

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/API
- 9. Algorithms
- 10. Sprint 1 and 2 Summary
- 11. Product Backlog/Sprint 3 Test cases/Sprint 3 Stories
- 12. Sprint 3 Completed/Not Completed
- 13. Metrics/Team Velocity
- 14. Burndown Charts
- 15. Retrospective
- 16. Project Demo and APIs
- 17. Group Wiki Page

#### TEAM MEMBERS T











Sabrina Scaccio: Scrum Master / Developer

Thomas D'Anna: Front End Developer

Justin Rivera: Victor Zapata III: Front End DeveloperBack End Developer

Michael Silva: Back End Developer

#### IMPROVEMENTS J

- The user stories were not written in the right format. We still had Given-then-when as user stories. Given-Then-When is a format for writing acceptance criteria not user stories.
- Story Points need to be in Fibonacci numbers. We had estimation points that are not in Fibonacci numbers.
- Missing Recap slides for Sprint 1.
- When presenting the burndown, we need to tell the story of how the team progressed or fell behind the schedule.
- API/Code slides need to present any API and elaborate on the code.

# PROJECT DESCRIPTION J

•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 J

Team communication will occur using Microsoft Teams/I-Message

Open communication with each other when problems do arise, ecspecially with our code.

Meetings will be held using Microsoft Teams. We will meet weekly on Wednesdays/Sundays @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. J

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 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 S



**<u>Kathy</u>** - 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 lastminute 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 S



**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 S



**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 (User Profile and Registration)
- Tag based Search System (Subject and Time Preference)
- Schedule/Book Sessions
- Google Integration

## TECHNOLOGY M

Frontend

Backend







Firebase

## FIREBASE REALTIME DATABASE API V

- Used to store user information.
  - o Names
  - o IDS
  - o Role
  - o Subjects
- Used to store schedule information
  - o Start and End Time
  - o People involved



```
cred = credentials.Certificate('project\\credentials.json')
firebase_admin.initialize_app(cred)
firebase = pyrebase.initialize_app(firebaseConfig)

authpy = firebase.auth()
db = firebase.database()
```

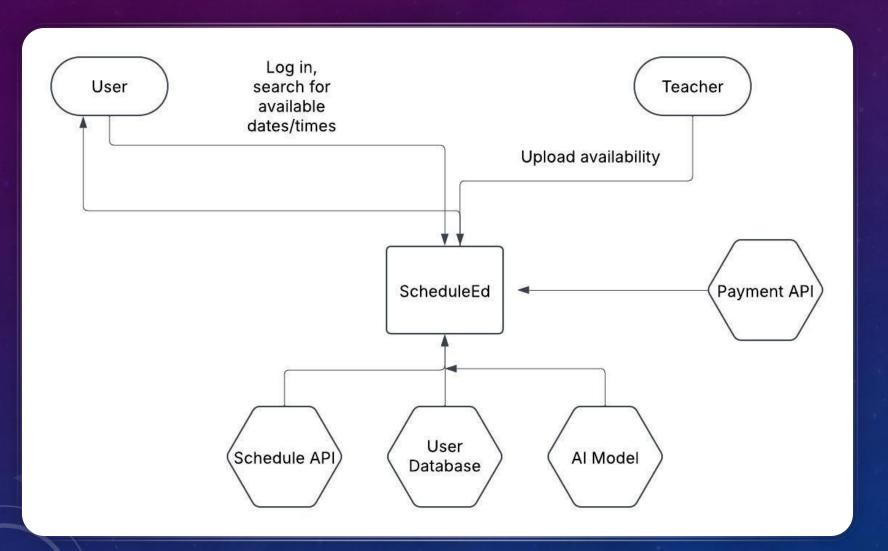
#### GOOGLE CALENDAR API M

```
def oauth2callback():
    flow.redirect uri = REDIRECT URI
    flow.fetch_token(authorization_response=request.url)
    credentials = flow.credentials
    session["credentials"] = {
        "token": credentials.token,
        "refresh_token": credentials.refresh_token,
        "token uri": credentials.token uri,
        "client id": credentials.client id,
        "client secret": credentials.client secret,
        "scopes": credentials.scopes
    headers = {
    'Authorization': f'Bearer {credentials.token}'
    response = requests.get(
        'https://www.googleapis.com/oauth2/v1/userinfo?alt=json',
        headers=headers
    ).json()
    session["userInfo"] = response
    print(search for users with tags([session['userInfo']['email']]))
    if(search for users with tags([session['userInfo']['email']]) == []):
        print("new account")
        return redirect(url for("update profile"))
```

## ALGORITHM V

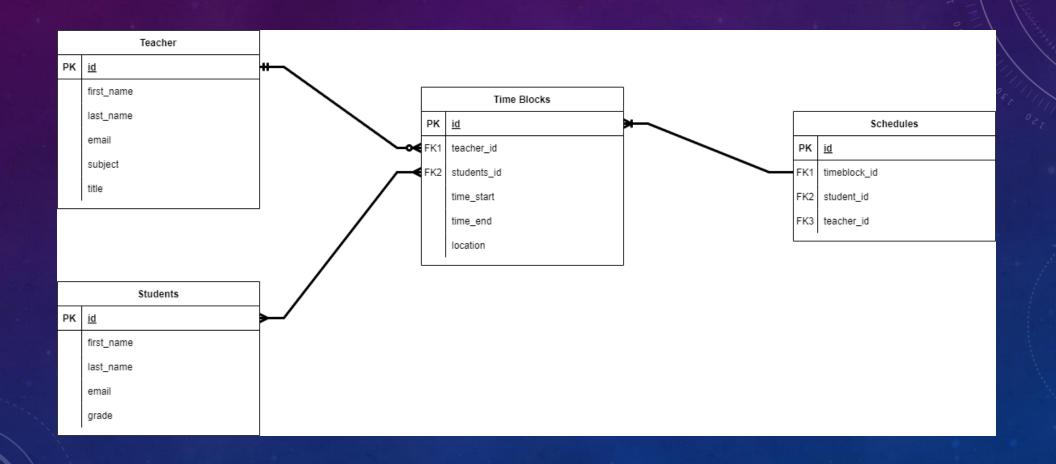
- Content-Based Filtering
  - o Based on Tags, the code searches for users that meet those requirements.
  - Goes through the entire user's section in the database, searching for user accounts that have those tags and returns a list of those users.



