ScheduleEd

CS 691 ASYNCHRONOUS

CAPSTONE

TEAM 1

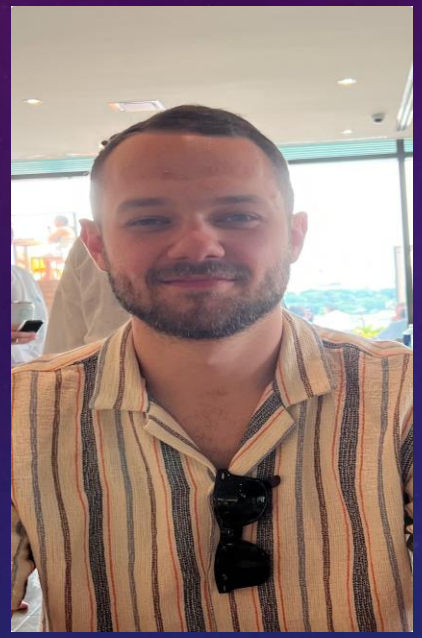
Professor Henry Wong
Spring 2025

AGENDA T

1. Team Member Roles and Responsibilities
2. Improvements
3. Project Description
4. Team Working Agreement
5. Schedule
6. Personas
7. MVP
8. Technologies
9. Algorithms
10. Product Backlog/Sprint 1 Test cases
11. Metrics/Team Velocity
12. Retrospective
13. Project Demo
14. Group Wiki Page

TEAM MEMBERS

Sabrina Scaccio:
Scrum Master /
Developer



Thomas D'Anna:
Front End Developer

Justin Rivera:
Front End Developer

Victor Zapata:
Back End Developer

Michael Silva:
Back End Developer

IMPROVEMENTS T

- Team met in a timelier manner, and we met twice a week for the whole month. If someone needed to miss the meeting, they gave a valid excuse. The communication was much better.
- We all completed our tasks assigned to each person by the date that we wanted the task done by.
- We came to a much better visualization of the product since we started.

PROJECT DESCRIPTION T

•ScheduleEd is a scheduling app that will assist teachers, parents, and students with the process of booking, managing, and tracking tutoring sessions. This app will focus on alleviating scheduling conflicts among all involved. Often, students have various commitments after school that are hard for the parents to manage. The times of these various extracurricular activities change. This has a trickledown effect on the teachers. This app will allow parents to book with a more flexible approach. They can go week by week, selecting times that work for them and their child. This app will eliminate scheduling conflicts, reduce ineffective communication, and avoid double-bookings and no-shows. In just the tap of a button, parents and students will be able to book, cancel, and reschedule appointments! The app will remind students/parents of their sessions and will allow the tutor to have a better scope at their week. It also will allow the tutor to notify parents of available times, rather than going back and forth, guessing what time will work. This app will aid many teachers, private tutors, and tutoring centers with a way to manage their learning schedule in a much more organized fashion.

TEAM WORKING AGREEMENT T

All team communication will occur using Microsoft Teams/I-Message

We remind each other that we are all in this together, and when conflicts do arise, we tackle them as a team and will help guide each other.

Meetings will be held using Microsoft Teams. We will meet weekly on Wednesdays @8:00 pm. We will add meetings as needed, to stay on top of deadlines. Meetings will be about a half hour.

At the beginning of each sprint, we will hold a sprint planning meeting, in which everyone is given their tasks.

Before the sprint is over, we will hold a meeting on our retrospectives.

Each team member will understand their role and what they are responsible for.

TEAM WORKING AGREEMENT CONT. T

Everyone will adhere to the due dates and the due date of when we want tasks done, will be discussed at the meeting.

Each team member has their own task but is reminded that we are a team, and things may not go as smoothly for others.

When there are conflicts within your own task, it is required that you tell the team immediately so that they can assist you and there are no delays in due dates.

Each team member is asked to come to the meetings fully prepared with their task.

We will continue to learn through this project and produce new innovative ways to tackle this capstone project.

Final work should be submitted as follows:

- The team has reviewed your work
- There are no errors within your code
- All tasks were tested
- Work meets the criteria of the class
- Code is uploaded to Github
- All aspects of the sprint are complete

PROJECT SCHEDULE

- Weekly Meetings!
- Sunday /Wednesday @ 8pm! V

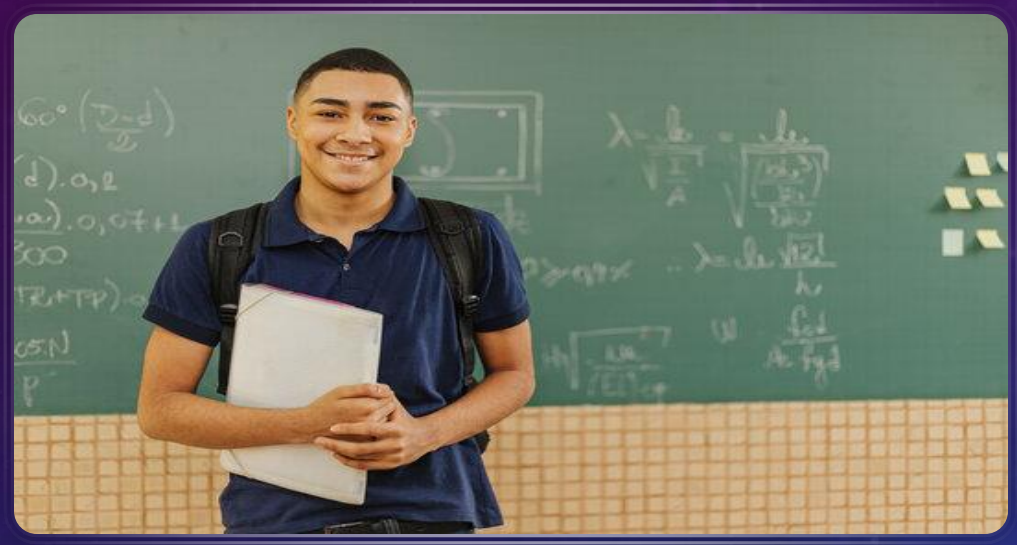
	Start	End
Sprint 0	January 21st	February 10th
Sprint 1	February 11th	March 10th
Sprint 2	March 11th	April 7th
Sprint 3	April 8th	May 5th

PERSONA 1 T

Kathy - Wants a comprehensive tutor scheduling planner for managing multiple clients.

Kathy is a private tutor working both online and in-person. While she enjoys teaching, managing her growing client base has become increasingly difficult. She often struggles with overbooking and scheduling conflicts, as manually tracking appointments leads to occasional double bookings or missed sessions. With an automated scheduling system, students could book sessions based on her availability, preventing conflicts and last-minute mix-ups. A student profile feature would help her store session notes and track progress efficiently, ensuring personalized lesson plans for each student.

