

SW Engineering CSC648/848 Fall 2024

BRAIN BUFFS (Team 1)

Final Project for SW Engineering Class CSC 648-848 Fall 2024

URL of the demo:

<http://ec2-13-57-185-95.us-west-1.compute.amazonaws.com> or 13.57.185.95

Team Members:

Shum Usami (susami@sfsu.edu)	Team Lead
Adharsh Thiagarajan	Frontend Lead
Devon Huang	Backend Lead
Kim Nguyen	GitHub Master
Thiha Aung	Software Developer

Change History:

Date Submitted:	Dec 17, 2024
Date Revised:	

1. Product summary

Name of the Product

Brain Buff

Product Description

Brain Buffs is a tutoring platform designed exclusively for SFSU students, making it easier to find experienced tutors for specific SFSU courses. Only students with SFSU email addresses can register. Users can browse tutors by SFSU-specific courses and subjects, send messages directly to tutors, and even sign up as tutors to support their peers.

Major Functions

Guests

1. **Search Tutor Postings:** Guests shall be able to search tutor postings based on subjects, class names, professor names, tutor names, and ratings.
2. **Browse Tutor Postings:** Guests shall be able to browse and view the search results of tutor postings.
3. **Register:** Guests shall be able to register an account using their SFSU email and password.
4. **Login:** Guests shall be able to login using their SFSU email and password.

Users (Students and Tutors)

5. **Inherit Guests Capabilities:** Users shall be able to do what guests can do except Register and Login.
6. **Send Booking Request:** Users shall be able to send booking requests to tutor postings.
7. **Create Tutor Postings:** Users shall be able to create new tutor postings with subjects, availability, rates, custom descriptions, and a PDF document.
8. **Delete Tutor Postings:** Users shall be able to browse their own tutor postings and delete them.
9. **Browse booking requests:** Users shall be able to browse the booking requests sent to their tutor postings.

Admin

10. **Approve Tutor Postings:** Admins shall be required to review and approve created or edited tutor postings before they go live.

- 11. Delete Inappropriate Users/Tutor Postings/Booking Requests:** Admins shall be able to delete users, tutor postings, and booking requests that violate platform policies.
- 12. Ban Inappropriate Users:** Admins shall be able to ban users that violate platform policies so that banned users shall not be able to login.

URL

<http://ec2-13-57-185-95.us-west-1.compute.amazonaws.com> or 13.57.185.95

2. Milestone documents – M1-M4

These are provided as separate attachments.

3. Product Screenshots

1. Search Tutor Postings

How our search bar looks overall:

The screenshot shows a web browser window with the URL [Not Secure ec2-13-57-185-95.us-west-1.compute.amazonaws.com/search?subject>All&search_text=](https://ec2-13-57-185-95.us-west-1.compute.amazonaws.com/search?subject>All&search_text=). The page title is "SFSU Software Engineering Project CSC 648-848, Fall 2024. For Demonstration Only." The main content is titled "Search Results" with the subtext "18 tutor(s) found".
Chris Wilson
(CSC) Computer Science
Class Number: 648
Title: CSC 648 Startup Simulation: Build and Deploy Success
Rate: \$21.00 per hour
CV: No CV available.
About:
In Professor Dragutin's CSC 648 class, I led my team in building and deploying a real web application. I can guide you through team coordination, full-stack development, and deployment strategies to help you excel in this startup simulation course.
Jane Doe
(CSC) Computer Science
Class Number:
About:
Book Session

How the dropdown menu looks with list of subjects:

The screenshot shows the same web browser window as the previous one, but with a dropdown menu open over the "All Subjects" button in the navigation bar. The dropdown menu lists several subjects: (CSC) Computer Science, (MATH) Mathematics, (ENG) English, (BIOL) Biology, and (BUS) Business.
The main content area remains the same, displaying the "Search Results" page with the "Chris Wilson" and "Jane Doe" tutor profiles.

When user searches for course number and letter for name of a tutor:

The screenshot shows a web browser window with multiple tabs open. The active tab displays the 'Search Results' page for 'CSC Computer Science' with the query '645'. The page header includes the 'Brain Buffs' logo, a search bar, and navigation links for 'About', 'Become a Tutor', 'Login', and 'Register'. The main content area is titled 'Search Results' and shows one result: 'Paul Russel' for 'CSC Computer Science'. The listing includes a profile picture of a man, his class number '645', title 'CSC 645 Computer Networks Tutoring by Industry Professional', rate '\$45.00 per hour', and a 'View CV' button. A blue 'Book Session' button is located in the top right corner of the listing. Below the results, there are footer sections for 'About Brain Buffs', 'Quick Links' (Home, Become a Tutor), and 'Contact Us' (Email: contact@brainbuffs.com, Phone: (123) 456-7890).

2. Browse Tutor Postings:

The screenshot shows a web browser window displaying two tutor postings. The first listing is for 'Jane Doe' (CSC Computer Science). Her profile picture is shown, along with her class number '520', title 'Expert Guidance for CSC 520: Theory of Computing', rate '\$22.00 per hour', and a 'View CV' button. A blue 'Book Session' button is located in the top right corner. The second listing is for 'Sarah Miller' (ENG English). Her profile picture is shown, along with her class number '530', title 'Advanced Composition Tutoring for ENGL 530', rate '\$10.00 per hour', and a note 'No CV available'. A blue 'Book Session' button is located in the top right corner of this listing. The page structure is identical to the previous screenshot, with a header, footer, and a central search results area.

3. Register

SFSU Software Engineering Project CSC 648-848, Fall 2024. For Demonstration Only.

Brain Buffs All Subjects Search 

Become a Tutor Login Register About

Create an Account

Full Name

Email

Password

Have an account? [Login](#)

Accept the [Terms and Conditions](#)

Submit

4. Login

SFSU Software Engineering Project CSC 648-848, Fall 2024. For Demonstration Only.