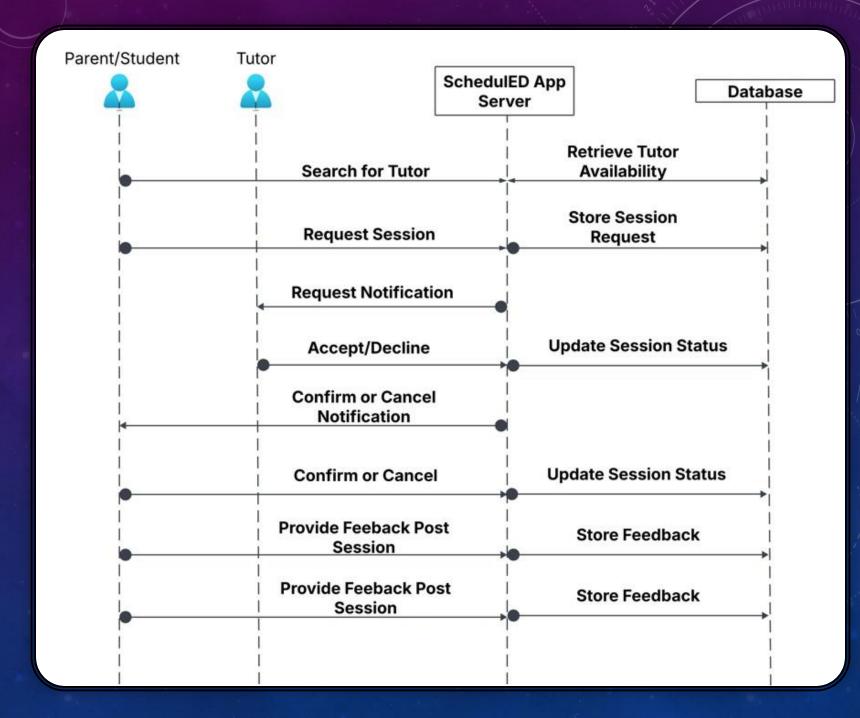


## CONTEXT DIAGRAM

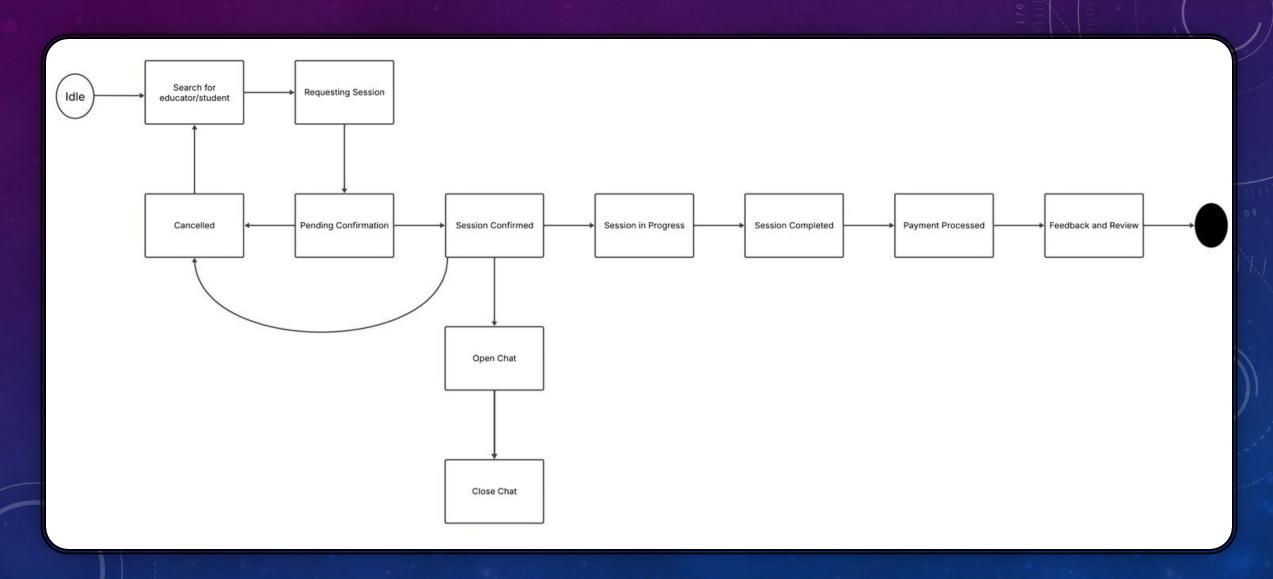
#### ER DIAGRAM



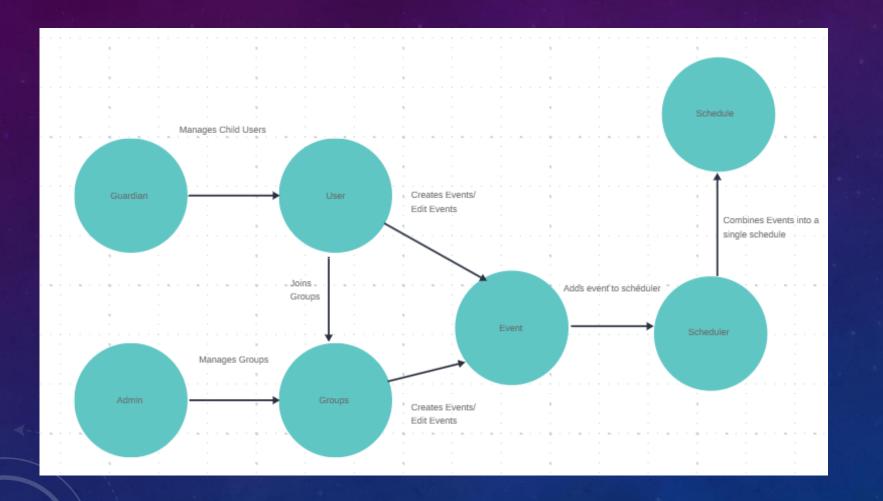
SEQUENCE DIAGRAM

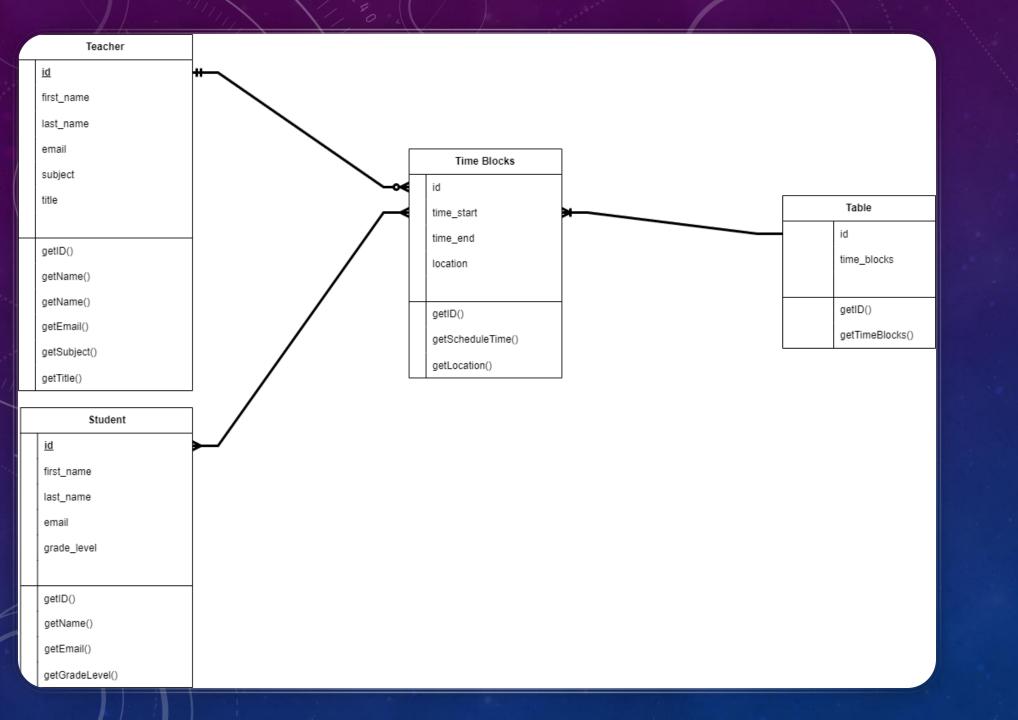


#### STATE DIAGRAM



## CONCEPT DIAGRAM





### CLASS DIAGRAM

#### SPRINT 1 RECAP S

- Developed all our needed diagrams
- Created our product backlog
- Decided on what technologies to use to develop the code
- Decided on what algorithms to use
- Account Creation

#### SPRINT 2 RECAP S

- User Login
- Created a Home Screen
- Firebase API was implemented
- User Selection Role

ID	Executable	US	Acceptance Criteria	Points	Sprint
		As a team, we want to complete our			
			Given we create the Diagrams and they approved by the team, When creating our application,		
Task1	Diagrams	project will look like and how it will function.	Then we will refer back to these diagrams to help structure our app.	3	1
		As a team, we want to complete our backlog	Given we create the Backlog, When it is fully populated with all features, and each feature is		
Task2	Product Backlog		assigned to a specific sprint, Then we will complete each task by the appropriate sprint end.		2 1
	- Touties Ducking				
		As a team, we want to agree on the			
Task3	Frentend and Backend Technologies	technologies we will use to complete our project and what works best for all.	Given the team agrees on and documents the frontend and backend technologies, When they are needed for specific featers, Then the team will use those technologies.		
TUSKO	Frontend and Backend Technologies	project and what works best for all.	needed for specific leaders, frien the team will use those technologies.		1
		As a team, we want to agree on the			
		,	Given that we agree on the algorithims, When we will need those algorithims, Then we will utilize		
Task4	Alogrithms	project.	them for our application.		1
			St. II		
			Given I'm on the registration screen, Then I see an option to "Sign up with SSO". When I select an SSO provider (ex. Google) and successfully authenticate, Then a new account is created in the system using the data		
			returned by the provider And I'm redirected to my dashboard or welcome page. Given this is my first time		
			signing up via SSO When my account is created, Then my email, name, and any other available profile fields		
110.4			are stored in my user profile. When I later return and sign in via the same SSO provider, Then I am able to log		
US 1	Account Creation	is saved automatically.	in successfully without creating a duplicate account		3 1
		As a user of the application, I want to see	Given I open the application, Then I see clearly labeled "Username" and "Password" input fields,		
		username and password fields as soon as I	When I enter a valid username and password and submit, Then I am successfully logged in. When I		
US 2	User Login	open the app so that I can enter my credentials and log in.	enter invalid credentials and submit, Then I receive an appropriate error message and remain on the login screen	,	1
00.2	Osei Logiii	credentials and log in.	uie iogiii sciecii		1
		As a user of the application, I want to be			
		taken to the home screen after I log in so	Given I'm on the login screen, When I enter valid credentials and tap "Log In", Then I am		
116.3	Home Careen	that I can access the app's main features	redirected to the home screen. Given I enter invalid credentials, When I tap "Log In", Then I remain		
US 3	Home Screen	immediately.	on the login screen, And I see an error message explaining my credentials were incorrect		1