PERSONA 2 T



Jake – Looking for centralized app for managing tutoring sessions and study material

Jake is a 16-year-old high school student juggling multiple tutoring sessions alongside his regular schoolwork and extracurricular activities. He often forgets about scheduled lessons or struggles to find time for rescheduling when conflicts arise. He has a hard time keeping track of assignments and notes from his tutoring sessions, often misplacing important study materials. With automated reminders, he would never miss an appointment, reducing last-minute cancellations and lost study time. A built-in calendar would help him visualize his schedule, ensuring he doesn't double-book tutoring with other commitments. A session tracking feature would allow him to store lesson notes, assignments, and key takeaways in one place, making it easier to review material when studying.

PERSONA 3 T

Debra - Keeping track of child's appointments and progress.

Debra is a busy mother of 3, trying to balance her work schedule while ensuring her 10-year-old daughter stays on top of her tutoring sessions. Debra often finds it challenging to keep track of lesson times, and her daughter's overall progress. In the chaotic life of a parent of multiple children, tutoring schedules sometimes slip through the cracks, leading to missed or forgotten sessions. She also struggles to stay updated on what Emily is working on in her sessions, relying on scattered notes from tutors or brief updates from her daughter. A session log feature would provide insight into Emily’s progress, giving Debra access to lesson notes and assignments so she can stay informed and involved in her child’s learning. A tutor scheduling app would be a game-changer for Debra, allowing her to keep all of Emily’s tutoring information in one place.

MVP V

- Accounts/Firebase Integration
- Tag based Search System
- Schedule/Book Sessions
- Google Integration