Brain Buffs All Subjects Search 

Become a Tutor Login Register About

Login

Email

Password

Login

Don't have an account? [Register](#)

[Forgot your password?](#)

5. Inherit Guests Capabilities

SFSU Software Engineering Project CSC 648-848, Fall 2024. For Demonstration Only.

Brain Buffs All Subjects Search Book Session About Become a Tutor Dashboard Logout

Search Results

18 tutor(s) found

Chris Wilson
(CSC) Computer Science



Class Number:
648

Title:
CSC 648 Startup Simulation: Build and Deploy Success

Rate:
\$21.00 per hour

CV:
No CV available.

About:
In Professor Dragutin's CSC 648 class, I led my team in building and deploying a real web application. I can guide you through team coordination, full-stack development, and deployment strategies to help you excel in this startup simulation course.

Book Session

Jane Doe
(CSC) Computer Science



Class Number:

About:

Book Session

SFSU Software Engineering Project CSC 648-848, Fall 2024. For Demonstration Only.

Brain Buffs (CSC) Computer Science 415 Search Book Session About Become a Tutor Dashboard Logout

Search Results

2 tutor(s) found

John Smith
(CSC) Computer Science



Class Number:
415

Title:
Expert Tutor for CSC 415: Operating System Principles

Rate:
\$25.00 per hour

CV:
View CV

About:
Struggling with CSC 415? I simplify concepts like memory management, file systems, and synchronization to help you excel. Flexible scheduling and tailored sessions.

Book Session

Steve Jobless
(CSC) Computer Science



Class Number:

About:

Book Session

6. Send Booking Request

The screenshot shows a web browser window for the SFSU Software Engineering Project CSC 648-848, Fall 2024. The page title is "Search Results" and it displays "12 tutor(s) found". A modal window titled "Message to John Smith" is open, containing a message box with the following text:

Hi John Smith, My name is Shun Usami and I would like to schedule a tutoring booking for 648. I want to prepare for my upcoming exam/assignment. My email is susami@sfsu.edu.

Below the message box are "Submit Request" and "View CV" buttons. The character count is shown as 173/500. To the right of the message box, there is a "Book Session" button. The background shows a list of tutors, with one tutor's profile partially visible. The tutor's name is John Smith, and their subject is (MATH) Mathematics. There are "Title:" and "About:" fields, both currently empty, followed by another "Book Session" button.

7. Create Tutor Postings

The screenshot shows a web browser window with a "Not Secure" warning at the top. The URL is `ec2-13-57-185-95.us-west-1.compute.amazonaws.com/tutor_signup`. The page title is "SFSU Software Engineering Project CSC 648-848, Fall 2024. For Demonstration Only." The header includes "Brain Buffs", "All Subjects", a search bar, and links for "Become a Tutor", "Dashboard", "Logout", and "About". The main content area has a heading "Become a Tutor". It contains several form fields: "Subject *", "Course# *", "Title *", "Description *", and "Pay Rate *". Each field has a placeholder text and a required indicator (*).

Subject *

-- Select a Subject --

Course# *

Enter Course # (e.g. 648)

Title *

Enter a Title

Description *

Enter a Description

Pay Rate *

\$ Enter Pay Rate /hr

The screenshot shows the continuation of the "Become a Tutor" sign-up form. It includes fields for "Pay Rate *", "Attach CV", and "Upload Profile Picture". Each field has a placeholder text and a required indicator (*). Below these fields is a note: "By submitting, I understand that applications may take up to 24 hours to approve." A blue "Submit" button is located at the bottom of this section.

Pay Rate *

\$ Enter Pay Rate /hr

Attach CV

Choose File No file chosen

Upload Profile Picture

Choose File No file chosen

* field is required.

By submitting, I understand that applications may take up to 24 hours to approve.

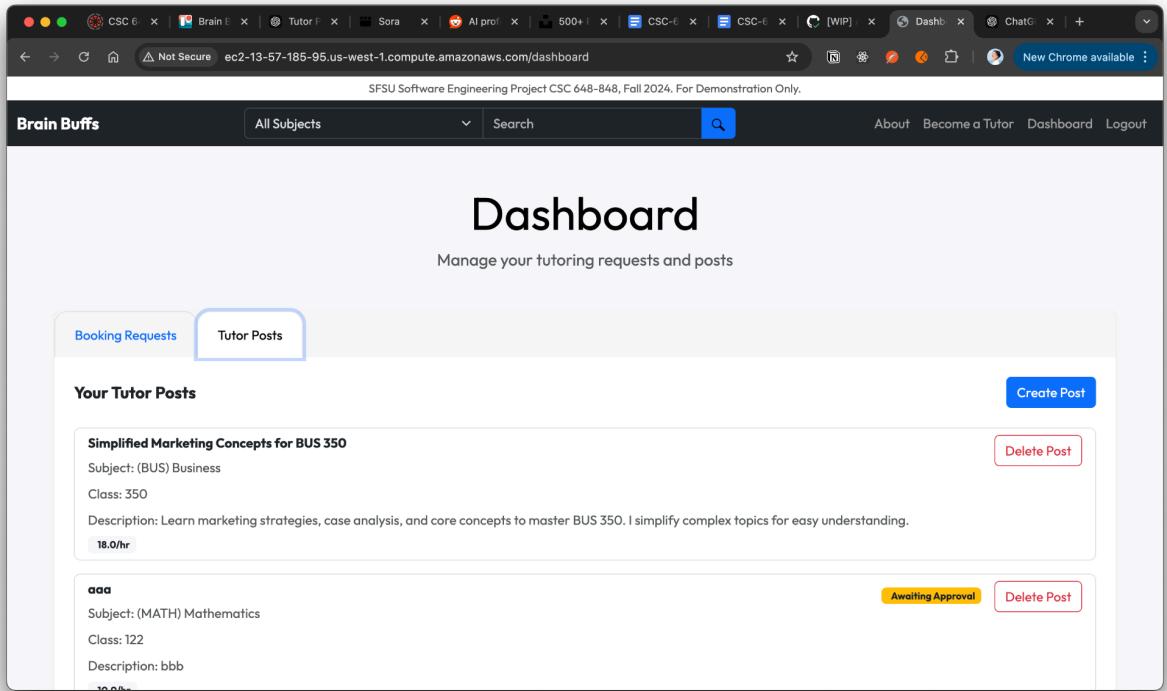
Submit

About Brain Buffs
Brain Buffs is a peer-driven tutoring platform, built by SFSU students to support their fellow students.
[Learn more](#)

Quick Links
[Home](#)
[Become a Tutor](#)

Contact Us
Email: contact@brainbuffs.com
Phone: (123) 456-7890

8. Delete Tutor Postings



SFSU Software Engineering Project CSC 648-848, Fall 2024. For Demonstration Only.

