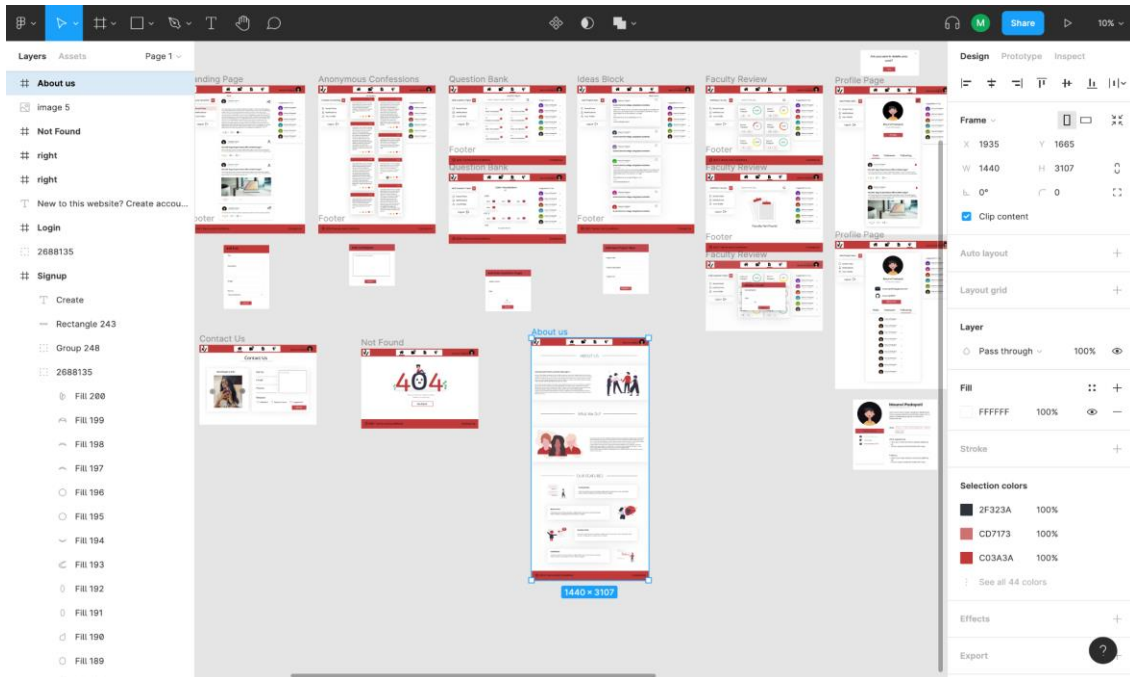
Postman Routes Testing:



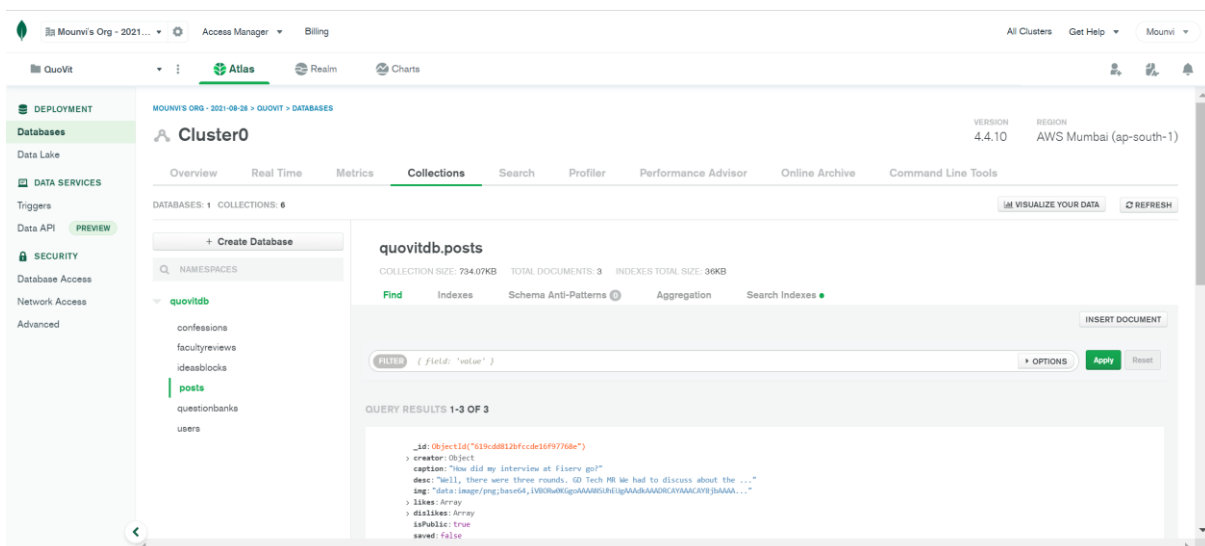
MongoDB Fields view:



Figma design: <https://www.figma.com/file/RlwqrzDyETh2TUaAVy7xir/QuoVit?node-id=0%3A1>



MongoDB Atlas:



Video Demonstration link: <https://youtu.be/zYL1du5k2Vs>

FRONTEND CODE:

Landing.js

```
import React, { useEffect } from "react";
import { getPosts } from "../../Actions/posts";
import { useDispatch, useSelector } from "react-redux";
import MainLayout from "../../Components/Structure/Main";
import "../../css/Landing.css";
import LandingCard from "../../Components/Cards/LandingCard";
import AddPostModal from "../../AddPostModal";

export default function Landing(){
  const dispatch = useDispatch();
  const {posts,savedPosts} = useSelector((state) => state.posts);
  const auth = useSelector((state)=>state.auth)
  useEffect(() => {
    dispatch(getPosts(auth._id));
  }, [dispatch,auth]);

  return (
    <MainLayout type="landing">
      <AddPostModal />
      <div className="landing-main">
        {posts.map((post) => (
          <LandingCard
            post={post}
            saved={savedPosts.some(sPost=>sPost._id === post._id)}
          />
        ))}
      </div>
    </MainLayout>
  );
}
```

landingCard.js

```
import React, { useState } from "react";
import { useDispatch , useSelector } from "react-redux";
import { useHistory } from "react-router-dom"
import User from "../../User/User.jsx";
import "../../css/LandingCard.css";
import { addComment, deletePost, dislikePost, likePost, toggleSavePost } from "../../Actions/posts";
import DeleteIcon from '@material-ui/icons/Delete';
import ArrowDropUpIcon from '@mui/icons-material/ArrowDropUp';
import ArrowDropDownIcon from '@mui/icons-material/ArrowDropDown';
import CommentIcon from '@mui/icons-material/Comment';
import TurnedInNotIcon from '@mui/icons-material/TurnedInNot';
import { Send, TurnedIn } from "@material-ui/icons";
import Empty from "../../Empty/Empty.js";
import LockIcon from '@mui/icons-material/Lock';
```

```

export default function LandingCard(props) {
  const history = useHistory()
  const [fullText,setFullText] = useState(true)
  const [showComments,setShowComments] = useState(false)
  const [comment,setComment] = useState("")
  const { creator , caption , desc , likes , dislikes , img , _id, comments, isPublic } = props.post;
  const [save,setSave] = useState(props.saved)
  const dispatch = useDispatch();
  const auth = useSelector((state)=>state.auth)
  const handleLikeClick = () => {
    if(auth._id){
      dispatch(likePost(_id,auth._id));
    } else {
      history.push("/Login")
    }
  };
  const handleDislikeClick = () => {
    if(auth._id){
      dispatch(dislikePost(_id,auth._id));
    } else {
      history.push("/Login")
    }
  }
  const handleSaveClick = () => {
    if(auth._id){
      setSave(!save)
      dispatch(toggleSavePost(_id,auth._id))
    } else {
      history.push("/Login")
    }
  }
  const handleDelete = () => {
    dispatch(deletePost(_id,auth._id))
  }
  const handleCommentClick = () => {
    setShowComments(!showComments)
  }
  const postComment = () => {
    if(!auth._id){
      history.push("/Login")
    } else if(!comment) {
      document.getElementById("comment").focus()
    } else {
      dispatch(addComment(_id,auth._id,comment))
    }
  }
  setComment("")
}
const likeCircleColors = ["#91C196", "#C5D226", "#F6E015", "#DA6767"];
let diff = likes.length - dislikes.length
const bgcolor = diff >= 10 ? 0 : diff >= 5 ? 1 : diff >= 3 ? 2 : 3;