TECHNOLOGY M

Frontend

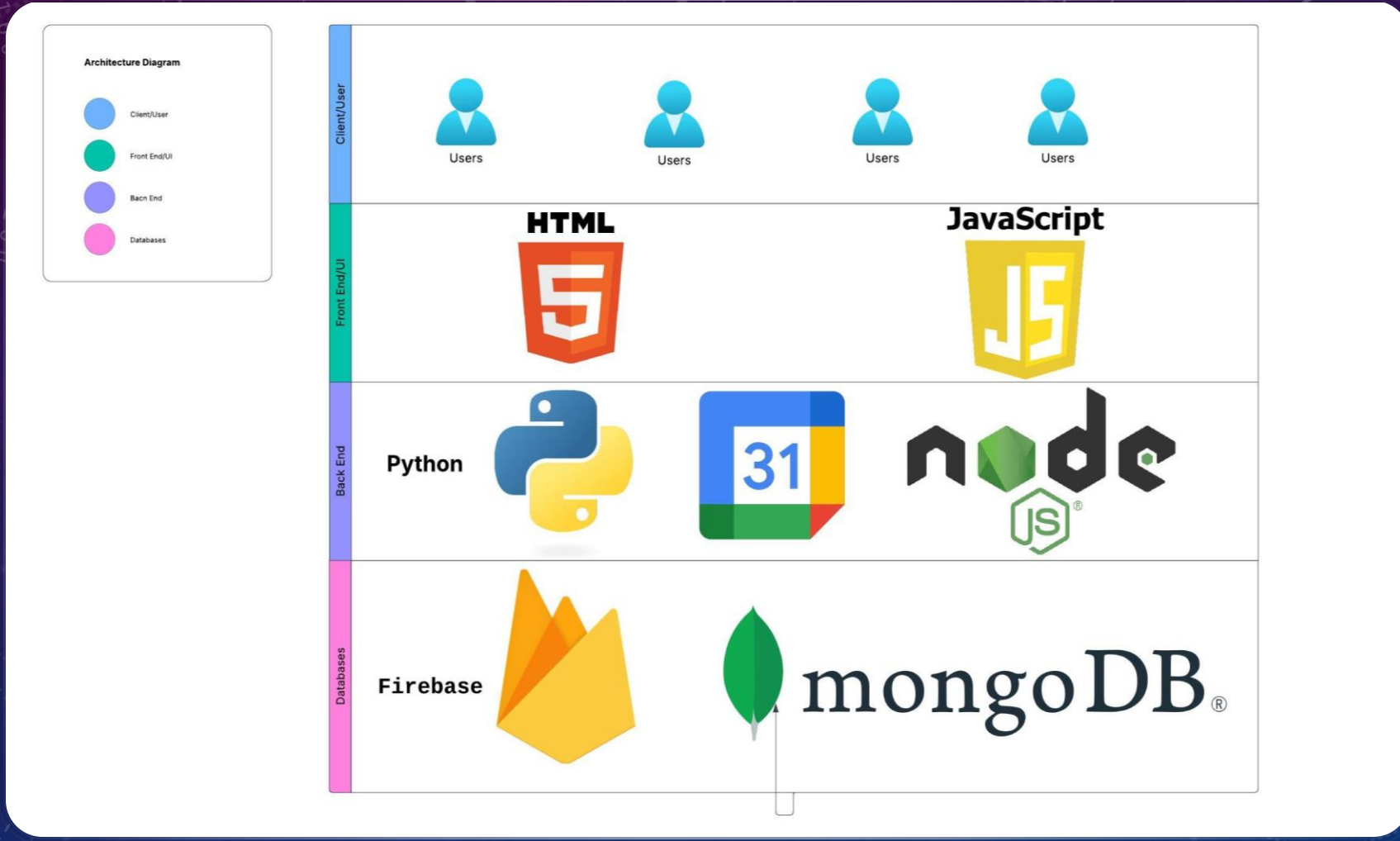
Backend

Firebase

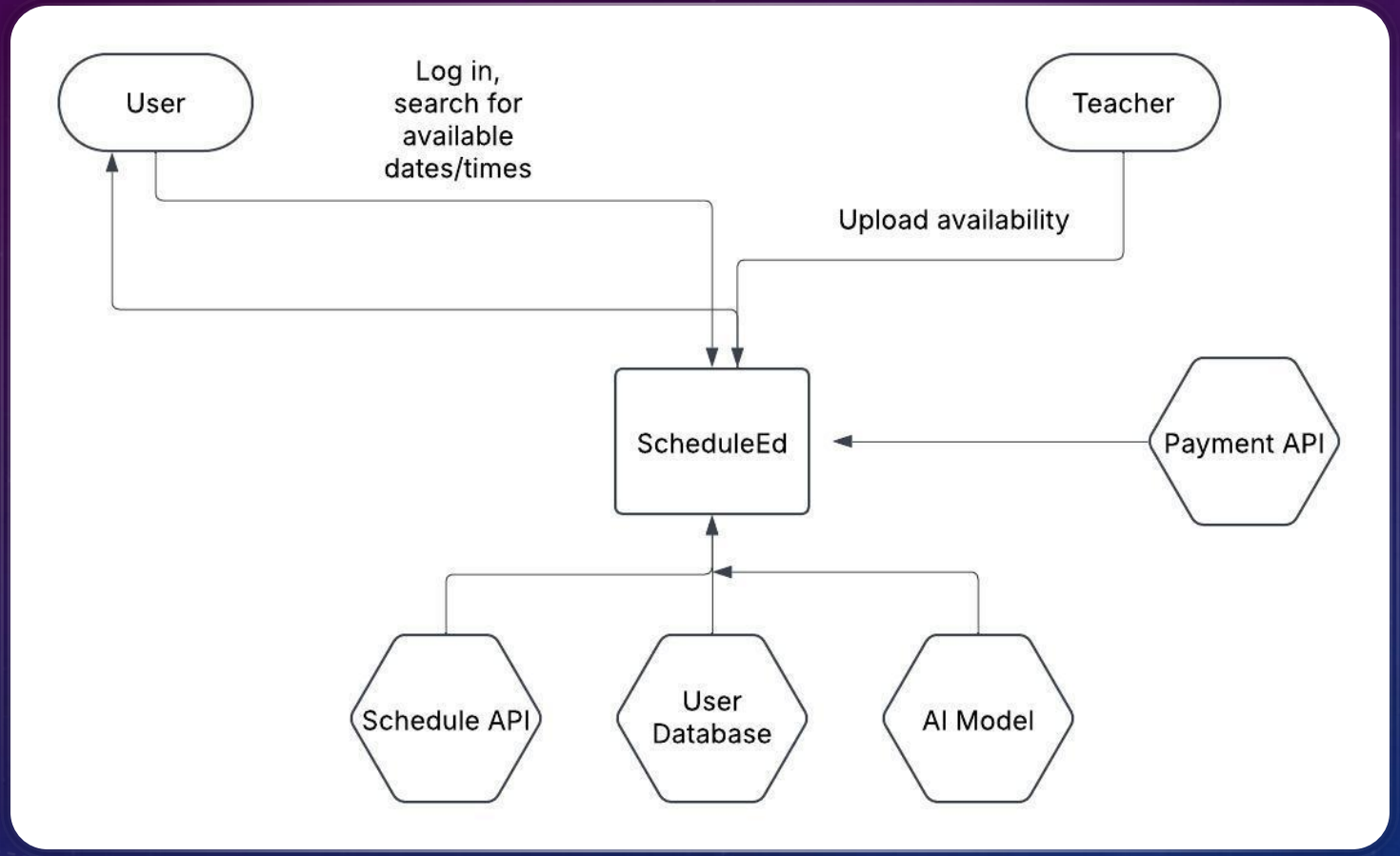
ALGORITHM M

- Machine Learning Models (Advanced Matching)
  - A decision tree predicts the best tutor for a student based on their learning style, subject, and past interactions.
- Content-Based Filtering
  - If a tutor has a history of working well with middle school students in "Science," they will be recommended to students within that range.