## PRODUCT BACKLOG T

US 4	Firebase API	As a registered user, I want my account data to be stored in a secure database so that it cannot be leaked or accessed by unauthorized parties.	Given I submit or update my account information, When the system writes to the database, Then all data is encrypted at rest.		8	2
US 5	User Selection	As a user of the application, I want to see a list of available tutors after I log in so that I can select the one that best matches my preferences.	Given I have successfully logged in, When the home screen loads, Then I see a section titled "Available Tutors" displaying a list of tutor profiles. Given there are tutors in the system, When the list is displayed, Then each tutor entry shows at least the tutor's name, subjects, and next available time slot.		В	2
US 6	Scheduling API	As a user of the application, I want to see a tutor's available time slots on a calendar after I select them so that I can choose a convenient appointment time.	Given I have successfully logged in and navigated to the "Available Tutors" list, When I tap or click on a tutor's name, Then I am taken to a calendar view showing only that tutor's available time slots.	1	3	2
US 7	Availability Setting	As a tutor, I want to set my availability for tutoring sessions when I log in to my profile so that students can see and book the times I'm free.	Given I have successfully logged in as a tutor, When I navigate to the "Availability" or "Schedule" section of my profile, Then I see a calendar showing the current week's dates and times. Given I have set availability, When a student views my profile or the list of tutors, Then they only see the time slots I've marked as available for booking		8	2
US 8	Student Notification	As a user, I want to receive reminders for upcoming tutoring sessions so that I do not forget about them.	Given I have one or more upcoming tutoring sessions scheduled, When it is 24 hours before the start time of any session, Then I receive a reminder notification (via my chosen channel)		5	2
US 9	Tutor Notification	As a tutor, I want to receive notifications for new tutoring requests so that I can promptly confirm or decline each booking.	Given a student submits a request for a tutoring session, When the request is successfully created, Then I receive a notification.		5	2

