Twuttor Project: For the Students

Group Member Names: Cameron Kounthapanya, Cameron Thomas, Carter Bassett, Jerry Wang, Nathan Lamp

Description:

The primary goal of Twuttor is pairing tutors and students up while fostering a social environment. Users can register either as a student or a tutor. Tutors would register information such as their subjects, experience,and available times. Tutors can also post information that they are interested in to better help students understand them and provide a more social aspect, generating more interest in academics.

Displayed on a carousel to students would be a tutors ratings (given by other students),their subjects of expertise, as well as a profile picture if the tutor opted to include one. Student users can also query for tutors based on the inputted factors.

Afterwards, when a student found a tutor the application would direct them to the tutor's email address, where they could communicate. Based on their communication, a time and date would be selected, and the application would mark the date on a calendar for both the tutor and the student.

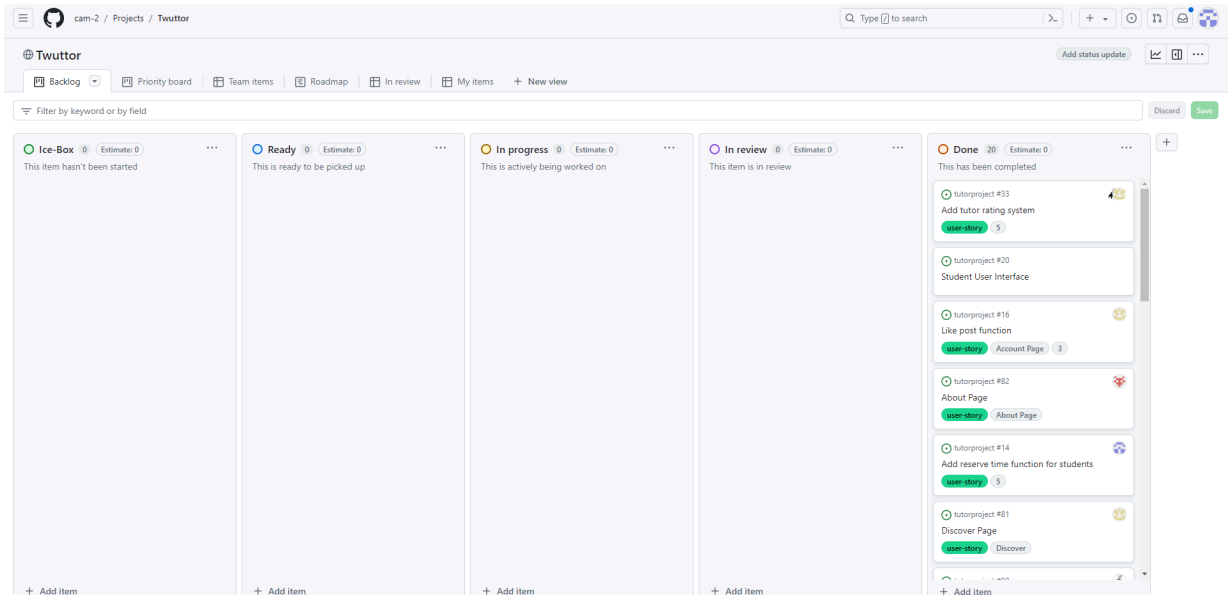
This application would help both students and tutors, as students would be able to find suitable tutors for their needs and conveniences, whereas tutors would be able to get matched and have a platform to be found on.

Project Tracker

Link to the Project Tracker.

https://github.com/users/cam-2/projects/2/views/1

Screenshot of project tracker.



Link to Video
https://drive.google.com/file/d/1RLRLqx8GIw_x3APiSR1QcQfx2KrHS6xv/view

Link to VCS
https://github.com/cam-2/tutorproject

Contributions:
Cameron Kounthapanya - He worked on the discovery page that dynamically displays available tutors by average rating in descending order using HTML, CSS, and Handlebars. These tutors were made to be displayed on a horizontal four card display that could be scrolled horizontally through JavaScript. The data for each tutor (name, subjects tutored, rating, profile picture) were pulled from various SQL tables, and Node.js was used to query the data. In addition, he also wrote various positive and negative unit test cases to test the functionality of the application, including for the registration and login API, using Mocha and Chai.