```

```

return (
  <div className="landingCard">
    {props.remove ? <div className="bin-post"><DeleteIcon onClick={handleDelete}/></div> :
    !isPublic ? <div className="bin-post bin-post2"><LockIcon /></div> : ""}
    <User user={creator} />
    <h3>{caption}</h3>
    <div>
      <div className="desc-div">
        {(desc.length>200 && fullText) ?
          <p style={{fontSize:"small"}}>{desc.substring(0,200)} &nbsp;<span
onClick={()=>{setFullText(false);console.log("hello")}}>More</span></p> :
          <p style={{fontSize:"small"}}>{desc}</p>
        }
      </div>
      {img &&
      <div className="post-img">
        <img src={img} alt="pic" />
      </div>}
      <div className="lcs-div">
        <div>
          <ArrowDropUpIcon onClick={handleLikeClick} />
          <div className="like-circle" style={{borderColor:likeCircleColors[bgcolor]}}>
            {diff}
          </div>
          <ArrowDropDownIcon onClick={handleDislikeClick} />
        </div>
        <div>
          <CommentIcon style={{marginRight:"0.3rem"}} onClick={handleCommentClick}/>
          {/* <p>{comments}</p> */}
          <p>{comments.length}</p>
        </div>
      </div>
      {save ?
      <TurnedIn style={{marginRight:"0.3rem"}} onClick={handleSaveClick} /> :
      <TurnedInNotIcon style={{marginRight:"0.3rem"}} onClick={handleSaveClick} />}
      <p>{save ? "Saved" : "Save"}</p>
    </div>
  </div>
  {showComments &&
  <div className="comment-box">
    <div>
      <input type="text" name="comment" id="comment" className="edit-ip" placeholder="Add
your comment" value={comment} onChange={(e)=>setComment(e.target.value)}/>
      <button onClick={postComment}><Send /></button>
    </div>
    <div>
      {comments.length > 0 ? comments.map(c=> <User user={c} />) : <Empty msg="Be the first one to
comment" index={4} small={true}/>}
    </div>
  </div>}

```

```
    </div>
  );
}
```

API.js

```
import axios from 'axios'
const backend_url = 'http://localhost:8000/'

export const signUp = (user) => axios.post(`${backend_url}auth/signup`,user)
export const signIn = (user) => axios.post(`${backend_url}auth/signin`,user)

export const fetchPosts = (id) => axios.get(`${backend_url}posts/${id}`)
export const fetchSavedPosts = (id) => axios.get(`${backend_url}posts/saved/${id}`)
export const toggleSavePost = (postId,userId) =>
  axios.put(`${backend_url}posts/saved/${userId}`,{postId})
export const likePost = (postId,userId) => axios.put(`${backend_url}posts/like/${postId}`,{userId})
export const dislikePost = (postId,userId) => axios.put(`${backend_url}posts/dislike/${postId}`,{userId})
export const addPost = (post,id) => axios.post(`${backend_url}posts/${id}`,post)
export const addComment = (postId,userId,comment) =>
  axios.put(`${backend_url}posts/comment/${postId}/${userId}`,{comment})

export const profileDetails = (id) => axios.get(`${backend_url}posts/profile/${id}`)
export const editProfileDetails = (id,body) => axios.put(`${backend_url}posts/profile/${id}`,body)
export const deletePost = (postId,userId) => axios.delete(`${backend_url}posts/${postId}/${userId}`)

export const followUser = (userId,followId) =>
  axios.put(`${backend_url}user/follow/${userId}`,{userId:followId})
export const unfollowUser = (userId,followId) =>
  axios.put(`${backend_url}user/unfollow/${userId}`,{userId:followId})
export const getSuggestedUsers = (id) => axios.get(`${backend_url}user/suggestions/${id}`)

export const getMentors = () => axios.get(`${backend_url}user/getMentors`)

export const fetchConfessions = () => axios.get(`${backend_url}confessions`)
export const addConfession = (newConfession) =>
  axios.post(`${backend_url}confessions/add`,{confession:newConfession})

export const fetchFacultyReviews = () => axios.get(`${backend_url}facultyReviews`)
export const addFaculty = (newFaculty,id) =>
  axios.post(`${backend_url}facultyReviews/${id}`,newFaculty)
export const rateFaculty = (userId,facId,rating) =>
  axios.put(`${backend_url}facultyReviews/rate/${userId}`,{facId,facultyRating:rating})

export const fetchCourses = () => axios.get(`${backend_url}questionBank`)
export const fetchPapersByCourse = (courseName) =>
  axios.get(`${backend_url}questionBank/course/${courseName}`)
export const downloadPaper = (courseName,id) =>
  axios.get(`${backend_url}questionBank/download/${courseName}/${id}`,{responseType: 'blob'})
export const uploadPaper = (courseName,courseCategory,examType,year,formData) =>
  axios.post(`${backend_url}questionBank/${courseName}/${courseCategory}/${examType}/${year}`,for
    mData)
```

```
export const fetchIdeas = () => axios.get(`${backend_url}ideasBlock/`)
export const addIdea = (idea,id) => axios.post(`${backend_url}ideasBlock/${id}`,idea)
```