## PRODUCT BACKLOG T

US 10  Schedule Deletion  As a user of the application, I want to reschedule or cancel my strong sessions subtraction entry shows "Reschedule" and "Cancel" controls. When I clack "Reschedule" "Cancel on a session, Then I metate to a calendar view showing that tutor's available slots, And I can essential in the strong of that I can adjust if my plans change.  As an admin, I want to access all users and session data so that I can manage the platform effectively.  As a user, I want to filter futors by subject so that I can exclude plant in the topic from the strong of the strong sessions in the topic from the strong of the strong sessions in one flow to that I can equilibrium to select and blook multiple to the spirit or the topic from the strong of the strong sessions in one flow to that I can plan my learning schedule in advance.  US 12  User Filtering  As a user, I want to select and blook multiple to the spirit or the topic from the strong sessions in one flow to that I can plan my learning schedule in advance.  As a user, I want to pion group tutoring sessions in one flow to that I can plan my learning schedule in advance.  As a user, I want to pion group tutoring sessions so that I can learn in a collaborative sessions so that I can learn in a collaborative sessions so that I can learn in a collaborative sessions so that I can learn in a collaborative sessions.  Civen I am logged in with an admin account. When I navigate to the Admin Dashboard, Then I see an interface for managing resources (lightighighted). When I continue clicking additional available slots, Then I see an interface for managing resources (lightighighted). When I choose to upload a file (e.g. PDF, DOCC, PTP) or ad an external list, Then I can assign those resources as they papear only for the linearing resources (lighted, if when I navigate to the "Resources" section of my dashboard. Then I see an interface for managing resources (lighted, if when I can assign those resources as they papear only for the linearing respirate sections. The I c			-				
As a user of the application, I want to reschedule or cracelling turboring sessions so that I can adjust if my plans change.  US 10  Schedule Detection  As an admin, I want to access all users and session flat I can manage the platform effectively.  As a user, I want to filter turbor by subject so that I can guidy find someone who specializes in the topic I need help with.  As a user, I want to special in methods and some flow so that I can plans when the platform of the pl							
US 10 Schedule Deletion that I can adjust if my plans change.  As an admin I, went to access all users and season data so that I can manage the platform effectively.  US 11 Admin Account  As a user, I want to filter tutors by subject so that I can juddy find someone with the possible or that I can juddy find someone with the provider in the topic I need holp with.  US 12 User Filtering  As a user, I want to provide learning schedule in advance.  As a user, I want to join group butdoring sessions so that I can learn in a colubborative setting and save money on each session.  US 14 Group Session Scheduling  As a user, I want to join group butdoring sessions so that I can learn in a colubborative acting and save money on each session.  Given I am logged in and on the "Available Tutors" screen, When I view the filter controls, Then I see a "Subject" dropdown or checklist listing all offered subjects 8 3 3  US 13 Schedule Setup  US 14 Group Session Scheduling  As a user, I want to join group butdoring sessions so that I can learn in a colubborative acting and save money on each session.  Given I am logged in, When I continue clicking additional available slots, Then each chosen slot is added to my "Selected Sessions" in the "Group Sessions", Then I see a list of all upcoming group utoring sessions, each shewing tutor name, subject.  Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group utoring sessions, each shewing tutor name, subject.  Given I am logged in, When I navigate to the "Resources" section of my dashboard. Then I see an interface for managing resources (pilead, list), When I choose species assions and the file group of a demonstrative provide learning resources to subset a species assisting. Then I can align those resources as they appear only for the intended recipients.				·			
US 10 Schedule Deletion that I can adjust if my plans change. that my session has been rescheduled. 8 2  As an admin, I want to access all users and session data to that I can manage the platform effectively.  US 11 Admin Account  US 12 User Filtering Specializes in the topic I need help with.  As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  US 13 Schedule Sotup  US 14 Group Session Scheduling  As a user, I want to select and book multiple sessions so that I can learn in a collaborative setting and assee money on each session.  US 14 Group Session Scheduling  As a tutor, I want to provide learning resources to students as that they can were resources to students as that they can were resources to students as that they can were resources to students or specific sessions, Then I can easign those resources so they appear only for the intended meriginents.			• • • • • • • • • • • • • • • • • • • •	· ·			
As an admin, I want to access all users and session data so that I can manage the platform effectively.  US 11 Admin Account  As a user, I want to filter tutors by subject so that I can justify find someone who specializes in the topic I need help with.  As a user, I want to select and book multiple tutoring sessions in one flow so that I can judy find someone who specializes in the topic I need help with.  As a user, I want to select and book multiple tutoring sessions in one flow so that I can judy find someone who specializes in the topic I need help with.  US 13 Schedule Setup  As a user, I want to select and book multiple tutoring sessions in one flow so that I can judy find someone who specializes in the topic I need help with.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  US 14 Group Session Scheduling  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor nave, subject, to "Group Sessions of the fine securics" section of my distributed. Then I are an entitlement of the management of the provide learning resources to students so that they can review and practice outleded of tutoring sessions. Then I can assign those resources to they appear only for the intended recources. When I select one or more required. The securical section or or with the substants or specific sessions. Then I can assign those resources to they appear only for the intended recources.	US 10 5		, ,	· ·	8	3	2
US 11 Admin Account  As a user, I want to provide learning sessions of that I can paraget the platform effectively.  Given I'm logged in with an admin account, When I navigate to the Admin Dashboard, Then I see a "Users" section listing every user with columns for Name, Email, Role, and Account Status.  As a user, I want to filter tutors by subject so that I can quickly find someone who specializes in the topic I need help with.  As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative session so that I can learn in a collaborative session, each showing tutor name, subject.  Given I'm on a tutor's calendar view, When I click or tap on one available time slot, Then that slot is selected (highlighted). When I continue clicking additional available slots, Then each chosen slot is added to my "Selected Sessions" list added to my "Selected Sessions". Then I see a list of all upcoming group tutoring sessions so that I can learn in a collaborative session, each showing tutor name, subject.  Given I'm logged in as a tutor, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions on the continue clicking additional available slots, Then ach chosen slot tutoring sessions, each showing tutor name, subject.  Given I'm logged in a tutor, When I navigate to the "Resources" section of my dashboard. Then I see an interface for managing resources (spload, link), When I choose to upload a file (e.g., PDF, DOCK, PPT) or add an external link. Then I can provide a talt. Given I have uploaded or linked resources, When I select one or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients.				•			
US 11 Admin Account  As a user, I want to provide learning sessions of that I can paraget the platform effectively.  Given I'm logged in with an admin account, When I navigate to the Admin Dashboard, Then I see a "Users" section listing every user with columns for Name, Email, Role, and Account Status.  As a user, I want to filter tutors by subject so that I can quickly find someone who specializes in the topic I need help with.  As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative session so that I can learn in a collaborative session, each showing tutor name, subject.  Given I'm on a tutor's calendar view, When I click or tap on one available time slot, Then that slot is selected (highlighted). When I continue clicking additional available slots, Then each chosen slot is added to my "Selected Sessions" list added to my "Selected Sessions". Then I see a list of all upcoming group tutoring sessions so that I can learn in a collaborative session, each showing tutor name, subject.  Given I'm logged in as a tutor, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions on the continue clicking additional available slots, Then ach chosen slot tutoring sessions, each showing tutor name, subject.  Given I'm logged in a tutor, When I navigate to the "Resources" section of my dashboard. Then I see an interface for managing resources (spload, link), When I choose to upload a file (e.g., PDF, DOCK, PPT) or add an external link. Then I can provide a talt. Given I have uploaded or linked resources, When I select one or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients.							
US 11 Admin Account  As a user, I want to filter tutors by subject so that I can quickly find someone who specializes in the topic I need help with.  US 12 User Filtering  As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  US 13 Schedule Setup  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to provide learning resources to students so that I can learn in a collaborative setting and save money on each session.  As a tutor, I want to provide learning resources to students so that they can review and practice outside of tutoring resources to students or specific sessions, Then I can assign those resources so they appear only for the intended recipients			•				