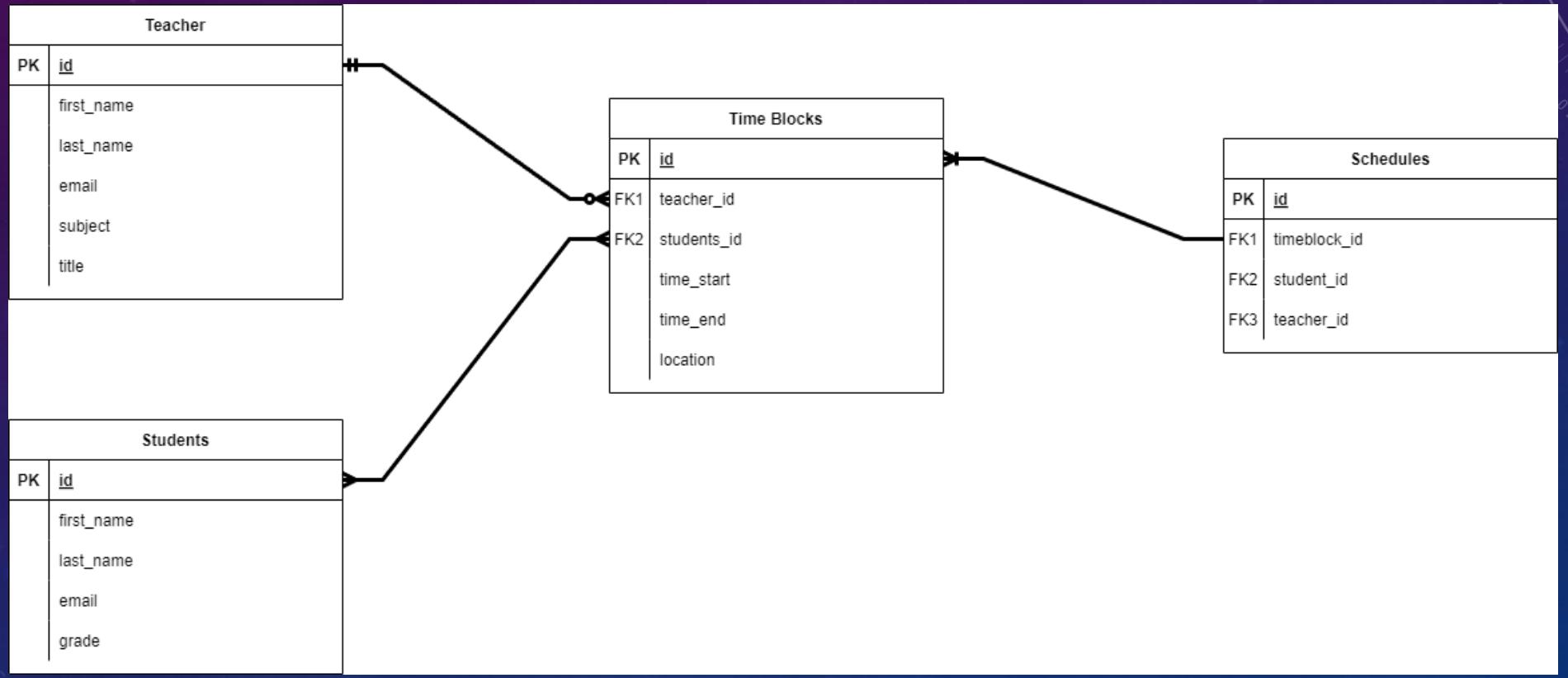
ARCHITECTURE DIAGRAM J



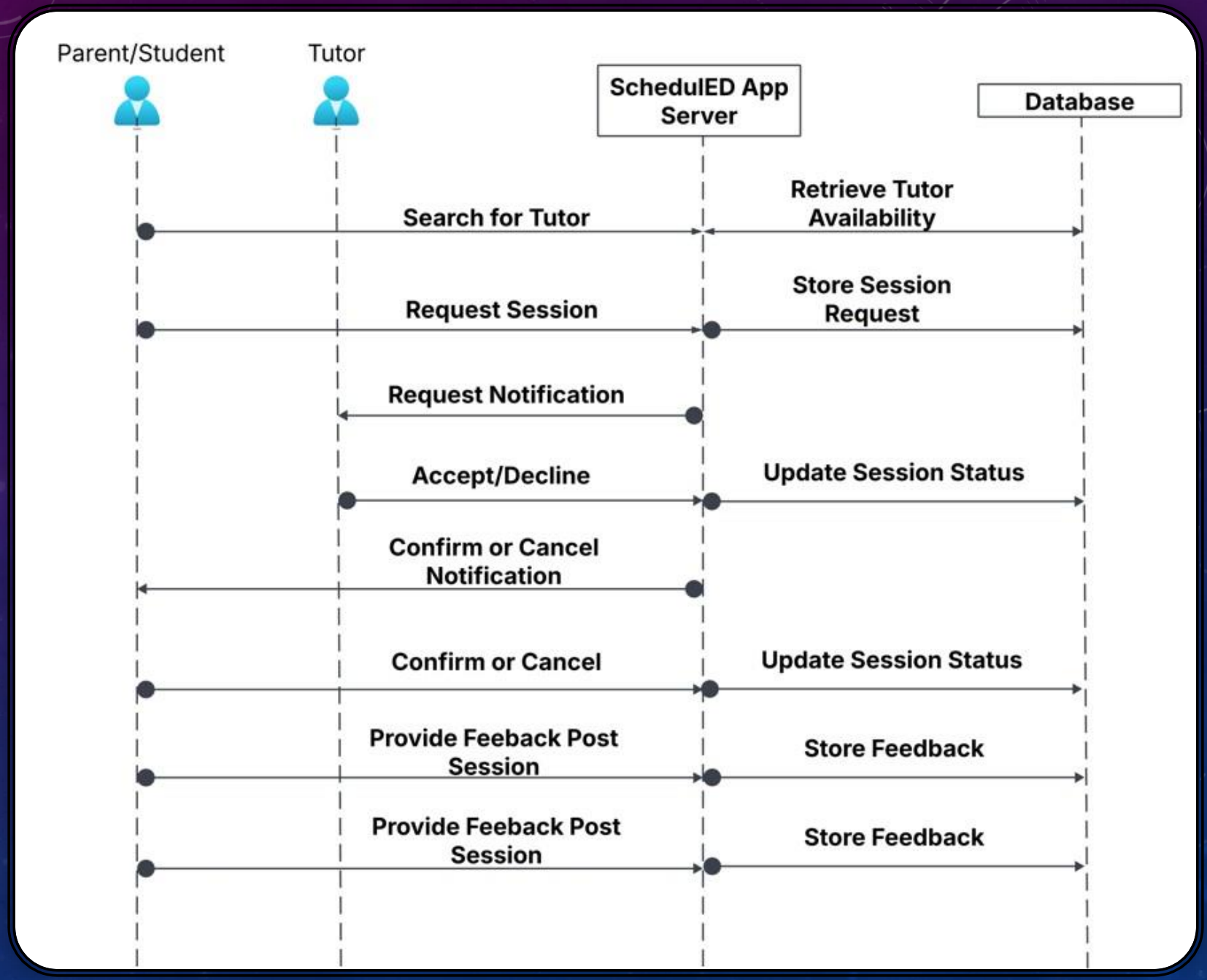
CONTEXT DIAGRAM J



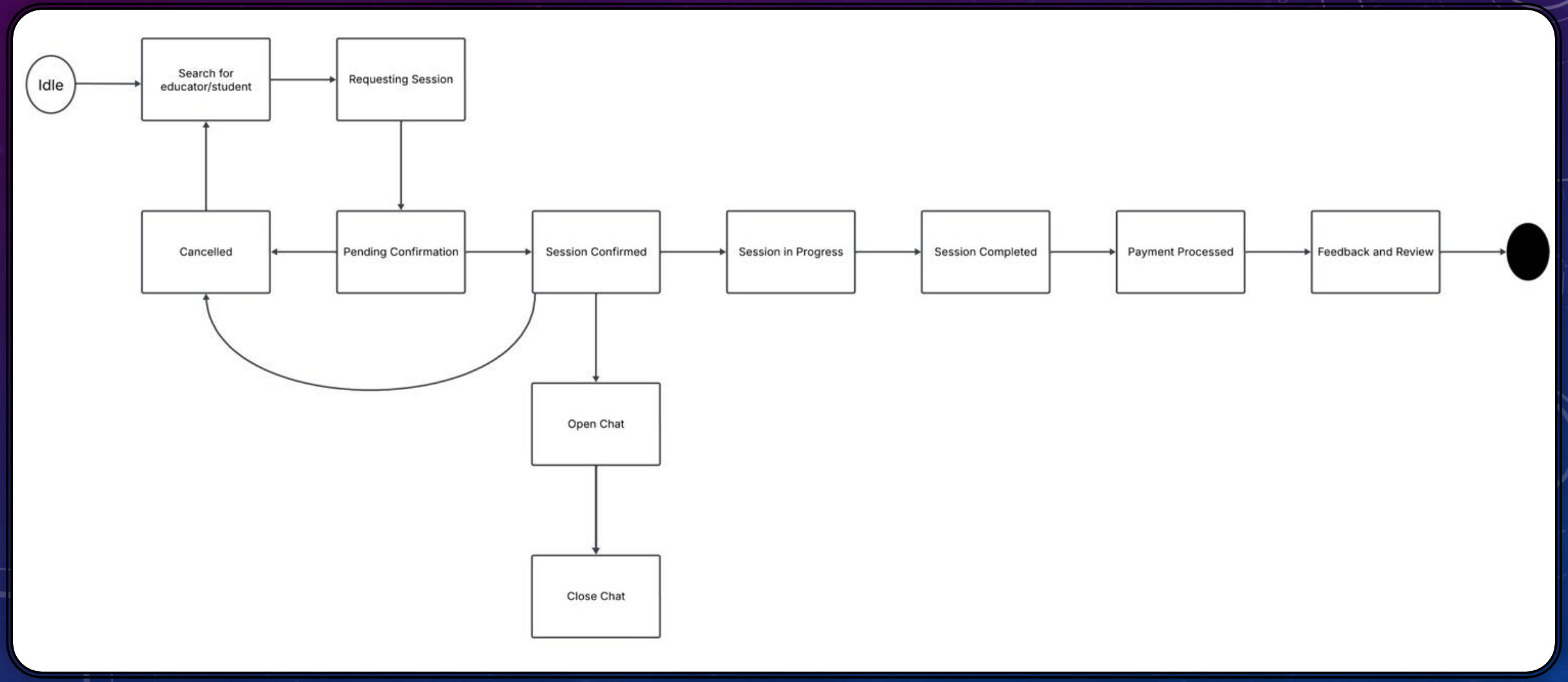
ER DIAGRAM V


Teacher
PK
id
first_name
last_name
email
subject
title
Time Blocks
PK
id
FK1
teacher_id
FK2
students_id
time_start
time_end
location
Schedules
PK
id
FK1
timeblock_id
FK2
student_id
FK3
teacher_id
Students
PK
id
first_name
last_name
email
grade