Actions.js

```
import * as api from "../API";
```

```
export const getPosts = (id) => async (dispatch) => {
  dispatch({ type: "SET_LOADING" })
  try {
    if(id === null)
      id = "619ca53ce8ca95b0fa19defd"
    const { data } = await api.fetchPosts(id);
    dispatch({ type: "FETCH_ALL_POSTS", payload: data });
  } catch (error) {
    alert(error)
  }
};
```

```
export const getSavedPosts = (id) => async (dispatch) => {
  dispatch({ type: "SET_LOADING" })
  try {
    if(id === null)
      id = "619ca53ce8ca95b0fa19defd"
    const { data } = await api.fetchSavedPosts(id);
    dispatch({ type: "FETCH_SAVED_POSTS", payload: data });
  } catch (error) {
    alert(error.message);
  }
};
```

```
export const toggleSavePost = (postid,userid) => async (dispatch) => {
  try {
    if(userid === null)
      alert("login first")
    else {
      dispatch({ type: "SET_LOADING" })
      const { data } = await api.toggleSavePost(postid,userid);
      dispatch({ type: "TOGGLE_SAVE_POST", payload: data });
    }
  } catch (error) {
    alert(error);
  }
};
```

```
export const likePost = (postid,userid) => async (dispatch) => {
  try {
    if(userid === null)
```

```

        alert("login first")
    else {
    dispatch({ type: "SET_LOADING" })
    const { data } = await api.likePost(postid,userid);
    dispatch({ type: "LIKE_POST", payload: data });
    }
    } catch (error) {
    alert(error.message);
    }
};

```

```

export const dislikePost = (postid,userid) => async (dispatch) => {
    try {
        if(userid === null)
            alert("login first")
        else {
    dispatch({ type: "SET_LOADING" })
    const { data } = await api.dislikePost(postid,userid);
    dispatch({ type: "DISLIKE_POST", payload: data });
    }
    } catch (error) {
    alert(error.message);
    }
};

```

```

export const addPost = (post,id) => async (dispatch) => {
    try {
        if(id){
    dispatch({ type: "SET_LOADING" })
    const { data } = await api.addPost(post,id);
    console.log(data)
    dispatch({type: "ADD_POST", payload: data});
    }
    } catch(error) {
    alert(error);
    }
}

```

```

export const profileDetails = (id) => async (dispatch) => {
    try {
        if(id){
    dispatch({ type: "SET_LOADING" })
    const { data } = await api.profileDetails(id);
    dispatch({type:"FETCH_PROFILE_DETAILS", payload:data})
    } else {
    alert("login first")
    }
    } catch (err) {
    alert(err)
    }
}

```



```

}
export const updateProfileDetails = (id,userId,edits) => async (dispatch) => {
  dispatch({ type: "SET_LOADING" })
  try {
    if(id !== userId){
      alert("You can only edit your own post")
    } else {
      const p = edits.proj.split(",");
      const s = edits.skil.split(",");
      const w = edits.workExp.split(",");
      const { data } = await api.editProfileDetails(id,{projects:p,skills:s,workExperience:w});
      dispatch({type:"FETCH_PROFILE_DETAILS",payload:data})
    }
  } catch(err){
    alert(err)
  }
}

```

```

export const deletePost = (postId,userId) => async (dispatch) => {
  try {
    if(!userId){
      alert("Login first")
    } else {
      dispatch({ type: "SET_LOADING" })
      const { data } = await api.deletePost(postId,userId);
      dispatch({type:"DELETE_POST",payload:data})
    }
  } catch(err){
    alert(err)
  }
}

```

```

export const addComment = (postId,userId,comment) => async (dispatch) => {
  try {
    if(!userId){
      alert("Login first")
    } else {
      dispatch({ type: "SET_LOADING" })
      const { data } = await api.addComment(postId,userId,comment);
      dispatch({ type:"ADD_COMMENT" , payload:data })
    }
  } catch(err){
    alert(err)
  }
}

```

Confessions.js

```

import React, { useEffect } from "react";
import ConfessionCard from "../../Components/Cards/ConfessionCard";
import MainLayout from "../../Components/Structure/Main";
import "../css/Confessions.css";

```

```

import { getConfessions } from "../Actions/confessions";
import { useDispatch, useSelector } from "react-redux";
import AddConfession from "./AddConfession";

export default function Confessions() {
  const dispatch = useDispatch();
  const { confessions } = useSelector((state) => state.confessions);
  useEffect(() => {
    dispatch(getConfessions());
  }, [dispatch]);
  return (
    <MainLayout type="confessions">
      <AddConfession />
      <div className="confessions-cont">
        <div className="c-1">
          {confessions.map((confession, index) =>
            index % 2 === 0 ? (
              <ConfessionCard
                date={confession.date}
                confession={confession.confession}
                id={confession.id}
                index={index}
              />
            ) : (
              ""
            )
          )}
        </div>
        <div className="c-2">
          {confessions.map((confession, index) =>
            index % 2 !== 0 ? (
              <ConfessionCard
                date={confession.createdAt}
                confession={confession.confession}
                id={confession.id}
                index={index}
              />
            ) : (
              ""
            )
          )}
        </div>
      </div>
    </MainLayout>
  );
}