US 11 Admin Account  As a user, I want to filter tutors by subject so that I can learn in a collaborative setting and save money on each session.  US 12 User Filtering  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to provide learning resources to students so that I can learn in a collaborative resources to students so that thet year review and practice outside of tutoring resources to students so that they can review and practice outside of tutoring resources to students so that they can review and practice outside of tutoring of the provides learning resources to students so that they can review and practice outside of tutoring resources to students so that they can review and practice outside of tutoring sessions. Then I can provide a title. Given I have uploaded or linked resources, When I see an interface for managing resources (upload, link). When I can assign those resources so they appear only for the intended receiver and practice outside of tutoring receivers and practice outside of tutoring sessions. Then I can assign those resources so they appear only for the intended receivers and practice outside of tutoring receivers.			<u> </u>				
As a user, I want to filter tutors by subject so that I can quickly find someone who specializes in the topic I need help with.  US 12  User Filtering  As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  US 13  Schedule Setup  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  Given I am logged in and on the "Available Tutors" screen, When I view the filter controls, Then I see a "Subject" dropdown or checklist listing all offered subjects \$\frac{1}{2}\$ seed a "Subject" dropdown or checklist listing all offered subjects \$\frac{2}{2}\$ seed a "Subject" dropdown or checklist listing all offered subjects \$\frac{2}{2}\$ seed a "Subject" dropdown or checklist listing all offered subjects \$\frac{2}{2}\$ seed a "Subject" dropdown or checklist listing all offered subjects \$\frac{2}{2}\$ seed a "Subject" dropdown or checklist listing all offered subjects \$\frac{2}{2}\$ seed a "Subject" dropdown or checklist listing all offered subjects \$\frac{2}{2}\$ seed a "Subject" dropdown or checklist listing all offered subjects \$\frac{2}{2}\$ seed a "Subject" dropdown or checklist listing all offered subjects \$\frac{2}{			pationii cirocavely.	Given I'm logged in with an admin account, When I navigate to the Admin Dashboard, Then I see a			
US 12 User Filtering specializes in the topic I need help with.  As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a tutor, I want to provide learning resources to students so that I they can review and practice outside of tutoring sessions, Then I an assign those resources so they appear only for the intended recipients	US 11 F	Admin Account		"Users" section listing every user with columns for Name, Email, Role, and Account Status.		5	3
US 12 User Filtering specializes in the topic I need help with.  As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a tutor, I want to provide learning resources to students so that I they can review and practice outside of tutoring sessions, Then I an assign those resources so they appear only for the intended recipients							
US 12 User Filtering specializes in the topic I need help with.  As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a tutor, I want to provide learning resources to students so that I they can review and practice outside of tutoring sessions, Then I an assign those resources so they appear only for the intended recipients							
US 12 User Filtering specializes in the topic I need help with.  As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a tutor, I want to provide learning resources to students so that I they can review and practice outside of tutoring sessions, Then I an assign those resources so they appear only for the intended recipients							
US 12 User Filtering specializes in the topic I need help with.  As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  US 13 Schedule Setup Schedule in advance.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  Given I am logged in, When I continue clicking additional available slots, Then each chosen slot is added to my "Selected Sessions" list  Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor name, subject,  Given I m logged in as a tutor, When I navigate to the "Resources" section of my dashboard. Then I see an interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients				Given Lam logged in and on the "Available Tutors" screen. When I view the filter controls. Then I			
As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  Given I m logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor name, subject,  Given I m logged in as a tutor, When I navigate to the "Resources" section of my dashboard. Then I see an interface for managing resources (upload, link), When I choose to upload a file (e.g., PDF, DOCK, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I see or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients	US 12			**		3	3
US 13  Schedule Setup  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a tutor, I want to provide learning resources to students so that they can review and practice outside of tutoring subsciences to students or specific sessions, Then I can assign those resources so they appear only for the intended recipients  is selected (highlighted). When I continue clicking additional available slots, Then each chosen slot is added to my "Selected Sessions" list  8 3  Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor name, subject,  8 3  Given I'm logged in as a tutor, When I navigate to the "Resources" section of my dashboard, Then I see an interface for managing resources (upload, link), When I choose to uploaded a file (e.g., PDF, DCX, PDF) or add an external link, Then I can provide a title. Given I have uploaded or indeed resources, When I select one or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients		- Table 1		,			
US 13  Schedule Setup  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a tutor, I want to provide learning resources to students so that they can review and practice outside of tutoring subsciences to students or specific sessions, Then I can assign those resources so they appear only for the intended recipients  is selected (highlighted). When I continue clicking additional available slots, Then each chosen slot is added to my "Selected Sessions" list  8 3  Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor name, subject,  8 3  Given I'm logged in as a tutor, When I navigate to the "Resources" section of my dashboard, Then I see an interface for managing resources (upload, link), When I choose to uploaded a file (e.g., PDF, DCX, PDF) or add an external link, Then I can provide a title. Given I have uploaded or indeed resources, When I select one or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients							
US 13  Schedule Setup  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  As a tutor, I want to provide learning resources to students so that they can review and practice outside of tutoring subsciences to students or specific sessions, Then I can assign those resources so they appear only for the intended recipients  is selected (highlighted). When I continue clicking additional available slots, Then each chosen slot is added to my "Selected Sessions" list  8 3  Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor name, subject,  8 3  Given I'm logged in as a tutor, When I navigate to the "Resources" section of my dashboard, Then I see an interface for managing resources (upload, link), When I choose to uploaded a file (e.g., PDF, DCX, PDF) or add an external link, Then I can provide a title. Given I have uploaded or indeed resources, When I select one or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients				Given I'm on a tutor's calendar view When I click or tan on one available time slot. Then that slot			
US 13 Schedule Setup plan my learning schedule in advance. is added to my "Selected Sessions" list 8 3  As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.  Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor name, subject,  Given I'm logged in as a tutor, When I navigate to the "Resources" section of my dashboard, Then I see an interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients			·	•			
Sessions so that I can learn in a collaborative setting and save money on each session.  Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor name, subject,  Given I'm logged in as a tutor, When I navigate to the "Resources" section of my dashboard, Then I see an interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or more students so that they can review and practice outside of tutoring	US 13		-		8	3	3
Sessions so that I can learn in a collaborative setting and save money on each session.  Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor name, subject,  Given I'm logged in as a tutor, When I navigate to the "Resources" section of my dashboard, Then I see an interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or more students so that they can review and practice outside of tutoring							
Sessions so that I can learn in a collaborative setting and save money on each session.  Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor name, subject,  Given I'm logged in as a tutor, When I navigate to the "Resources" section of my dashboard, Then I see an interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or more students so that they can review and practice outside of tutoring							
US 14 Group Session Scheduling setting and save money on each session. tutoring sessions, each showing tutor name, subject, 8 3  Given I'm logged in as a tutor, When I navigate to the "Resources" section of my dashboard, Then I see an interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients							
Given I'm logged in as a tutor, When I navigate to the "Resources" section of my dashboard, Then I see an interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients	110.44						2
interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or  As a tutor, I want to provide learning resources to students so that they can review and practice outside of tutoring	US 14	Group Session Scheduling	setting and save money on each session.	tutoring sessions, each showing tutor name, subject,	8	3	3
interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or  As a tutor, I want to provide learning resources to students so that they can review and practice outside of tutoring						Т	
interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or  As a tutor, I want to provide learning resources to students so that they can review and practice outside of tutoring				Given [m logged in as a tutor. When I navigate to the "Recourses" section of my dashboard. Then I see an			
As a tutor, I want to provide learning more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients review and practice outside of tutoring							
resources to students so that they can recipients review and practice outside of tutoring							
review and practice outside of tutoring							
US 15   File Sharing   sessions.   8   3			,				
	US 15	File Sharing	sessions.			В	3