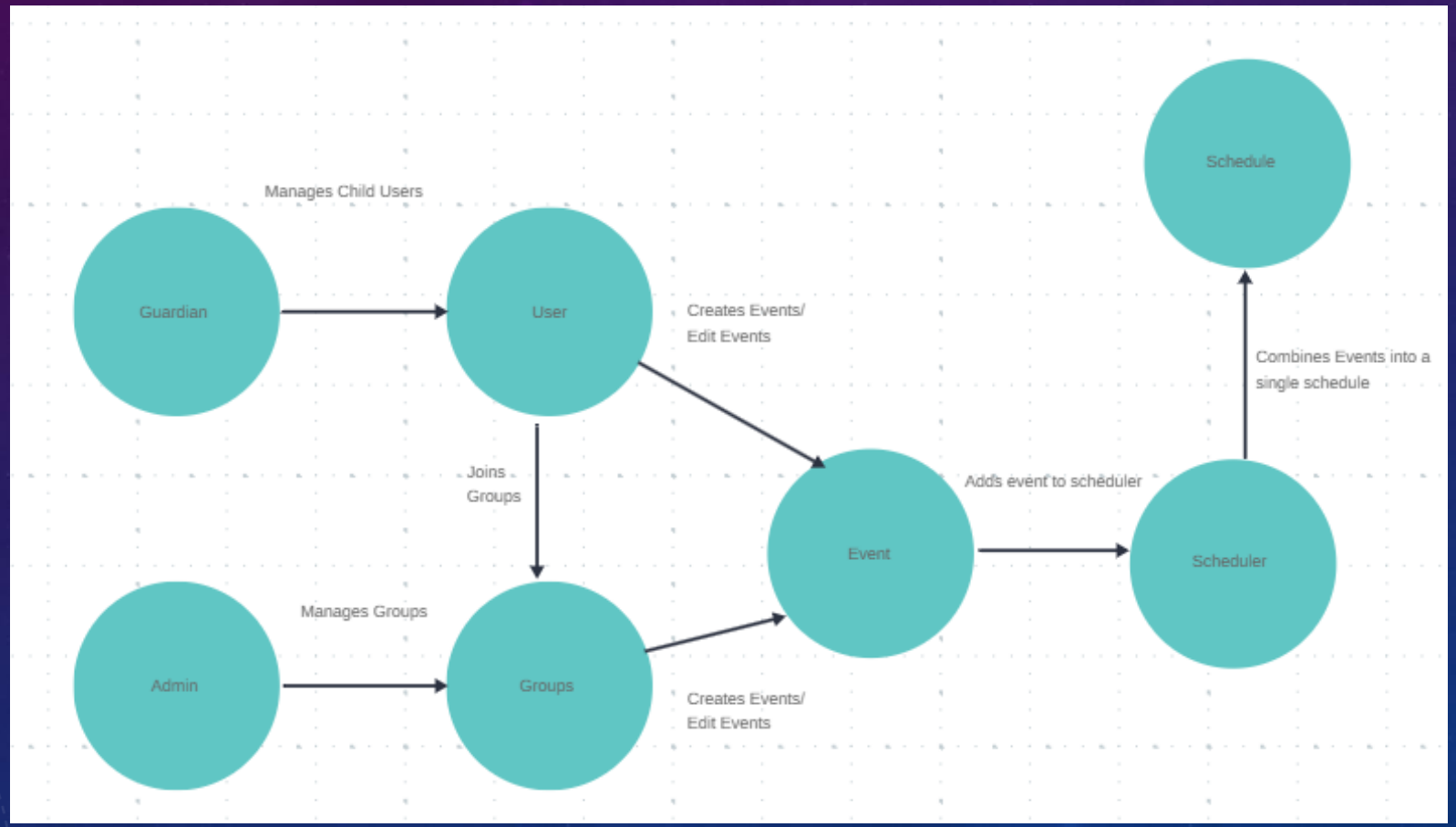
SEQUENCE DIAGRAM T

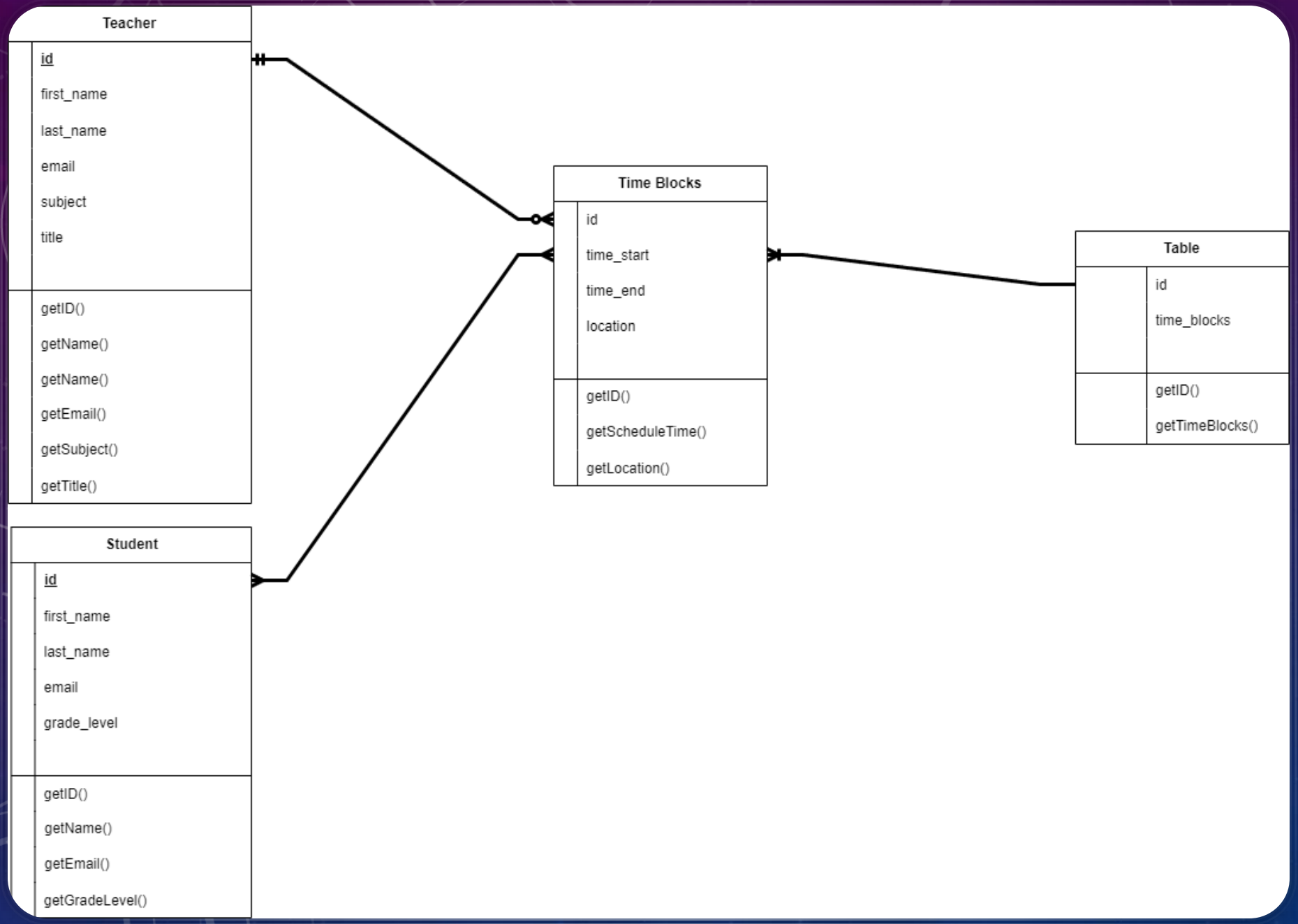


STATE DIAGRAM T



CONCEPT DIAGRAM M





CLASS DIAGRAM V

ID	Executable	US	Acceptance Criteria	Points	Sprint
Task1	Diagrams	As a team, we want to complete our diagrams for visualizing what our project will look like and how it will function	Diagrams are created and approved by the team, clearly showing the project structure and functionality.	3	1
Task2	Product Backlog	As a team, we want to complete our backlog and plan in what sprint we want to complete each feature	Backlog is fully populated with all features, and each feature is assigned to a specific sprint.	2	1
Task3	Frontend and Backend Technologies	As a team, we wanted to agree on the technologies we will use to complete our project.	Team agrees on and documents the frontend and backend technologies to be used for the project.	1	1
Task4	Alogrithms	As a team, we wanted to agree on the algorithms we will use to complete our project.	Team agrees on and documents the algorithms to be used for the project.	1	1
US1	Account Creation	Given I am someone who wants to create an account, when I try to create an account using SSO then I should be able to create an account that saves my data.	User can successfully create an account using SSO, and their data is saved in the database.	7	1
US2	User Login	Given I am a user of the application, when I open the application, I should be able to see a username and password field, and then I should be able to use my username and password to login	User can see login fields and successfully log in using their username and password.	7	1
US3	Home Screen	Given I am a user of the application, when I login, Then I should be able to see the home screen.	User is redirected to the home screen after successful login.	5	1

PRODUCT BACKLOG S

US4	Firebase API	Given I am a user with an account, my account data should be stored in a secured database so that there is no risk of data leak.	User data is stored securely in Firebase, and no unauthorized access is possible.	8	2
US5	Tutor Selection	Given that I am a user of the application, When I login I should be able to see a list of available tutors, and then I should be able to select one that matches my preferences.	User can view a list of tutors and select one based on their preferences.	10	2
US6	Scheduling API	Given that I am a user of the application, When I select my tutor, I should be able to see available time slots on the calender for that selected tutor.	User can view available time slots for the selected tutor on a calendar.	9	2
US7	Availability Setting	Given that I am a tutor, when I log in to my profile I want to be able to set my availability for tutoring sessions so that then the students can book time slots	Tutor can set their availability, and students can book sessions based on the tutor's availability.	8	2