Dashboard

Manage your tutoring requests and posts

[Booking Requests](#) [Tutor Posts](#)

Your Tutor Posts

[Create Post](#)

Simplified Marketing Concepts for BUS 350

Subject: (BUS) Business
Class: 350
Description: Learn marketing strategies, case analysis, and core concepts to master BUS 350. I simplify complex topics for easy understanding.
18.0/hr

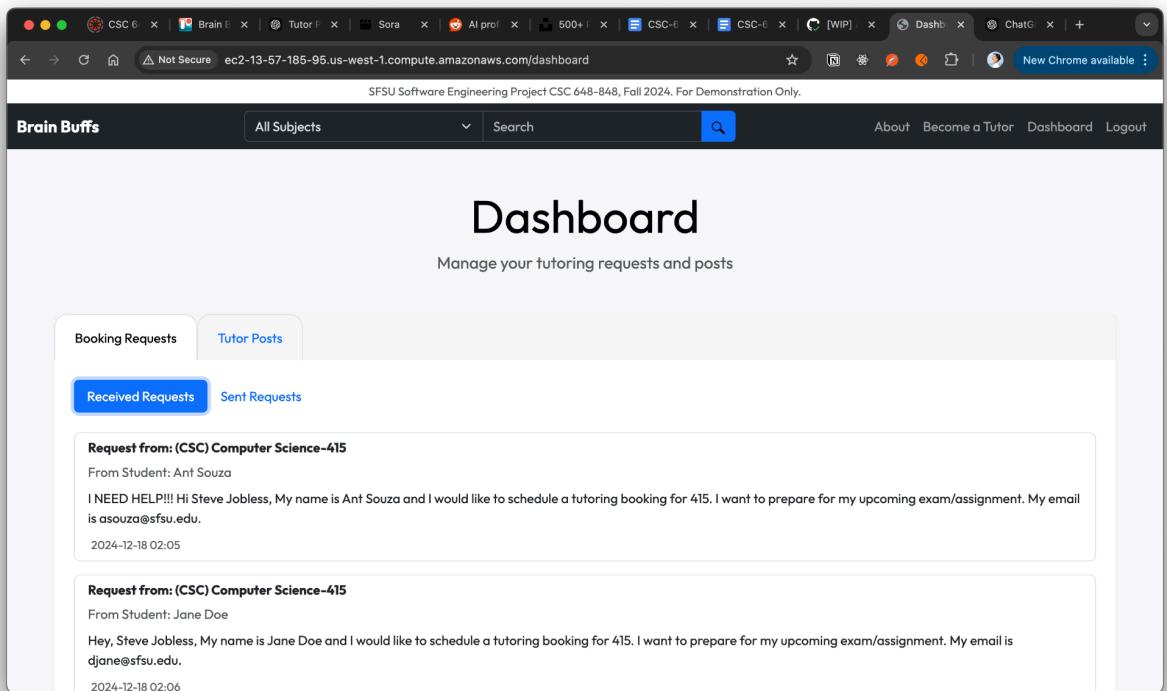
[Delete Post](#)

aaa

Subject: (MATH) Mathematics
Class: 122
Description: bbb
30.0%

[Awaiting Approval](#) [Delete Post](#)

9. Browse booking requests



SFSU Software Engineering Project CSC 648-848, Fall 2024. For Demonstration Only.

Dashboard

Manage your tutoring requests and posts

[Booking Requests](#) [Tutor Posts](#)

[Received Requests](#) [Sent Requests](#)

Request from: (CSC) Computer Science-415

From Student: Ant Souza
I NEED HELP!!! Hi Steve Jobless, My name is Ant Souza and I would like to schedule a tutoring booking for 415. I want to prepare for my upcoming exam/assignment. My email is asouza@sfsu.edu.
2024-12-18 02:05

Request from: (CSC) Computer Science-415

From Student: Jane Doe
Hey, Steve Jobless, My name is Jane Doe and I would like to schedule a tutoring booking for 415. I want to prepare for my upcoming exam/assignment. My email is djane@sfsu.edu.
2024-12-18 02:06

10. Approve Tutor Postings

11. Delete Inappropriate Users/Tutor Postings/Booking Requests As Well as Ban Inappropriate Users

4. Database Organization

booking_request

Name: booking_request Schema: CSC648

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
tutor_posting_id	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
sender_id	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
description	TEXT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
created_at	TIMESTAMP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CURRENT_TIMESTAMP
updated_at	TIMESTAMP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
<click to edit>										

Foreign Key | Referenced Table

booking_request_ibfk_1	'CSC648'.`user`	<input type="checkbox"/>
booking_request_ibfk_3	'CSC648'.`tutor_posting`	<input checked="" type="checkbox"/>
<click to edit>		

Foreign key details 'booking_request_ibfk_3'

Column	Referenced Column
<input type="checkbox"/> id	<input type="checkbox"/>
<input checked="" type="checkbox"/> tutor_posting_id	<input checked="" type="checkbox"/> id
<input type="checkbox"/> sender_id	<input type="checkbox"/>
<input type="checkbox"/> description	<input type="checkbox"/>
<input type="checkbox"/> created_at	<input type="checkbox"/>
<input type="checkbox"/> updated_at	<input type="checkbox"/>