#### PRODUCT BACKLOG T

## SPRINT 3 USER STORIES AND ROLLOVER FROM SPRINT 2 STORIES S

					V2////	
US 6	Scheduling API	As a user of the application, I want to see a tutor's available time slots on a calendar after I select them so that I can choose a convenient appointment time.	Given I have successfully logged in and navigated to the "Available Tutors" list, When I tap or click on a tutor's name, Then I am taken to a calendar view showing only that tutor's available time slots.	13		2
US 7	Availability Setting	As a tutor, I want to set my availability for tutoring sessions when I log in to my profile so that students can see and book the times I'm free.	Given I have successfully logged in as a tutor, When I navigate to the "Availability" or "Schedule" section of my profile, Then I see a calendar showing the current week's dates and times. Given I have set availability, When a student views my profile or the list of tutors, Then they only see the time slots I've marked as available for booking	8		2
US 8	Student Notification	As a user, I want to receive reminders for upcoming tutoring sessions so that I do not forget about them.	Given I have one or more upcoming tutoring sessions scheduled, When it is 24 hours before the start time of any session, Then I receive a reminder notification (via my chosen channel)	5		2
US 9	Tutor Notification	As a tutor, I want to receive notifications for new tutoring requests so that I can promptly confirm or decline each booking.	Given a student submits a request for a tutoring session, When the request is successfully created, Then I receive a notification.	5		2
US 10	Schedule Deletion	As a user of the application, I want to reschedule or cancel my tutoring sessions so that I can adjust if my plans change.	Given I have one or more upcoming tutoring sessions, When I view my "My Sessions" list,Then each session entry shows "Reschedule" and "Cancel" controls. When I click "Reschedule"/ "Cancel on a session, Then I'm taken to a calendar view showing that tutor's available slots, And I can select a new date and time, And I can confirm the change, And I receive a confirmation message that my session has been rescheduled.	8		2

