**Intro (00:00) (Jack):**

Hello, we are team 63 for project 41: Online Tutoring App from UTD CS Project featuring Jack Wittenbrook, Mason Kuehne, Chloe Lee, Sam Salinas, Vincent Tran-Bui, and Adithya Viswanathan. We have created an online tutoring web application called TutorUTD.

**Overview and goals (00:30) (Jack):**

TutorUTD is a web based application where students can find and book appointments with tutors specializing in the classes they need. We created this application using angular as our frontend and django as our backend with RESTful API to connect them. We used MySQL as our database and utilized Duo for 2 factor authentication when logging in.

**Individual slides-**

**Jack (01:30):**

My part of development was focused generally on the front-end, Including the initial figma design connecting http calls to our backend, implementing route guards to protect the site from unintended access, and several of our pages and components.

One of the most recurring components on our site is the time-table component which is used to display tutor availability and appointments as well as being used to select times to edit the schedule and book appointment, which is controlled by setting the table to one of three modes all in one reusable component.

Another important page is the registration page of course. This component covers both student and tutor registration and provides a form where users can enter data as well as checking and giving feedback for issues such as missing fields, wrong password format and when the confirm password does not match. After submitting it retrieves a duo sign-up url to register for two factor authentication after which the user can log in and access the rest of the site.

**Mason (02:30):**

The first component I wanted to work on for the website was the navbar because it was a universal component, meaning that it would be displayed on each page. The navbar differs depending on the page the user is on and whether the user is a student or a tutor.

After implementing the navbar, I decided to work on the profile component. I started by formatting the layout, and then adding the modals for editing the profile and booking a session with a specific tutor.

My last major focus was the website redesign. Because the frontend had some extra time at the end of the semester, I thought it would be fun to give the application a cleaner look by incorporating some shadows and changing up the color scheme. It helped give the website a fuller look and gave it some better depth.

**Chloe (03:30):**

I was a part of the backend development. I created the basic outline of the registration/login component and implemented Duo 2 factor authentication. When signing up, users will get a QR code to enroll themselves into Duo; and when logging in, users will get a ‘push’ notification on their device for authentication or a QR code if they have not already been enrolled with Duo.

**Sam (04:30):**

I was part of the backend development. I worked on the backend communications for students which involves students having the ability to mark, unmark, and fetch their favorite tutors, as well as make, cancel, and view their own appointments, with the backend directly interacting with the database. I also worked on setting up AWS resources which includes the EC2 instances the website runs on as well as setting up and managing the RDS database.

**Vincent (05:30):**

I was also part of the backend development and primarily worked on implementing an email system to send confirmation emails when students or tutors register their account, book appointments, and cancel appointments. I also implemented a scheduled task system to send reminder emails to students or tutors containing appointments scheduled for the day.

**Adithya (06:30):**

Hello my name is Adithya and I worked on backend development. First, I worked on database design and setup on Amazon Web Services using their Relational Database Service. Then I implemented our backend APIs using Python’s Django, which is a powerful REST Framework for building Web APIs. I spent the majority of my time on building APIs for Tutor’s interaction with the application. Functionality like viewing/editing profiles, viewing/canceling appointments, and etc. I got a lot of exposure to building APIs from scratch and continuous collaboration with my teammates, which helped me become a more well-rounded backend developer. In the process, I helped with the API for Register and Login, both for tutors and students. In addition, in order to implement tutor’s profile picture functionality, we utilized Amazon’s Simple Storage Service or S3 as our cloud storage. Incorporating Amazon’s Web Services in the form of their Relational Database Service and Simple Storage Service proved to be very time efficient, easy to implement, and easy to manage and in the end, we were able to deliver a full-featured application.

**Conclusion (08:00) (Adithya):**

This concludes our presentation of our Online Tutoring Application TutorUTD. Our sincere thanks to our faculty advisor Dr. Pushpa Kumar and our course TA Ms. Jahnavi for mentoring and helping us throughout the semester. The meetings really helped us reflect on a week’s work and helped keep us on track from start to finish. And with that, we would now like to present a short demo of our application to showcase its main functionality. I would like to pass it off to Jack for our demo.

**Demo (09:00)**

(Video)