Columns | Indexes | **Foreign Keys** | Triggers | Partitioning | Options

Foreign Key | Referenced Table

booking_request_ibfk_1	'CSC648'.`user`	<input type="checkbox"/>
booking_request_ibfk_3	'CSC648'.`tutor_posting`	<input checked="" type="checkbox"/>
<click to edit>		

Foreign key details 'booking_request_ibfk_1'

Column	Referenced Column
<input type="checkbox"/> id	<input type="checkbox"/>
<input type="checkbox"/> tutor_posting_id	<input type="checkbox"/>
<input checked="" type="checkbox"/> sender_id	<input checked="" type="checkbox"/> id
<input type="checkbox"/> description	<input type="checkbox"/>
<input type="checkbox"/> created_at	<input type="checkbox"/>
<input type="checkbox"/> updated_at	<input type="checkbox"/>

Columns | Indexes | **Foreign Keys** | Triggers | Partitioning | Options

subject

tutor_posting

Name: tutor_posting Schema: CSC648

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	
user_id	INT	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>						
subject_id	INT	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>						
profile_picture_url	VARCHAR(255)									NULL
cv_url	VARCHAR(255)									NULL
class_number	INT			<input checked="" type="checkbox"/>						
title	VARCHAR(45)			<input checked="" type="checkbox"/>						
pay_rate	DECIMAL(6,2)			<input checked="" type="checkbox"/>						
description	TEXT			<input checked="" type="checkbox"/>						
approved	TINYINT(1)			<input checked="" type="checkbox"/>						'0'
created_at	TIMESTAMP			<input checked="" type="checkbox"/>						CURRENT_TIMESTAMP
updated_at	TIMESTAMP			<input checked="" type="checkbox"/>						CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
<click to edit>										

Foreign Key | Referenced Table

tutor_posting_ibfk_1	`CSC648`.`user`
tutor_posting_ibfk_2	`CSC648`.`subject`
<click to edit>	

Foreign key details 'tutor_posting_ibfk_1'

Column	Referenced Column
<input type="checkbox"/> id	
<input checked="" type="checkbox"/> user_id	id
<input type="checkbox"/> subject_id	
<input type="checkbox"/> profile_picture_url	
<input type="checkbox"/> cv_url	
<input type="checkbox"/> class_number	
<input type="checkbox"/> title	
<input type="checkbox"/> pay_rate	
<input type="checkbox"/> description	
<input type="checkbox"/> approved	
<input type="checkbox"/> created_at	
<input type="checkbox"/> updated_at	

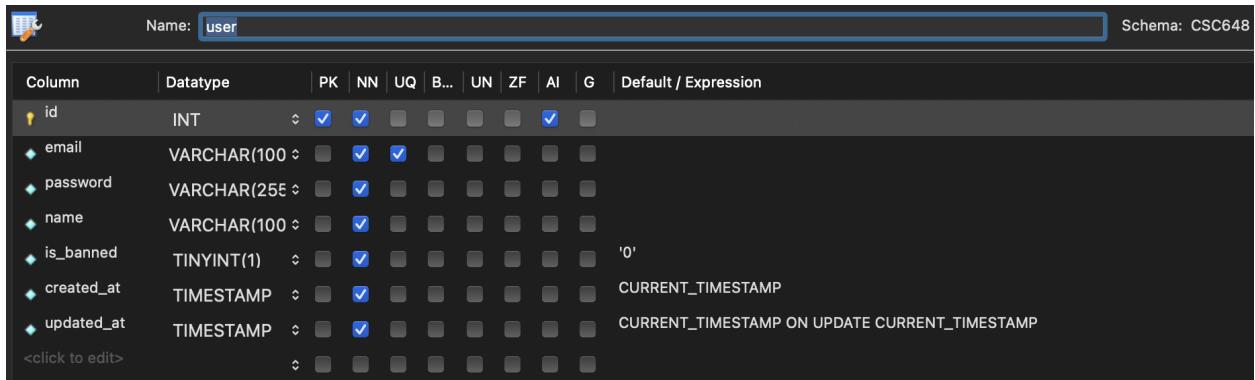
Foreign Key | Referenced Table

tutor_posting_ibfk_1	`CSC648`.`user`
tutor_posting_ibfk_2	`CSC648`.`subject`
<click to edit>	

Foreign key details 'tutor_posting_ibfk_2'

Column	Referenced Column
<input type="checkbox"/> id	
<input type="checkbox"/> user_id	
<input checked="" type="checkbox"/> subject_id	id
<input type="checkbox"/> profile_picture_url	
<input type="checkbox"/> cv_url	
<input type="checkbox"/> class_number	
<input type="checkbox"/> title	
<input type="checkbox"/> pay_rate	
<input type="checkbox"/> description	
<input type="checkbox"/> approved	
<input type="checkbox"/> created_at	
<input type="checkbox"/> updated_at	

user



The screenshot shows a database schema editor interface with a dark theme. At the top, there's a toolbar with icons for file operations like New, Open, Save, and Print. To the right of the toolbar, it says "Name: user" and "Schema: CSC648". Below the toolbar is a table structure for the "user" table.

Column	Datatype	PK	NN	UQ	B...	UN	ZF	AI	G	Default / Expression
↑ id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
email	VARCHAR(100)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
password	VARCHAR(255)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
name	VARCHAR(100)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
is_banned	TINYINT(1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	'0'
created_at	TIMESTAMP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CURRENT_TIMESTAMP
updated_at	TIMESTAMP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
<click to edit>										

5. Github organization

Main Branches in Repository:

We adopted the **main** branch as the primary branch for our repository and opted not to include a **develop** branch. This decision was made to streamline the branching, review, and deployment processes.