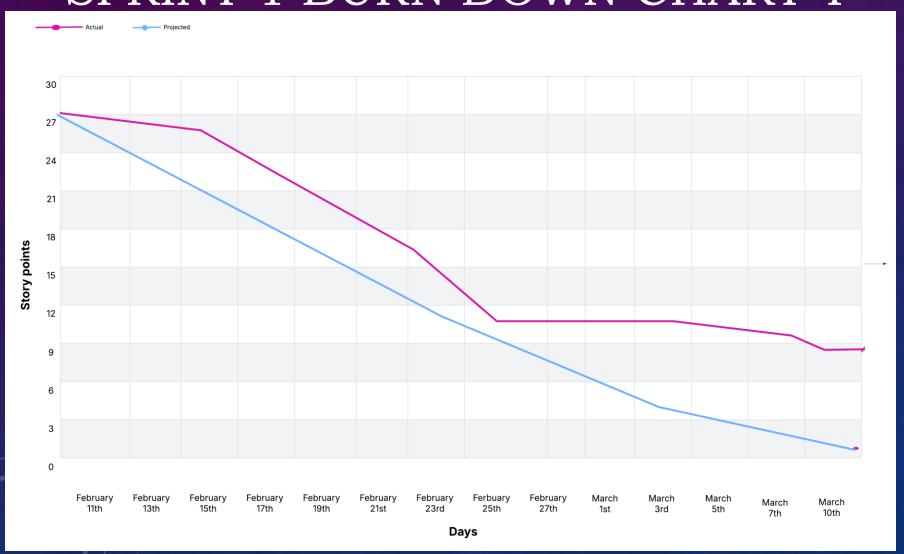
## SPRINT 3 USER STORIES AND ROLLOVER FROM SPRINT 2 STORIES S

0010	School Boloson	chact can adjuse it my plans change.	that my session has seen reserved area.	15		V
US 11		As an admin, I want to access all users and session data so that I can manage the platform effectively.	Given I'm logged in with an admin account, When I navigate to the Admin Dashboard, Then I see a "Users" section listing every user with columns for Name, Email, Role, and Account Status.	5		3
US 12		As a user, I want to filter tutors by subject so that I can quickly find someone who specializes in the topic I need help with.	Given I am logged in and on the "Available Tutors" screen, When I view the filter controls, Then I see a "Subject" dropdown or checklist listing all offered subjects	8		3
US 13		As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.	Given I'm on a tutor's calendar view, When I click or tap on one available time slot, Then that slot is selected (highlighted). When I continue clicking additional available slots, Then each chosen slot is added to my "Selected Sessions" list	8		3
US 14		As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.	Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor name, subject,	8		3
US 15	File Sharing	As a tutor, I want to provide learning resources to students so that they can review and practice outside of tutoring sessions.	Given I'm logged in as a tutor, When I navigate to the "Resources" section of my dashboard, Then I see an interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients	8	3	3

## SPRINT 1 SUMMARY T

ID	Executable	us	Acceptance Criteria	Points	Sprint	
						Ш
		As a team, we want to complete our				1/
		diagrams so that we can visualize what our	Given we create the Diagrams and they approved by the team, When creating our application,			
Task1	Diagrams	project will look like and how it will function.	Then we will refer back to these diagrams to help structure our app.		3	1
		As a team, we want to complete our backlog				
		and plan in what sprint we want to complete	Given we create the Backlog, When it is fully populated with all features, and each feature is			117
Task2	Product Backlog	each feature	assigned to a specific sprint, Then we will complete each task by the appropriate sprint end.		2	1
		As a team, we want to agree on the technologies we will use to complete our	Given the team agrees on and documents the frontend and backend technologies, When they are			
Task3	Frontend and Backend Technologies	project and what works best for all.	needed for specific featers, Then the team will use those technologies.		1	1
Task4	Alogrithms	As a team, we want to agree on the algorithms we will use to complete our project.	Given that we agree on the algorithims, When we will need those algorithims, Then we will utilize them for our application.		1	1
US 1	Account Creation	As a new user, I want to create an account using Single Sign-On (SSO) so that my account is set up quickly and my profile data is saved automatically.	Given I'm on the registration screen, Then I see an option to "Sign up with SSO". When I select an SSO provider (ex. Google) and successfully authenticate, Then a new account is created in the system using the data returned by the provider And I'm redirected to my dashboard or welcome page. Given this is my first time signing up via SSO When my account is created, Then my email, name, and any other available profile fields are stored in my user profile. When I later return and sign in via the same SSO provider, Then I am able to log in successfully without creating a duplicate account		8	1
US 2	User Login	As a user of the application, I want to see username and password fields as soon as I open the app so that I can enter my credentials and log in.	Given I open the application, Then I see clearly labeled "Username" and "Password" input fields, When I enter a valid username and password and submit, Then I am successfully logged in. When I enter invalid credentials and submit, Then I receive an appropriate error message and remain on the login screen		8	1
US 3	Home Screen	As a user of the application, I want to be taken to the home screen after I log in so that I can access the app's main features immediately.	Given I'm on the login screen, When I enter valid credentials and tap "Log In", Then I am redirected to the home screen. Given I enter invalid credentials, When I tap "Log In", Then I remain on the login screen, And I see an error message explaining my credentials were incorrect		5	1