```

FacultyReviews.js

```

import React, {useEffect,useState} from "react";
import MainLayout from "../Components/Structure/Main";
import FacultyReviewCard from "../Components/Cards/FacultyReviewCard";

```

```

import AddFacultyModal from "./AddFacultyModal";
import { getFacultyReviews } from "../Actions/facultyReviews";
import { useDispatch, useSelector } from "react-redux";
import RateFacultyModal from "./RateFacultyModal";
import Search from "./Search";
import "./css/FacultyReview.css";

export default function FacultyReview() {
  const [rateShow, setRateShow] = useState(false);
  const [activeFaculty, setAcitveFaculty] = useState({id:"",name:""})
  const dispatch = useDispatch();
  const {facultyReviews} = useSelector((state) => state.facultyReviews);
  useEffect(() => {
    dispatch(getFacultyReviews());
  }, [dispatch]);
  const handleRateShow = (id,name) => {
    setAcitveFaculty({id,name});
    setRateShow(true)
  }
  return (
    <MainLayout type="facultyReviews">
      <Search faculties={facultyReviews} />
      <AddFacultyModal />
      <RateFacultyModal showModal={rateShow} activeFaculty={activeFaculty}
closeModal={()=>setRateShow(false)} />
      <div className="fac-main">
        <div className="fac-cards">
          {facultyReviews.map((faculty) => (
            <FacultyReviewCard faculty={faculty} handleShow={handleRateShow}/>
          ))}
        </div>
      </div>
    </MainLayout>
  );
}

```

IdeasBlock.js

```

import React, { useEffect } from "react";
import { getIdeas } from "../Actions/ideasBlock";
import { useDispatch, useSelector } from "react-redux";
import MainLayout from "../Components/Structure/Main";
import IdeaCard from "../Components/Cards/IdeaCard";
import "./css/IdeasBlock.css";
import AddIdeaModal from "./AddIdeaModal";

export default function IdeasBlock() {
  const dispatch = useDispatch();
  const { ideas } = useSelector((state) => state.ideas);

```

```

useEffect(() => {
  dispatch(getIdeas());
}, [dispatch]);
return (
  <MainLayout type="ideasBlock">
    <AddIdeaModal />
    <div className="ideas-main">
      {ideas.map((idea) => (
        <IdeaCard idea={idea} />
      ))}
    </div>
  </MainLayout>
);
}

```

questionBank.js

```

import React, { useEffect } from "react";
import { useDispatch, useSelector } from "react-redux";
import CourseCard from "../Components/Cards/CourseCard";
import MainLayout from "../Components/Structure/Main";
import AddPaperModal from "../AddPaperModal";
import { getCourses } from "../Actions/questionBank";
import Search from "../Search";
import "../css/QuestionBank.css";

export default function QuestionBank() {
  const dispatch = useDispatch();
  const { courses } = useSelector((state) => state.questionBank);
  useEffect(() => {
    dispatch(getCourses());
  }, [dispatch]);
  return (
    <MainLayout type="questionBank">
      <AddPaperModal />
      <Search courses={courses} />
      <div className="course-container">
        {courses.map((course) => (
          <CourseCard course={course} />
        ))}
      </div>
    </MainLayout>
  );
}

```

BACKEND CODE

Posts.js

```
import users from "../models/user.js";
import posts from "../models/posts.js";

const get_user_posts = async (userId) => {
  try {
    let userPosts = [], uniquePostIds = [], uniquePosts = [], savedPosts = [];
    if (userId) {
      const currentUser = await users.findById(userId);
      userPosts = await posts.find({ "creator.id": currentUser._id });
      const friendPosts = await Promise.all(
        currentUser.following.map((friendId) => {
          return posts.find({ "creator.id": friendId });
        })
      );
      friendPosts.map(fPost => {
        fPost.length > 0 ? fPost.map(f => userPosts.push(f)) : null
      })
      savedPosts = await Promise.all(
        currentUser.savedPosts.map(post => {
          return posts.findById(post);
        })
      );
    }
    const publicPosts = await posts.find({ isPublic: true })
    userPosts.push(...publicPosts)
    userPosts.map(post => {
      if (!uniquePostIds.includes(post._id.toString())) {
        uniquePostIds.push(post._id.toString())
        uniquePosts.push(post)
      }
    })
    return {uniquePosts,savedPosts}
  } catch (err) {
    console.log(err)
  }
}

//create a post
const create_post = async (req, res) => {
  let uTag;
  const userId = req.params.id;
  users.findById(userId).then(result => {
    try {
      uTag = `${result.branch} , VIT ${result.campus}`
      posts.create({ ...req.body, creator: { name: result.name, tagLine: uTag, profileImg:
result.profileImg, id: result._id } }, (err, data) => {
        if (err) {
          res.status(500).send(err);
        }
      })
    }
  })
}
```

```

        } else {
            res.status(201).send(data);
        }
    });
} catch (err) {
    console.log(err)
    res.status(500).send(err);
}
})
};