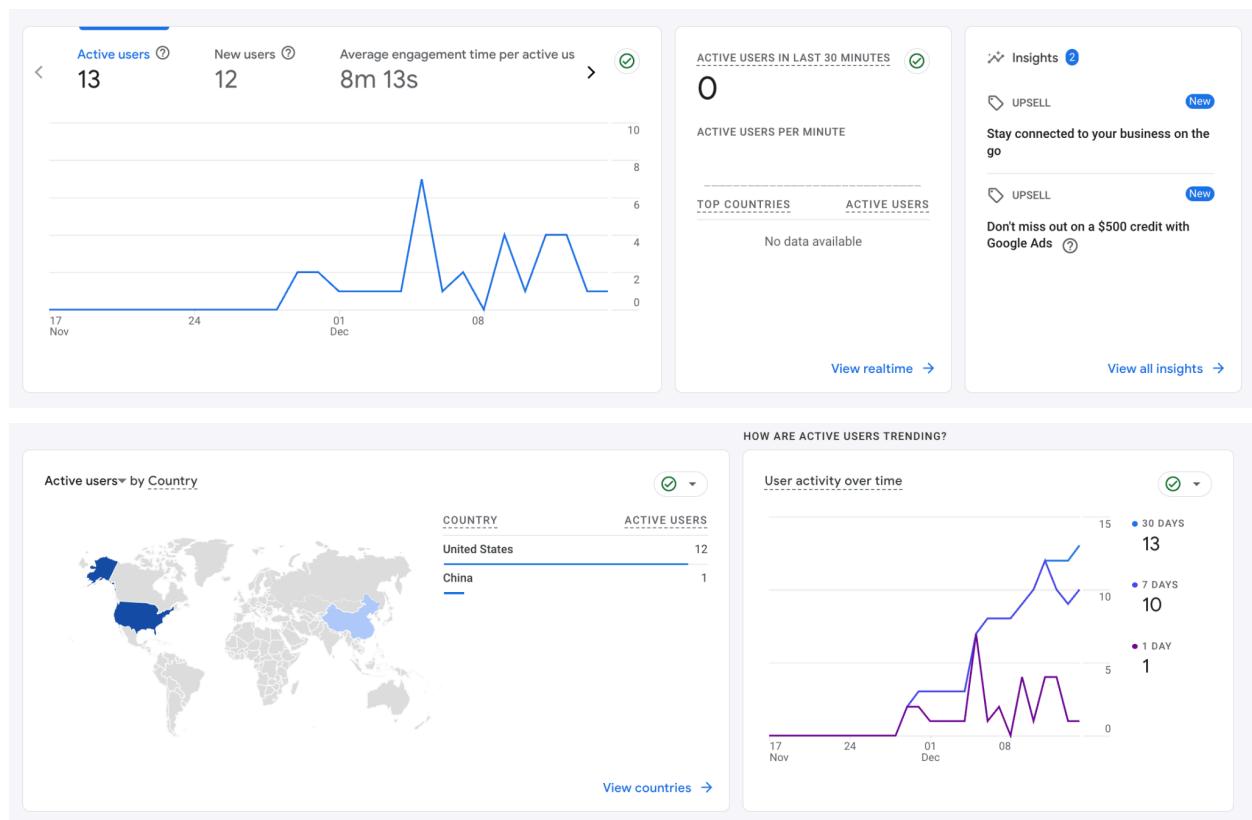
Access to Master Branch:

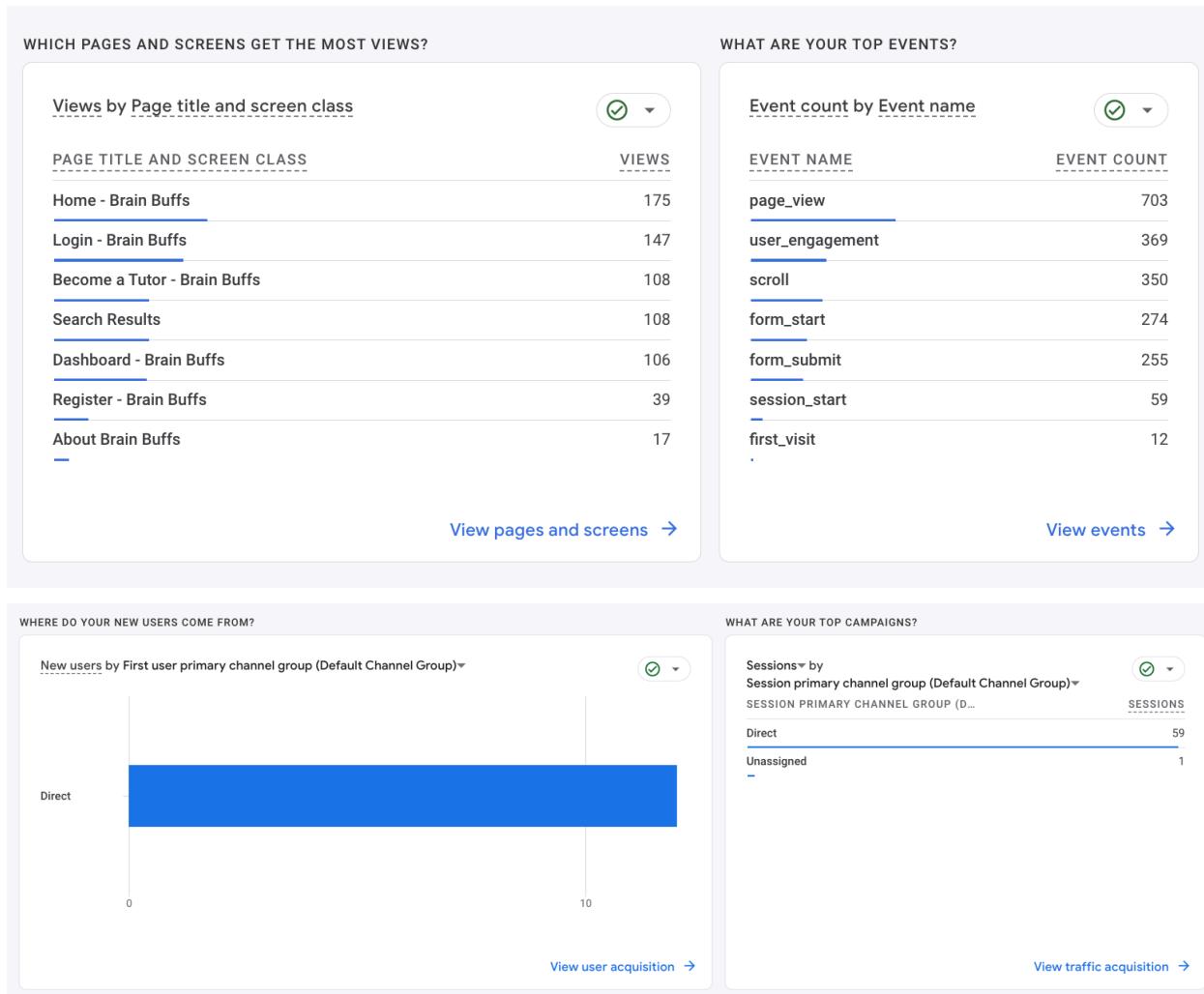
All team members were granted read access to the main branch, while write access was restricted to ensure robust code quality. Merging to the **main** branch required code reviews with **a minimum of two approvals** per pull request. This policy helped maintain high-quality standards and minimized conflicts during integration.