US8	Student Notification	Given that I am a user, I want to recieve reminders for upcoming tutoring sessions so that I do not forget about them	User receives notifications or reminders for upcoming tutoring sessions.	5	2
US9	Tutor Notification	Given that I am a tutor, I want to receive notifications for tutoring requests so that I can comfirm or decline bookings	Tutor receives notifications for tutoring requests and can confirm or decline them.	5	2
US10	Schedule Deletion	Given that I am a user , I want to reschedule or cancel tutoring sessions so that i can adjust if my plans change	User can reschedule or cancel tutoring sessions through the app.	7	2

PRODUCT BACKLOG T

US11	Schedule Statistics	Given that I am a tutor, I want to track the number of sessions/hours that I have worked and calculate my earnings so that I can manage my schedule and income.	Tutor can view statistics on sessions worked and earnings calculated.	9	3
US12	Secure Payment	Given that I am a user, I want to make payments for tutoring sessions through the app so that I can book and pay easily.	User can securely make payments for tutoring sessions within the app.	9	3
US13	Admin Account	Given that I am an admin, I want to have access to all users and session data so that I can manage the platform.	Admin can access and manage all user and session data through the admin panel.	6	3
US14	Billing Settings	Given that I am a tutor, I want to set my hourly rate so that my students know the cost of my sessions beforehand.	Tutor can set and update their hourly rate, which is visible to students.	7	3
US15	User Filtering	Given that I am a user, I want to filter my tutors based on subject so that I can choose a tutor who specializes in the content that I need help in	User can filter tutors by subject to find a tutor specializing in the desired content.	9	3

PRODUCT BACKLOG T

US16	Schedule Setup	Given that I am a user, I want to book multiple tutoring sessions at once so that I can plan ahead for my tutoring sessions.	User can book multiple tutoring sessions in one go.	8	3
US17	Group Session Scheduling	Given that I am a user, I want to join group tutoring sessions so that I can learn in a group setting, which will save me money.	User can join group tutoring sessions and see the cost savings compared to individual sessions.	8	3
US18	Session Note Feature	Given that I am a user, I want to see my session history (Notes of topics covered) so that I can review the topics I have learned.	User can view session history with notes on topics covered.	7	3
US19	File Sharing	Given that I am a tutor, I want to provide learning resources to students so that they can review/practice outside of the tutoring sessions.	Tutor can upload and share learning resources with students, who can access them outside of sessions.	7	3