```

```

//Get timeline posts
const get_timeline_posts = async (req, res) => {
    try {
        const uniquePosts = await get_user_posts(req.params.id)
        res.send(uniquePosts)
    } catch (err) {
        res.send(err)
    }
};

```

```

//delete a post
const delete_post = async (req, res) => {
    try {
        const post = await posts.findById(req.params.postId);
        if (post.creator.id === req.params.userId) {
            await post.deleteOne();
            const pd = await fetch_user_profile(req.params.userId)
            res.status(200).send(pd)
        } else {
            res.status(403).send("you can delete only your post");
        }
    } catch (err) {
        console.log(err)
        res.status(500).send(err);
    }
};

```

```

//like a post
const like_post = async (req, res) => {
    try {
        const post = await posts.findById(req.params.id);
        if (!post.likes.includes(req.body.userId)) {
            await post.updateOne({ $push: { likes: req.body.userId } });
        }
        if (post.dislikes.includes(req.body.userId)) {
            await post.updateOne({ $pull: { dislikes: req.body.userId } });
        }
        const uniquePosts = await get_user_posts(req.body.userId)
        res.send(uniquePosts)
    } catch (err) {

```

```

        console.log(err)
        res.status(500).send(err);
    }
};

//Dislike a post
const dislike_post = async (req, res) => {
    try {
        const post = await posts.findById(req.params.id);
        if (!post.dislikes.includes(req.body.userId)) {
            await post.updateOne({ $push: { dislikes: req.body.userId } });
        }
        if (post.likes.includes(req.body.userId)) {
            await post.updateOne({ $pull: { likes: req.body.userId } });
        }
        const uniquePosts = await get_user_posts(req.body.userId)
        res.send(uniquePosts)
    } catch (err) {
        res.status(500).send(err);
    }
};

```

```

//update a post
const update_post = async (req, res) => {
    try {
        const post = await posts.findById(req.params.id);
        if (post.creator.id === req.body.userId) {
            await post.updateOne({ $set: req.body });
            res.status(200).send("the post has been updated");
        } else {
            res.status(403).send("you can update only your post");
        }
    } catch (err) {
        console.log(err)
        res.status(500).send(err);
    }
};

```

```

//get a post
const get_post = async (req, res) => {
    try {
        const post = await posts.findById(req.params.id);
        res.status(200).send(post);
    } catch (err) {
        res.status(500).send(err);
    }
};

```

```

//save posts
const toggle_save_post = async (req,res) => {
    try {

```

```

    const user = await users.findById(req.params.id)
    !user.savedPosts.includes(req.body.postId) ?
      await user.updateOne({ $push: { savedPosts : req.body.postId } }) :
      await user.updateOne({ $pull: { savedPosts : req.body.postId } })
    const posts = await get_user_posts(req.params.id)
    res.send(posts)
  } catch(err){
    console.log(err)
    res.status(500).send(err)
  }
}
//get saved posts
const get_saved_posts = async (req,res) => {
  try {
    const user = await users.findById(req.params.id)
    const savedPosts = await Promise.all(
      user.savedPosts.map(post => {
        return posts.findById(post);
      })
    );
    res.status(200).send(savedPosts)
  } catch(err){
    res.status(500).send(err)
  }
}

const fetch_user_profile = async (id) => {
  try{
    const currentUser = await users.findById(id);
    const userPosts = await posts.find({ "creator.id": currentUser._id });
    const following = await Promise.all(
      currentUser.following.map(async (friendId) => {
        let user = await users.findById({ _id: friendId });
        let tagline = `${user.branch} , VIT ${user.campus}`
        let { name , profileImg , _id } = user;
        return {name,profileImg,tagline,_id}
      })
    )
    const followers = await Promise.all(
      currentUser.followers.map(async (friendId) => {
        let user = await users.findById({ _id: friendId });
        let tagline = `${user.branch} , VIT ${user.campus}`
        let { name , profileImg , _id } = user;
        return {name,profileImg,tagline,_id}
      })
    )
    return {userPosts,currentUser,followers,following}
  } catch(err){
    console.log(err)
  }
}

const get_profile_details = async (req,res) => {