GitHub Repository Home Page:

The screenshot shows the GitHub repository page for 'csc648-fa24-03-team01'. The repository is private and was forked from 'CSC-648-SFSU/csc-648-sfsu-csc-648-section-03-fall-2024-csc648-base-repo'. It has 6 branches and 0 tags. The main branch is 357 commits ahead of the main branch. The repository has 358 commits, with the latest being a merge pull request from Novedh. The repository includes .github/workflows, Milestones, application, credentials, .gitignore, LICENSE, and README.md files. The README is currently selected. The repository has 3 stars and 0 forks. It also includes sections for Releases, Packages, and Languages (HTML 50.0%, Python 45.2%, Nix 3.9%, Shell 0.9%).

6. Google analytics stats plot for your WWW site

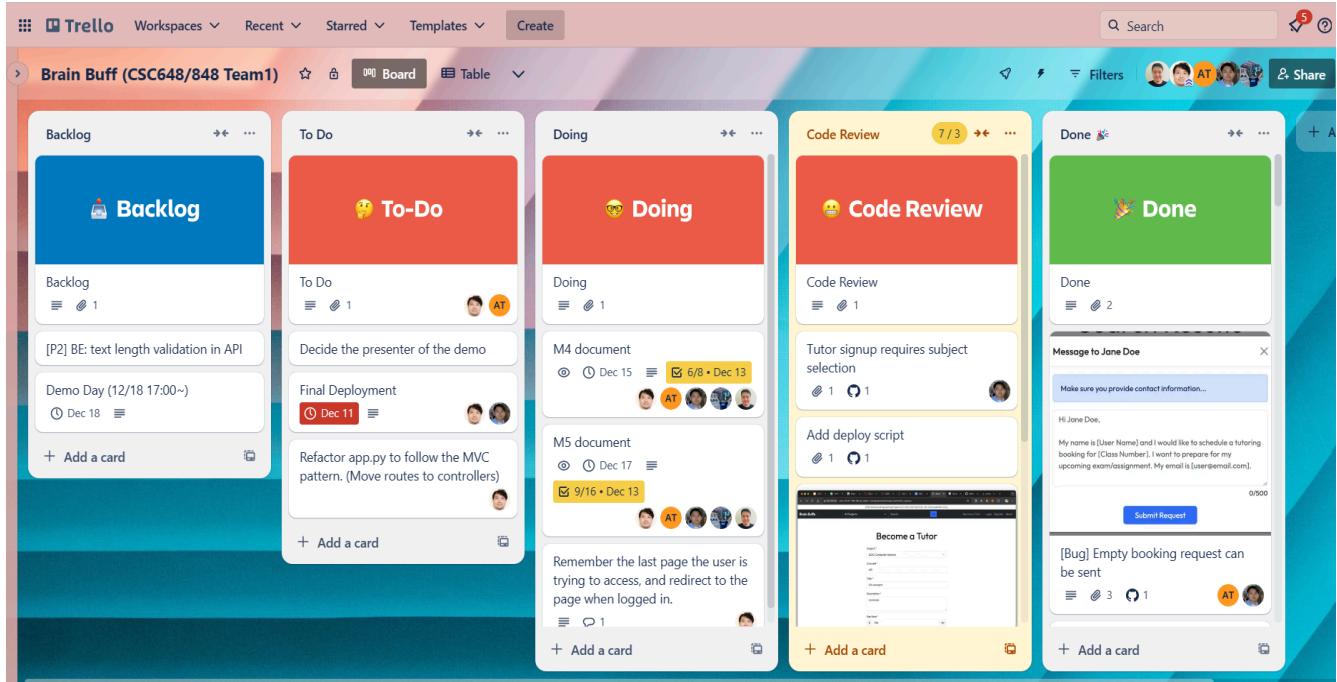




7. Project management

For project management, our team utilized **Trello** to organize tasks, break down tasks into subtasks, assign tasks to specific team members, track progress, and ensure timely completion of each milestone.

1. We created the detailed task cards for backend, frontend, and documentation work of each milestone.
2. Each task card was assigned to specific team members, with deadlines and descriptions to ensure accountability.
3. Cards were moved across columns like “To Do”, “Doing”, “Code Review and “Done” in order to monitor the progress of the tasks.
4. We used comments and checklists within each card of the Trello to communicate updates.