PRODUCT BACKLOG T

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US3	Home Screen	Given I am a user of the application, when I login, Then I should be able to see the home screen.	User is redirected to the home screen after successful login.	5	1

SPRINT 1 STORIES T

Test Case	Test Case Name	Step Description	Expectation Result	Execution Status
TC_1	Password and Username Displayed	When Visiting Our application, the Username and Password Fields are displayed. There is a "Create Account" Button as an alternative to account creation using SSO.	The Username and Password Field is visible and functional, as well as the "Create Account" option.	Passed
TC_2	SSO Account Creation	1. Create an account or 2. Click create account using email. 3. Create account using your gmail and sign in. 4. Fill out short questionnaire on what you are looking for in the site.	You create your account by either clicking the create account option or by connecting your gmail. After signing in, the questionnaire appears to tailor your profile.	Passed
TC_3	Home Screen Population	1. After signing in succesfully, the home screen will populate displaying "Welcome!" 2. Under the "Welcome!" Sign click on the "Continue to Dashboard" option.	The login will be succseful, then the Welcome screen will be displayed. Then you will click "Continue to dashboard" to search for educators to students	Passed

TEST CASES SPRINT 1 T

TEAM VELOCITY 26/26 STORY POINTS COMPLETED J

Task1: Diagrams are created and approved by the team, clearly showing the project structure and functionality. 3 Story Points Completed

Task2: Backlog is fully populated with all features, and each feature is assigned to a specific sprint.
2 Story Points Completed

Task3: Team agrees on and documents the frontend and backend technologies to be used for the project.
1 Story Point Completed

Task4: Team agrees on and documents the algorithms to be used for the project.
1 Story Point Completed

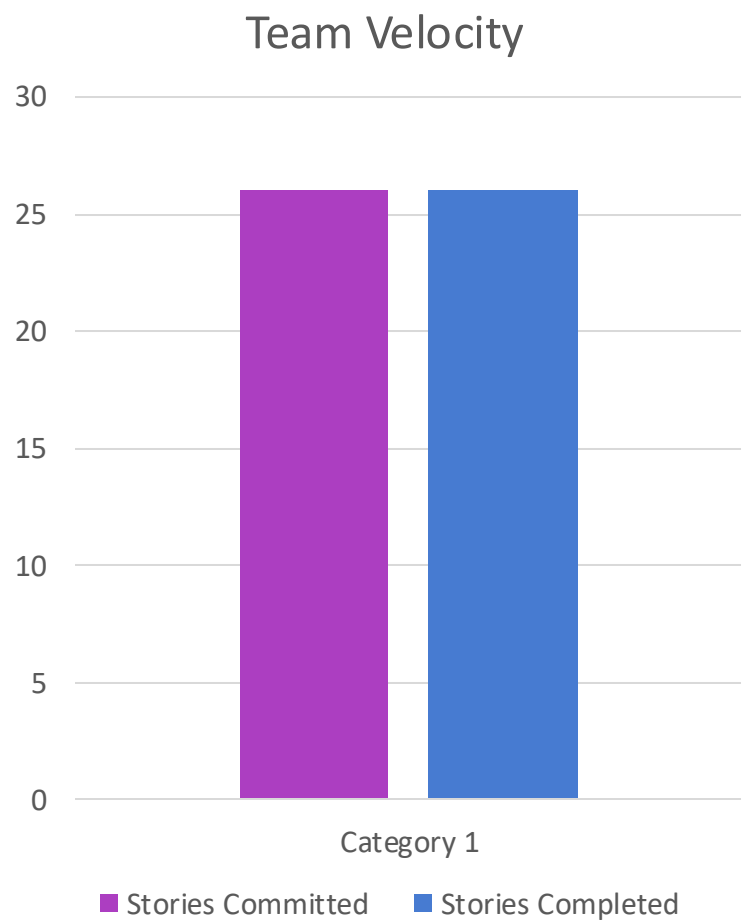
US1: User can successfully create an account using SSO, and their data is saved in the database.
7 Story Points Completed

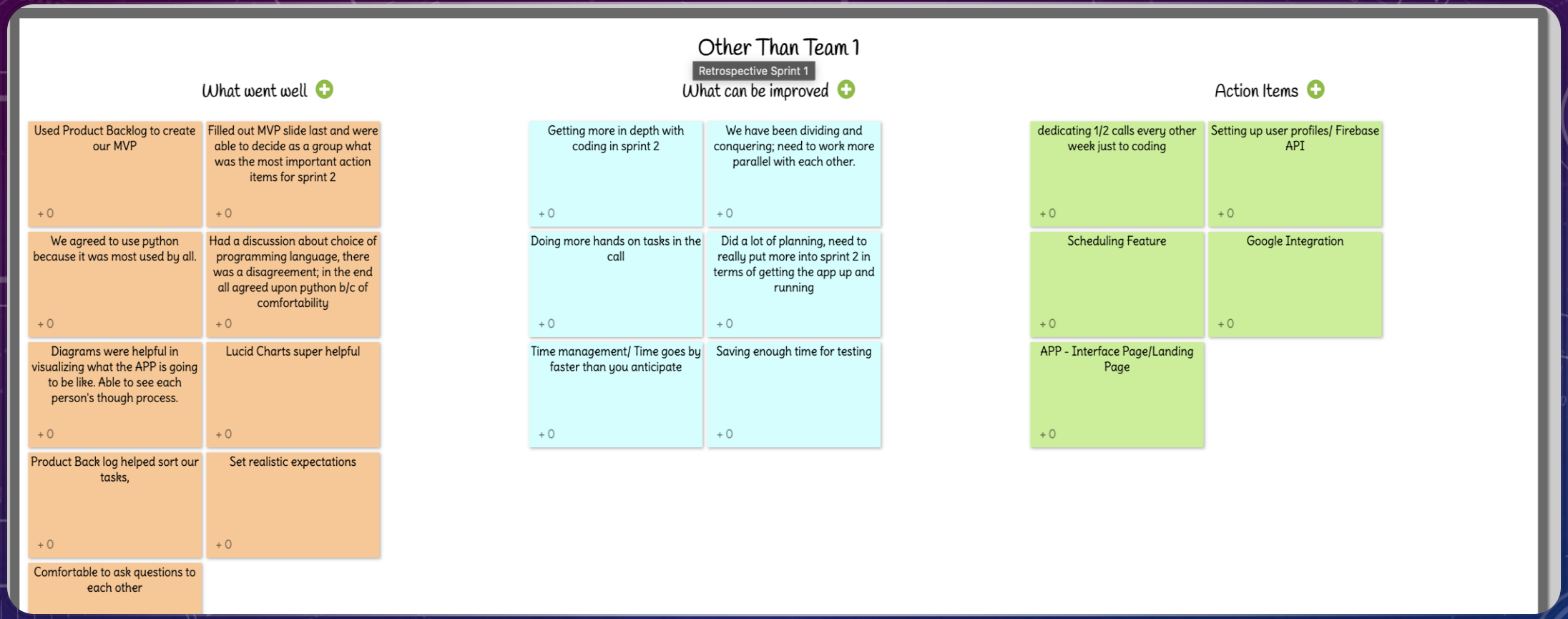
US2: User can see login fields and successfully log in using their username and password.
7 Story Points Completed