```



```

    try{
      const pd = await fetch_user_profile(req.params.id)
      res.status(200).send(pd)
    } catch(err){
      res.status(500).send(err)
    }
  }
}

const update_profile_details = async (req, res) => {
  try {
    const user = await users.findById(req.params.id);
    await user.updateOne({ $set: req.body });
    const pd = await fetch_user_profile(req.params.id)
    res.status(200).send(pd);
  } catch (err) {
    res.status(500).send(err);
  }
};

const add_comment = async (req,res) => {
  try {
    const post = await posts.findById(req.params.postId)
    const user = await users.findById(req.params.userId)
    await post.updateOne({ $push: { comments: { name : user.name, profileImg : user.profileImg, id:
user.id, comment: req.body.comment } }});
    const uniquePosts = await get_user_posts(req.params.userId)
    res.send(uniquePosts)
  } catch(err) {
    console.log(err)
    res.status(500).send(err)
  }
}

export { create_post, update_post, delete_post, get_post, get_timeline_posts, like_post, dislike_post,
get_saved_posts , toggle_save_post , get_profile_details, update_profile_details, fetch_user_profile,
add_comment }

```

postModel.js

```

import mongoose from "mongoose";

const postSchema = new mongoose.Schema(
  {
    creator:{
      name:String,
      tagLine: String,
      profileImg:String,
      id:String
    },
    caption: {

```

```

    type: String,
    required: true,
  },
  desc: {
    type: String
  },
  img: {
    type: String
  },
  likes: {
    type: Array,
    default: [],
  },
  dislikes: {
    type: Array,
    default: [],
  },
  isPublic:{
    type:Boolean,
    default:true
  },
  saved:{
    type:Boolean,
    default:false
  },
  comments: [
    {
      name:String,
      profileImg:String,
      id:String,
      comment: String
    }
  ],
},
{ timestamps: true }
);

```

```
export default mongoose.model("post", postSchema);
```

postRoutes.js

```

import express from "express";
import { create_post , update_post , delete_post , get_post , get_timeline_posts , like_post ,
dislike_post, get_saved_posts, toggle_save_post, get_profile_details, update_profile_details,
add_comment } from "../controllers/postController.js";

const router = express.Router();

//create a post
router.post("/:id", create_post);
//update a post
router.put("/:id", update_post);

```

```

//delete a post
router.delete("/:postId/:userId", delete_post);
//like a post
router.put("/like/:id", like_post);
// dislike a post
router.put("/dislike/:id", dislike_post);
//get a post
// router.get("/:id", get_post);
//get timeline posts
router.get("/:id", get_timeline_posts);
//get saved posts
router.get("/saved/:id",get_saved_posts);
//toggle save posts
router.put("/saved/:id",toggle_save_post)
// user profile details
router.get("/profile/:id",get_profile_details);
//update profile details
router.put("/profile/:id",update_profile_details);
//add comment
router.put("/comment/:postId/:userId",add_comment)

export default router;

```

users.js

```

import users from "../models/user.js";
import { fetch_user_profile } from "../postController.js";
import bcrypt from "bcrypt";

//follow a user
const follow_user = async (req, res) => {
  if (req.body.userId !== req.params.id) {
    try {
      const user = await users.findById(req.params.id);
      const currentUser = await users.findById(req.body.userId);
      if (!user.following.includes(req.body.userId)) {
        await user.updateOne({ $push: { following: req.body.userId } });
        await currentUser.updateOne({ $push: { followers: req.params.id } });
        res.status(200).send("user has been followed");
      } else {
        res.status(403).send("you already follow this user");
      }
    } catch (err) {
      res.status(500).send(err);
      console.log(err);
    }
  } else {
    res.status(403).json("you cant follow yourself");
  }
};

```

```

//unfollow a user
const unfollow_user = async (req, res) => {
  if (req.body.userId !== req.params.id) {
    try {
      const user = await users.findById(req.params.id);
      const currentUser = await users.findById(req.body.userId);
      if (user.following.includes(req.body.userId)) {
        await user.updateOne({ $pull: { following: req.body.userId } });
        await currentUser.updateOne({ $pull: { followers: req.params.id } });
        const pd = await fetch_user_profile(req.params.id)
        res.status(200).send(pd)
        // res.status(200).send("user has been unfollowed");
      } else {
        res.status(403).send("you dont follow this user");
      }
    } catch (err) {
      res.status(500).send(err);
    }
  } else {
    res.status(403).send("you cant unfollow yourself");
  }
};

//get a user
const get_user = async (req, res) => {
  try {
    const user = await users.findById(req.params.id);
    const { password, updatedAt, createdAt, isAdmin, ...other } = user._doc;
    res.status(200).send(other);
  } catch (err) {
    res.status(500).send(err);
  }
};

//update user
const update_user = async (req, res) => {
  console.log(req.body.userId, req.params.id);
  if (req.body.userId === req.params.id || req.body.isAdmin) {
    if (req.body.password) {
      try {
        const salt = await bcrypt.genSalt(10);
        req.body.password = await bcrypt.hash(req.body.password, salt);
      } catch (err) {
        return res.status(500).send(err);
      }
    }
    try {
      const user = await users.findByIdAndUpdate(req.params.id, {
        $set: req.body,
      });
      res.status(200).json("Account has been updated");
    }
  }
};