M5 document

in list DOING

Members

Due date

Dec 17, 2:33 PM

Notifications

Watching

Description

<https://docs.google.com/document/d/1or1gtATChwpJwsNVihjWWsBTNhmuZA> Connect your Google account

Edit

Milestone 5 document

56%

Item	Description	Due Date	Last Activity	Assignee	Actions
<input checked="" type="checkbox"/>	Cover page	Dec 13			
<input checked="" type="checkbox"/>	1) Product summary	Dec 13			
<input type="checkbox"/>	2) Milestone documents – M1-M4	Dec 13			
<input type="checkbox"/>	3) Product Screen Shots	Dec 13			
<input checked="" type="checkbox"/>	4) Database Organization	Dec 13			
<input type="checkbox"/>	5) Github organization	Dec 13			
<input checked="" type="checkbox"/>	6) Google analytics stats plot for your WWW site	Dec 13			
<input checked="" type="checkbox"/>	7) Project management:	Dec 13			
<input type="checkbox"/>	8) Team member self assessment and contributions	Dec 13			
<input type="checkbox"/>	Upload the M5 document to GitHub	Dec 15			
<input type="checkbox"/>	Print out the hard copy of M5 document	Dec 17			

Leave

Members

Labels

Checklist

Dates

Attachment

Location

Cover

Custom Fields

GitHub

Add Power-Ups

Automation

Add button

Move

Copy

Make template

8. Team member self assessment and contributions

Shun Usami



CSC 648-848 Team 1: Team Member Self-Assessment and Contributions

From Shun Usami <susami@sfsu.edu>

Date Thu 12/5/2024 6:16 PM

To Adharsh Thiagarajan <athiagarajan1@sfsu.edu>; Devon Huang <dhuang16@sfsu.edu>; Thiha Aung <taung5@sfsu.edu>; Tuan Nguyen <knguyen47@sfsu.edu>

a) Contributions to Team Project and Teamwork

- Scheduled and hosted team meetings, providing donuts for morale.
- Conducted regular 1-on-1 and pair programming sessions with team members to identify skill gaps, recommend resources, and answer technical questions.
- Selected and set up the software stack, including the remote server setup.
- Created initial unit tests, controllers, and app structures to provide examples, making it easier for other members to contribute.
- Broke down tasks into subtasks, organized them on Trello, and assigned them to team members.
- Sent reminders before deadlines and provided technical assistance when needed.
- Created templates for milestone documents.
- Performed final reviews and submissions for assignments.

b) Number of Submissions to GitHub Team Development Branch

14 submissions.

c) Main Challenges Encountered in the Team Project

The team was highly motivated and skilled, resulting in no major challenges.

Occasionally, there were risks of missing deadlines. To address this, I sent early reminders, held 1-on-1 sessions to assist members, and scheduled group work sessions to ensure timely task completion. Initially, I reviewed all tasks myself, which was overwhelming. To resolve this, I delegated responsibility for specific tasks to respective leads (e.g., front-end tasks to the front-end lead), encouraging ownership and accountability.

d) Experience with GenAI

GenAI was particularly helpful for both technical consultations and communication.

- Technically, it helped me understand and structure an MVC pattern implementation in Python/Flask, and design tests related to the database.
 - For communication, it helped refine my English and provided support for writing reports by translating my initial drafts from Japanese into English.
- Using GenAI in these areas improved both the efficiency and quality of my work.

e) Improvements for Future Projects Based on Learnings from This Class

- I would hold daily Scrum meetings instead of infrequent updates, to improve communication and progress tracking.
- Organizing team-building activities, such as social events or sports games like pickleball, would foster stronger team cohesion and camaraderie.

Extended Reflections as Team Lead

c) Main Challenges Encountered in the Team Project (From the Team Lead Perspective)

I realized the importance of evaluating team members' skills and preferences more thoroughly before assigning lead roles. There were minor mismatches between members' abilities and their roles, though the

team still performed well.

Additionally, I may have over-relied on certain members, increasing their workload. Balancing responsibilities more equitably among team members will be a focus in future projects.

d) Experience with GenAI (From the Team Lead Perspective)

The use of GenAI varied greatly among team members.

- Some relied heavily on GenAI, submitting pull requests with code or comments seemingly copied without full understanding. During reviews, this lack of comprehension became evident, making it challenging to implement corrections.
 - Conversely, others hesitated to use GenAI when stuck, delaying progress. I felt they could have benefited from consulting GenAI to guide their understanding.
- I believe GenAI should be used primarily as a learning and ideation tool rather than for generating final deliverables. Encouraging members to utilize GenAI in this way will be a priority moving forward.

e) Improvements for Future Projects Based on Learnings from This Class (From the Team Lead Perspective)

- Implementing daily Scrum meetings to track progress and address challenges more effectively.
- Hosting team-building activities, such as social events or sports games, to strengthen bonds and improve collaboration.

This concludes my self-assessment and reflections as the team lead.

Best regards,

Shun Usami
SFSU ID: 923675555

Adharsh Thiagarajan

AT Adharsh Thiagarajan
Self Assessment and Contributions
To: Shun Usami, Devon Huang, Thiha Aung, Tuan Nguyen
Sent - Exchange 2:34 AM

Self Assessment and Contributions:

A) Contributions to Team Project and Teamwork

- I was the Frontend Lead for the project Brain Buffs, I played a crucial role in shaping the application's user interface and overall user experience.
- Led discussions and brainstorming sessions to create UI mockups, ensuring the design aligned with the project's goals and functionality requirements. Helped out others with any frontend technicalities and designs when creating each page for the project.
- Assisted team members with frontend technicalities and design challenges, providing guidance on HTML/CSS structure and design principles for individual pages.
- Applied Bootstrap to most of the HTML files, utilizing pre-built CSS classes and components to streamline the development process and ensure a cohesive, responsive design.
- Collaborated closely with the backend team to ensure the frontend components integrated seamlessly with the backend functionalities.

B) Number of Submissions to GitHub Team Development Branch

- 15 submissions

C) Main Challenges Encountered in the Team Project:

- Balancing the project with a busy semester schedule proved to be a significant challenge, as it limited my ability to participate in daily meetings and promptly review open Pull Requests (PRs). Before the team adopted Trello for task management, assigning tasks and tracking progress was cumbersome, often leading to confusion about responsibilities and deadlines. Additionally, open PRs frequently remained unreviewed for over a day, creating bottlenecks that delayed merging changes and hindered progress on dependent tasks. Another challenge was adapting to new tools and frameworks, such as Flask and Bootstrap, which required additional learning time and initially impacted productivity. Despite these difficulties, the team made efforts to address these challenges as the project progressed, improving collaboration and efficiency.