Cameron Thomas - implemented the following:

- A responsive Navigation Bar linking the Landing Page, Discover Page, Login and Profile page, and fully functional Search Bar that searches a tutor either by first name, last name, or subject tutored with nested SQL queries and joins/implementations of relational databases.
- Full stack development of the ability for tutors uploading profile photos displayed both on the Discover Page as well as a tutor's respective About Page using the Multer package.
- About Page linked from each respective tutor's tile in the Discover Page. This page dynamically displays a tutor's About section, their posts, and profile photo using Handlebars.
- CSS/Wireframes for the following: Landing Page, Registration and Login pages, About Page.

Carter Bassett - implemented the following:

- SQL Backend/Architecting: Carter helped create the initial layout for many of the tables used for the projects, as well as determining inter-table relations. Throughout the project, Carter helped modify/ add new tables to support additional functionalities.
- Registration Pages: Carter assisted in making the necessary HTML, along with supporting JS to handle API calls to the tables. Worked on functionality to merge student and tutor registration pages, as well as functionality to prevent registering with pre-existing usernames.
- Calendar: Carter was solely responsible for the full-stack implementation of the Calendar page, including integration with other capabilities.

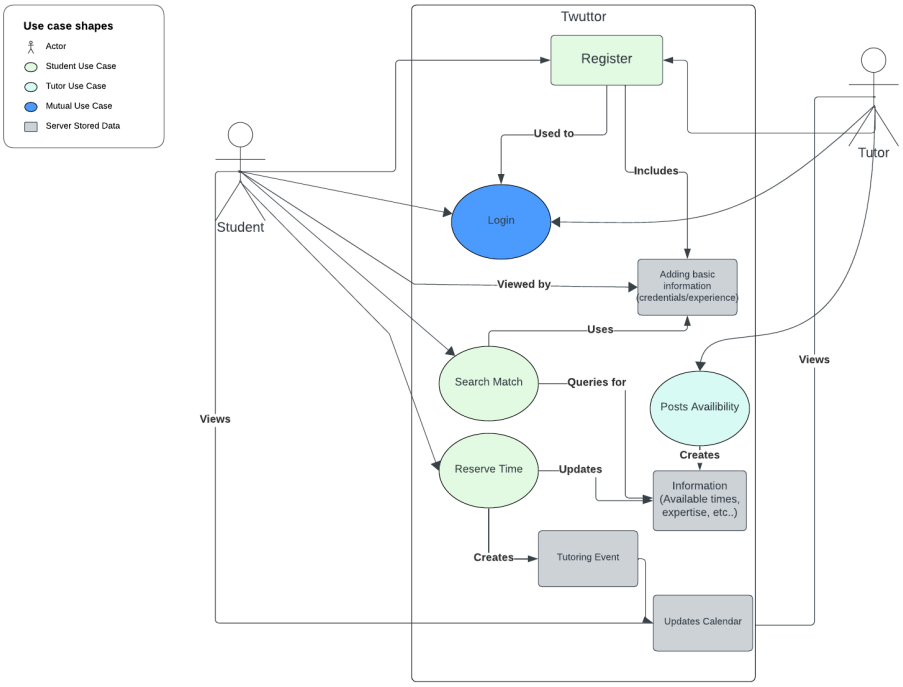
Jerry Wang - Jerry worked on the following functionalities:

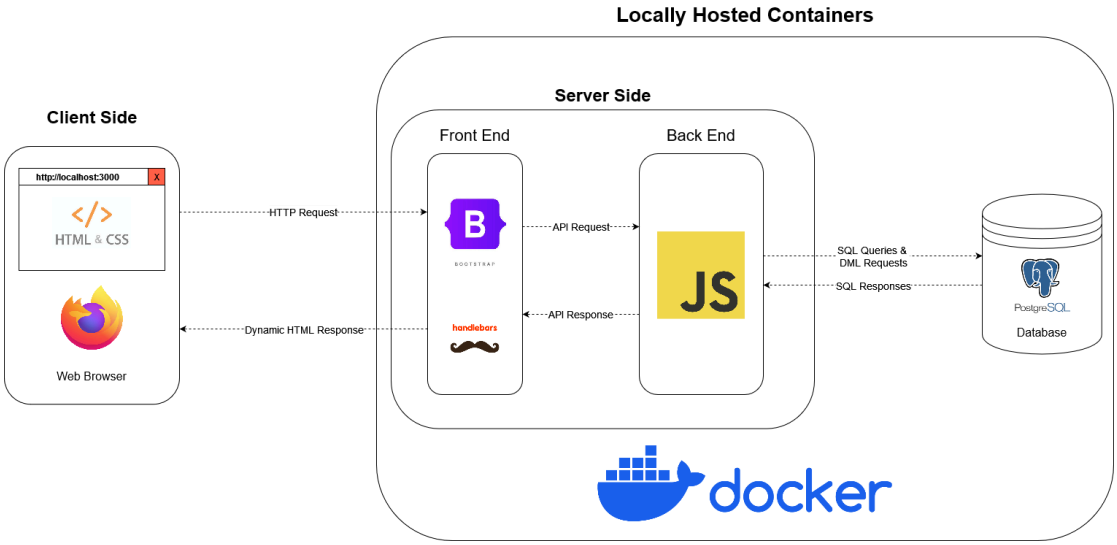
- login for tutors and students, logout and dynamic middleware authentication, adding additional information post registration for students and tutors, as well as aiding with the registration functionality.
- Additionally he worked on bug fixing to get the website running correctly.
- Jerry wrote javascript and SQL to interface with each other to store and query for data.
- Jerry also used HTML and handlebars when building the pages for login and the post registration. Furthermore, dynamic handlebars and javascript were used to update the navbar and site visibility based on the user's login status.

Nathan Lamp -

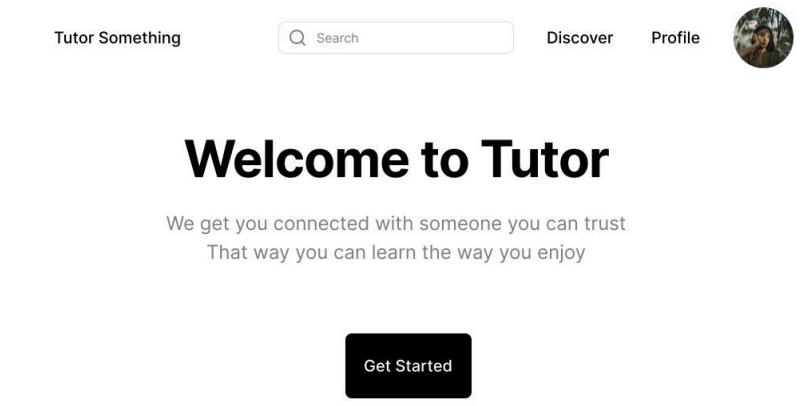
- Created the original sql tables needed to get login and register working
- Front end design, used css to stylize the profile and about page
- Tutor Posts, responsible for full stack implementation of the post feature. Included the sql table, api route and rendering on the page.
- Tutor Ratings, implemented an uber like rating system that allows students to rate the tutors that have helped them, this rating displays as an average on the tutor discover page.

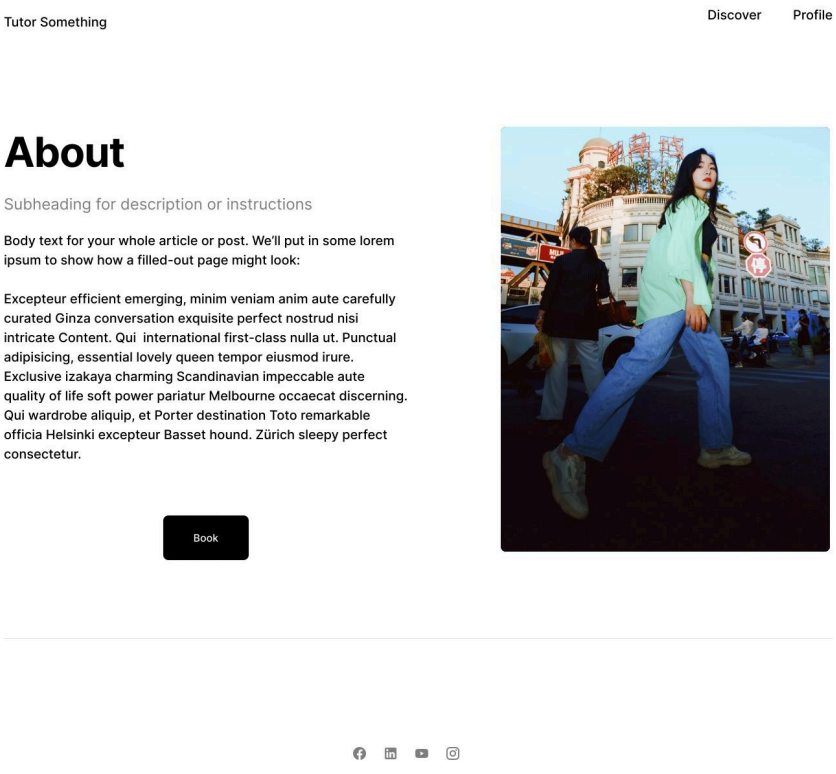
Case Diagrams:





Wireframes:


Tutor Something
Search
Discover
Profile
Welcome to Tutor
We get you connected with someone you can trust
That way you can learn the way you enjoy
Get Started


Tutor Something
Discover
Profile
About
Subheading for description or instructions
Body text for your whole article or post. We'll put in some lorem ipsum to show how a filled-out page might look:
Excepteur efficient emerging, minim veniam anim aute carefully curated Ginza conversation exquisite perfect nostrud nisi intricate Content. Qui international first-class nulla ut. Punctual adipisicing, essential lovely queen tempor eiusmod irure. Exclusive izakaya charming Scandinavian impeccable aute quality of life soft power pariatur Melbourne occaecat discerning. Qui wardrobe aliquip, et Porter destination Toto remarkable officia Helsinki excepteur Basset hound. Zürich sleepy perfect consectetur.
Book

Suggested people

Helena Hills
@helenahills

Charles Tran
@charlestran

Oscar Davis
@oscardavis

Daniel Jay Park
@danielj

Carlo Rojas
@carlorojas

Helena
3 min ago

About Page Description. This will take up much more space when filled with the about of someone.

85 likes

Charles in Math
2 hrs ago

About Page Description. This will take up much more space when filled with the about of someone.

6 likes

Oscar
1 day ago

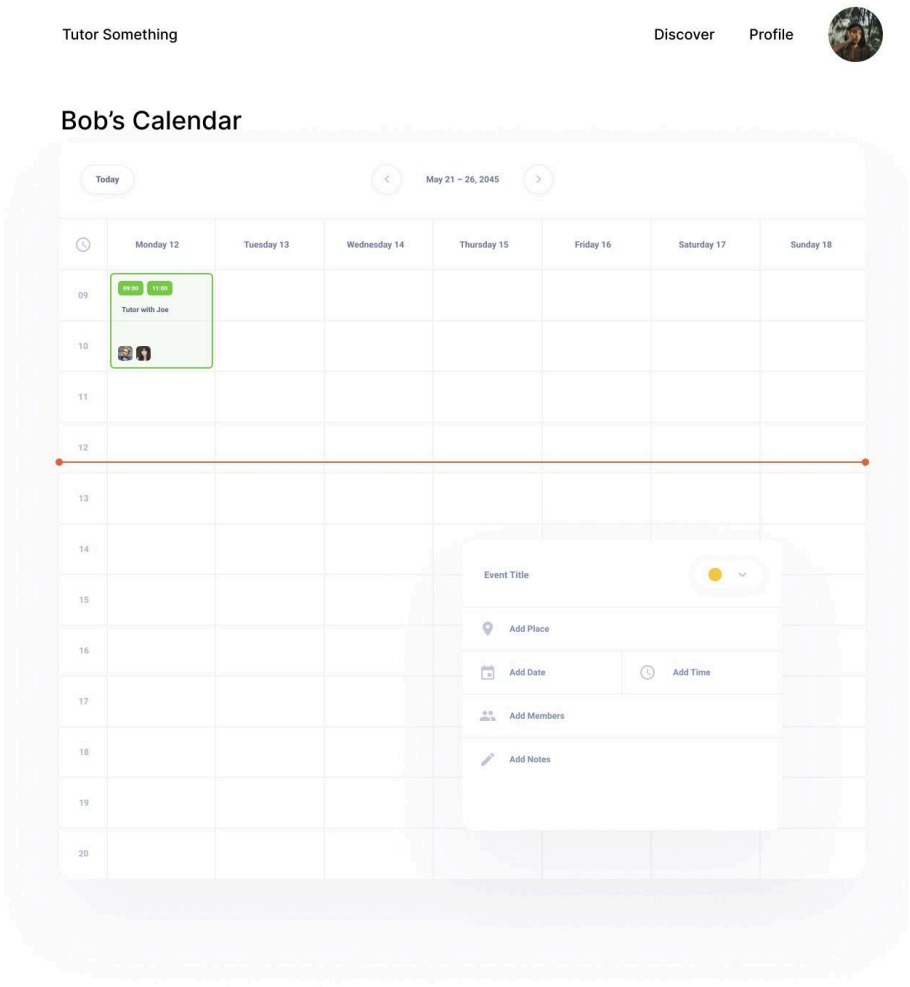
About Page Description. This will take up much more space when filled with the about of someone.