```

```

    } catch (err) {
      console.log(err);
      return res.status(500).send(err);
    }
  } else {
    return res.status(403).send("You can update only your account!");
  }
};

//delete user
const delete_user = async (req, res) => {
  if (req.body.userId === req.params.id || req.body.isAdmin) {
    try {
      await users.findByIdAndDelete(req.params.id);
      res.status(200).send("Account has been deleted");
    } catch (err) {
      return res.status(500).send(err);
    }
  } else {
    return res.status(403).send("You can delete only your account!");
  }
};

//get all users
const users_index = (req, res) => {
  users
    .find()
    .then((result) => {
      res.status(200).send(result);
    })
    .catch((err) => {
      res.status(500).send(err);
    });
};

// get suggested users
const suggested_users_index = async (req, res) => {
  try {
    const user = await users.findById(req.params.id);
    const following = await Promise.all(
      user.following.map(async (friendId) => {
        let user = await users.findById({ _id: friendId });
        return user._id.toString();
      })
    );
    let all_users = await users.find();
    let suggestions = all_users.filter(user => !following.includes(user._id.toString()));
    let final = suggestions.filter(s => s._id.toString() !== req.params.id);
    final = final.map((user) => {
      let tagline = `${user.branch} , VIT ${user.campus}`;
      let { name , profileImg , _id } = user;
      return {name,profileImg,tagline,_id}
    });
  }
};

```

```

    })
    res.status(200).send(final)
  } catch(err){
    console.log(err)
    res.status(500).send(err)
  }
}
const get_mentors = async (req,res) => {
  try {
    let webDev = [] , pythonDev = [] , ml = [] , bct = [] , ds = [];
    const all_users = await users.find()
    all_users.map(user=>{
      user.expertise === "Web Development" ?
webDev.push({name:user.name,profileImg:user.profileImg,_id:user._id}) :
      user.expertise === "Python Developer" ?
pythonDev.push({name:user.name,profileImg:user.profileImg,_id:user._id}) :
      user.expertise === "Machine Learning" ?
ml.push({name:user.name,profileImg:user.profileImg,_id:user._id}) :
      user.expertise === "Blockchain Dev" ?
bct.push({name:user.name,profileImg:user.profileImg,_id:user._id}) :
      user.expertise === "Data Science" ?
ds.push({name:user.name,profileImg:user.profileImg,_id:user._id}) :
      null
    })
    res.status(200).send({webDev,pythonDev,ml,bct,ds})
  } catch(err){
    console.log(err)
    res.status(500).send(err)
  }
}
export { update_user, delete_user, get_user, follow_user, unfollow_user, users_index,
suggested_users_index, get_mentors };

```

usersModel.js

```

import mongoose from "mongoose"

const UserSchema = new mongoose.Schema(
  {
    name: {
      type: String,
      required: true,
      min: 3,
      max: 50,
    },
    email: {
      type: String,
      required: true,
      max: 50,
      unique: true,
    },
  },

```

```
phoneNumber:{
  type: String,
  required: true,
  unique: true,
},
branch:{
  type: String,
  required: true
},
campus:{
  type: String,
  default: "Vellore"
},
githubUsername:String,
password: {
  type: String,
  required: true,
  min: 8,
},
profileImg: {
  type: String,
  default: "",
},
followers: {
  type: Array,
  default: [],
},
following: {
  type: Array,
  default: [],
},
isAdmin: {
  type: Boolean,
  default: false,
},
savedPosts:{
  type:Array,
  default:[]
},
workExperience:{
  type:Array,
  default:[]
},
skills:{
  type:Array,
  default:[]
},
projects:{
  type:Array,
  default:[]
},
```

```
about:{
  type:String,
  default:""
},
linkedIn:{
  type:String,
  default:""
},
expertise: {
  type:String,
  default:null
}
},
{ timestamps: true }
);

export default mongoose.model("User", UserSchema);
```

userRoutes.js

```
import express from "express";
import {update_user,delete_user,get_user,follow_user,unfollow_user,users_index,
suggested_users_index, get_mentors} from "../controllers/usersController.js"

const router = express.Router()

//get all users
router.get("/",users_index)

router.get("/getMentors",get_mentors)

//update user
router.put("/:id", update_user);

//delete user
router.delete("/:id", delete_user);

//get a user
router.get("/:id", get_user);

//follow a user
router.put("/follow/:id", follow_user);

//unfollow a user
router.put("/unfollow/:id", unfollow_user);

//get suggested users
router.get("/suggestions/:id",suggested_users_index);

export default router;
```