D) Experience with GenAI (As Frontend Lead Perspective):

- GenAI tools were invaluable in my role as Frontend Lead, simplifying tasks like HTML page generation with prebuilt templates, dynamic navigation setup for user states, and Bootstrap integration for responsive designs, saving time and effort. However, they occasionally produced incorrect outputs or unnecessary functions, introducing bugs that required additional debugging. Despite these challenges, GenAI significantly improved my understanding of frontend design and highlighted the potential of automation to enhance development efficiency.

E) Improvements for Future Projects Based on Learnings from this Class:

- For future projects, I plan to improve by establishing clear timelines and scheduling regular team meetings to ensure tasks are completed collaboratively and efficiently. Using robust project management tools like Trello from the start will streamline task assignments and minimize confusion. Implementing a daily code review system can help address bottlenecks by ensuring timely PR reviews. Additionally, dedicating time early to master essential tools and frameworks will reduce learning curves, and encouraging team members to take ownership of specific areas will enhance productivity while maintaining strong collaboration and support.

Devon Huang

 **Devon Huang**
CSC 648-848 Team 1: Team Member Self-Assessment and Contributions
To: Shun Usami, Adharsh Thiagarajan, Thiba Aung, Tuan Nguyen

a) Contributions to Team Project and Teamwork

- I was the Backend Lead.
- Assist other team members in backend integrations.
- Ledained in the completion of the Vertical Prototype milestone.
- Developed the search and browse tutor postings features.
- Login form with sessions for storing user data within our web app.
- Added google analytics to web app
- Set up project structure to follow MVC pattern
- Set up the AWS EC2 server
- Deploy / redeploy the web app
- Set up the database in the remote server (tables)

b) Number of Submissions to GitHub Team Development Branch

24 submissions.

c) Main Challenges Encountered in the Team Project
We had no major challenges preventing us from completing our project. Most of our challenges came from time management such as having a Pull Request open for multiple days or not completing a task by our own set deadlines. This caused break periods when no progress was being made but it is understandable because we have different class schedules and events in our lives.

d) Experience with GenAI
GenAI was useful for me when I came to learning new tools and help with issues that I have

- To understand encountered issues or error messages in my code.
- To help with complicated SQL statements that required many joins.
- To better understand how to set up the EC2 server.

Many times if I asked for code it will give me something unusable for our project because it lacked comprehension of the project and its requirements. It however could provide helpful tips on how we can approach and implement those functions in our project.

e) Improvements for Future Projects Based on Learnings from This Class

- To communicate better/ ask for help / or ask others if they need help to foster a better environment where we can increase efficiency and create a good workflow.
- To avoid overcommitting beyond what is realistically achievable within a given timeframe, just do enough to pass as good. (It would have been impossible to incorporate all the P2 and P3 along with the P1's in this project.)

Thiha Aung

 Thiha Aung
To: @Shun Usami; @Adharsh Thiagarajan; @Tuan Nguyen; @Devon Huang

Reply | Reply all | Forward | ⚡ | 📄 | ...
Wed 12/11/2024 10:24 PM

a) Contributions to Team Project and Teamwork

- I was the software developer.
- Created UI Storyboards for each main use case in milestone 2.
- Developed software in backend and frontend integrations.
- Developed the create and delete tutor postings features.
- Participated in the team meeting, pair programming sessions with team leader and other team members.
- Collaborated with team leader, backend leader, frontend leader and GitHub master in every milestone.
- Follow their instructions and comments.
- Filled out my responsible parts in the milestone documents.

b) Number of Submissions to GitHub Team Development Branch

12 submissions.

c) Main Challenges Encountered in the Team Project

We had no major challenges while completing our project. One challenge is just time management to make every milestone on time because we had to manage other different classes and events in our lives. The team was highly motivated and skilled, so I learned a lot of SW processes from my teammates.

d) Experience with GenAI

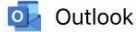
GenAI was very helpful for me through the project in the fields of Frontend, Backend, GitHub and errors encountered.

- To understand the frontend framework and backend features in the project.
- To help with the required GitHub commands.
- To solve the encountered issues or errors in my code.

e) Improvements for Future Projects Based on Learnings from This Class

- I would explore using GenAI more to be better effective and efficiency of SW development.
- I would dedicate time to learning additional tools and technologies related to software development, such as advanced Flask features, frontend state management, more backend features and continuous integration workflows.

Kim Nguyen



CSC 648-848 Team 1: Team Member Self-Assessment and Contributions

From Tuan Nguyen <knguyen47@sfsu.edu>

Date Fri 12/13/2024 10:22 AM

To Devon Huang <dhuang16@sfsu.edu>; Thiha Aung <taung5@sfsu.edu>; Shun Usami <susami@sfsu.edu>; Adharsh Thiagarajan <athiagarajan1@sfsu.edu>

a) Contributions to Team Project and Teamwork

As Github Master / Software Developer:

1. Repository Management:

- Maintained code quality checks
- Created/Closed PRs and approved code reviews

2. UI/UX Development:

Core Pages:

- Login & Signup pages
- Header, Footer, and Homepage
- About page and "Become a Tutor" flow
- Dashboard
- Developed on Search results with responsive layout

3. Feature Implementation:

- Browse received/sent booking requests
- Unit test development

b) Number of Submissions to GitHub Team Development Branch

32 submissions

c) Main Challenges Encountered in the Team Project

1. UI/UX:

- Maintaining consistent design across pages
- Ensuring responsive layouts

2. Repository:

- Managing multiple feature branches
- Coordinating concurrent development

d) Experience with GenAI

Effectively used for:

1. UI Development:

- Bootstrap layout generation
- Component styling

2. Code Quality:

- SQL query optimization
- Git operations
- Code formatting

e) Improvements for Future Projects Based on Learnings from This Class

1. Process:

- Earlier implementation of design system
- Automated code review checks
- Better git workflow documentation

2. Technical:

- Component library development
- Enhanced UI testing
- Stricter type checking