US3: User is redirected to the home screen after successful login.
5 Story Points Completed

METRICS COMMITTED/COMPLETED RATIO J

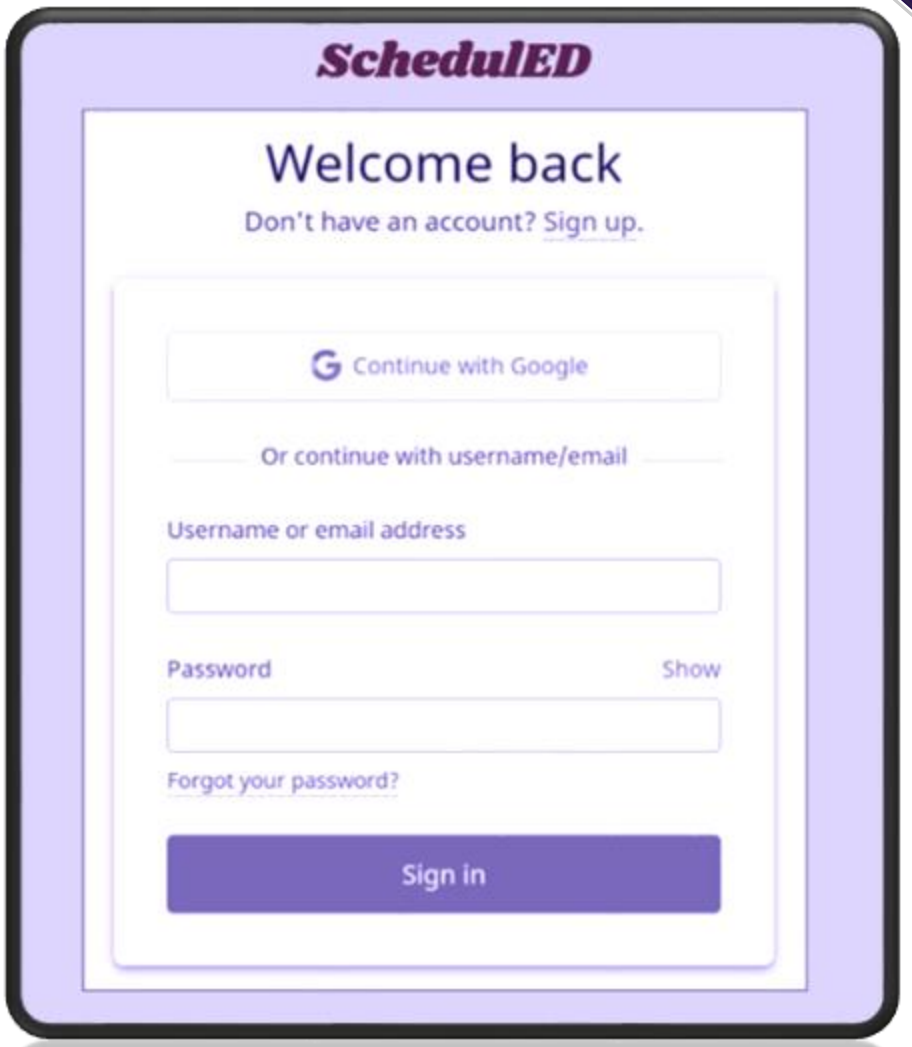
26 Story Points completed out of
26 Story Points = 100% Completed



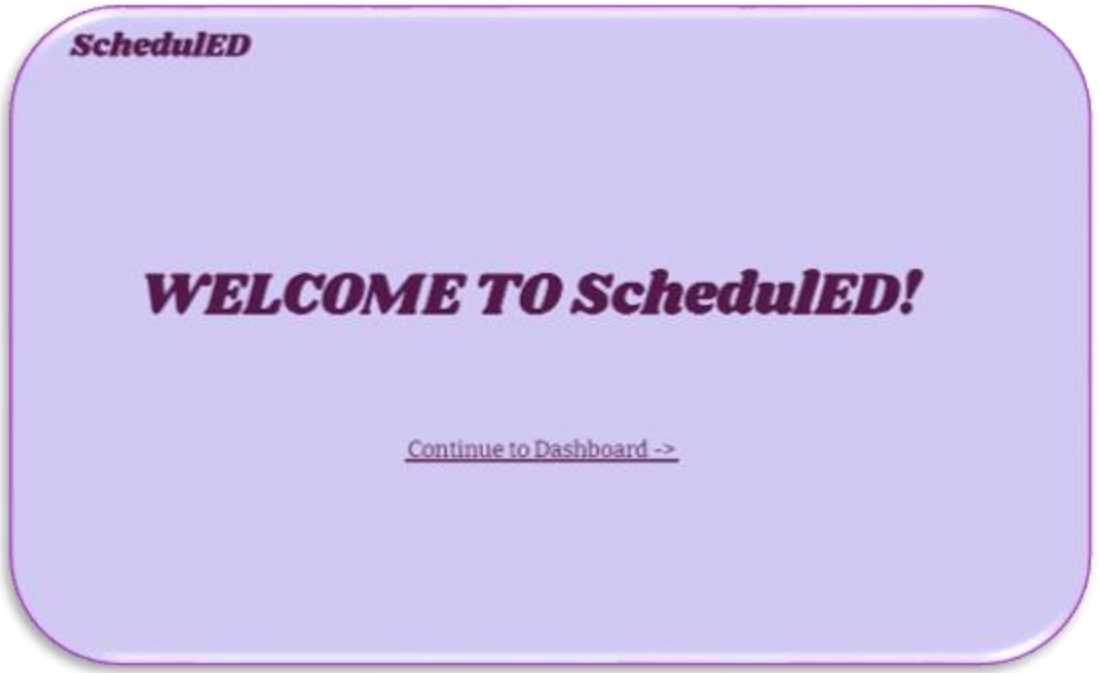


RETROSPECTIVE S

PROJECT DEMO M



PROJECT DEMO M



GROUP WIKI LINK

https://github.com/htmw/2025SA-Team1/wiki