85 likes

Mark Rojas in Physics
6 hrs ago

About Page Description. This will take up much more space when filled with the about of someone.

85 likes



Test results:

- Register - If a user were to register as a student with a username that is already registered, an error is provided to the user, no data is added to the students table in the database, and they get redirected to the login page (PASSED). If a user were to register as a student with a unique username, they get redirected to the registering info page, and their username and password are added to the students table in the database (PASSED). If a user were to register as a tutor with a username that is already registered, an error is provided to the user, no data is added to the tutors table in the database, and they get redirected to the login page (PASSED). If a user were to register as a tutor with a unique username they get redirected to the registering info page, and their username and password are added to the tutors table in the database (PASSED). A human tester was tasked to register as if they were a student. They quickly selected the student radio button so that they register as a student and entered a unique username and password to create an account just like any other website requiring registration. This behavior is consistent with our use case.
- Login - If a user were to login as a student with a username that is not registered, an error is provided to the user, and they are redirected to the register page (PASSED). If a

user were to login as a student with a valid username and password combination, they are logged in and redirected to the discover page (PASSED). If a user were to login as a tutor with a username that is not registered, an error is provided to the user, and they are redirected to the register page (PASSED). If a user were to login as a tutor with a valid username and password combination, they are logged in and redirected to the discover page (PASSED). A human tester was tasked to login as a student with a valid username and password combination. They quickly selected the student radio button so that they login as a student and entered a valid username and password combination to log in to their valid account just like any other website requiring logins. This behavior is consistent with our use case.

- Add Post - If a tutor were to be logged in, they add a post with content less than or equal to 500 characters to their about page by navigating to the profile page on the navigation bar and entering the content that they want to be posted. A logged in student can view this post on the tutor's about page (PASSED). If a tutor were to be logged in, they cannot add a post with content greater than 500 characters to their about page by navigating to the profile page on the navigation bar and entering the content that they want to be posted. A logged in student cannot view this post on the tutor's about page (PASSED). A human tester was tasked to add a post while logged in as a tutor. They quickly clicked on the navigation bar to get to the profile page as it seemed to them it is how they would manage everything related to their profile. On the profile page, they created a post that was less than 500 characters to be added to their about page. This behavior is consistent with our use case.
- Rate Tutor - If a student were to be logged in, they rate a tutor on a scale of 1 through 5 by navigating to the profile page on the navigation bar and giving the rating for the tutor they want to rate. Their rating is added to the ratings table, and the average rating for the tutor is updated taking the rating that was just added into calculation. This average rating can be viewed by logged in tutors and students and the tutor's about page and discover page (PASSED). A human tester was tasked to rate a tutor they just had a tutoring session with while logged in as a student. They quickly clicked on the navigation bar to get to the profile page as it seemed to them it is how they would manage all their ratings. On the profile page, they selected their tutor they just had a session with as a 5. This behavior is consistent with our use case.

Deployment

The deployment is on localhost via Docker. In order to access Twuttor first download the project source code from the Github page of https://github.com/cam-2/tutorproject. Following that navigate to the ProjectSourceCode directory of the project and start up docker by running: docker compose up -d. Following that the user may need to wait a bit depending on their device and especially if it is their first time for NodeJs to initialize everything. Once the Docker finishes setting up everything, navigate to the url of: http://localhost:3000/. From there, the application will be able to guide the user through everything else.