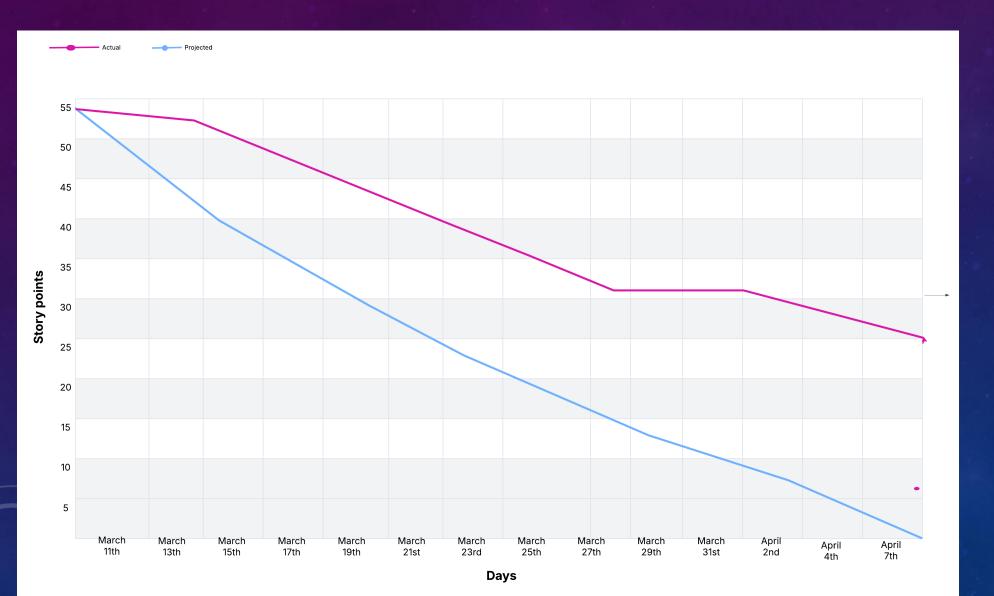
## SPRINT 1 BURN DOWN CHART T



## SPRINT 2 SUMMARY J

000	Home Corcon	immediately.	on the login sercen, who i see an error message explaining my creatmans were meanlest			/
US 4	Firebase API	As a registered user, I want my account data to be stored in a secure database so that it cannot be leaked or accessed by unauthorized parties.	Given I submit or update my account information, When the system writes to the database, Then all data is encrypted at rest.		3	2
US 5	User Selection	As a user of the application, I want to see a list of available tutors after I log in so that I can select the one that best matches my preferences.	Given I have successfully logged in, When the home screen loads, Then I see a section titled "Available Tutors" displaying a list of tutor profiles. Given there are tutors in the system, When the list is displayed, Then each tutor entry shows at least the tutor's name, subjects, and next available time slot.		3	2
US 6	Scheduling API	As a user of the application, I want to see a tutor's available time slots on a calendar after I select them so that I can choose a convenient appointment time.	Given I have successfully logged in and navigated to the "Available Tutors" list, When I tap or click on a tutor's name, Then I am taken to a calendar view showing only that tutor's available time slots.	1;	3	2
US 7	Availability Setting	As a tutor, I want to set my availability for tutoring sessions when I log in to my profile so that students can see and book the times I'm free.	Given I have successfully logged in as a tutor, When I navigate to the "Availability" or "Schedule" section of my profile, Then I see a calendar showing the current week's dates and times. Given I have set availability, When a student views my profile or the list of tutors, Then they only see the time slots I've marked as available for booking		3	2
US 8	Student Notification	As a user, I want to receive reminders for upcoming tutoring sessions so that I do not forget about them.	Given I have one or more upcoming tutoring sessions scheduled, When it is 24 hours before the start time of any session, Then I receive a reminder notification (via my chosen channel)		5	2
US 9	Tutor Notification	As a tutor, I want to receive notifications for new tutoring requests so that I can promptly confirm or decline each booking.	Given a student submits a request for a tutoring session, When the request is successfully created, Then I receive a notification.		5	2
US 10	Schedule Deletion	As a user of the application, I want to reschedule or cancel my tutoring sessions so that I can adjust if my plans change.	Given I have one or more upcoming tutoring sessions, When I view my "My Sessions" list,Then each session entry shows "Reschedule" and "Cancel" controls. When I click "Reschedule"/ "Cancel on a session, Then I'm taken to a calendar view showing that tutor's available slots, And I can select a new date and time, And I can confirm the change, And I receive a confirmation message that my session has been rescheduled.	4	3	2

#### SPRINT 2 BURN DOWN CHART J



### SPRINT 3 STORIES COMPLETED V

			A STATE OF THE STA			
US 6	Scheduling API	As a user of the application, I want to see a tutor's available time slots on a calendar after I select them so that I can choose a convenient appointment time.	Given I have successfully logged in and navigated to the "Available Tutors" list, When I tap or click on a tutor's name, Then I am taken to a calendar view showing only that tutor's available time slots.	13	3	2
US 7	Availability Setting	As a tutor, I want to set my availability for tutoring sessions when I log in to my profile so that students can see and book the times I'm free.	Given I have successfully logged in as a tutor, When I navigate to the "Availability" or "Schedule" section of my profile, Then I see a calendar showing the current week's dates and times. Given I have set availability, When a student views my profile or the list of tutors, Then they only see the time slots I've marked as available for booking	8	3	2
US 8	Student Notification	As a user, I want to receive reminders for upcoming tutoring sessions so that I do not forget about them.	Given I have one or more upcoming tutoring sessions scheduled, When it is 24 hours before the start time of any session, Then I receive a reminder notification (via my chosen channel)	5	i	2
US 9	Tutor Notification	As a tutor, I want to receive notifications for new tutoring requests so that I can promptly confirm or decline each booking.	Given a student submits a request for a tutoring session, When the request is successfully created, Then I receive a notification.	5	5	2
US 10	Schedule Deletion	As a user of the application, I want to reschedule or cancel my tutoring sessions so that I can adjust if my plans change.	Given I have one or more upcoming tutoring sessions, When I view my "My Sessions" list, Then each session entry shows "Reschedule" and "Cancel" controls. When I click "Reschedule"/ "Cancel on a session, Then I'm taken to a calendar view showing that tutor's available slots, And I can select a new date and time, And I can confirm the change, And I receive a confirmation message that my session has been rescheduled.	8	3	2
US 12	User Filtering	As a user, I want to filter tutors by subject so that I can quickly find someone who specializes in the topic I need help with.	Given I am logged in and on the "Available Tutors" screen, When I view the filter controls, Then I see a "Subject" dropdown or checklist listing all offered subjects		В	3
US 13	Schedule Setup	As a user, I want to select and book multiple tutoring sessions in one flow so that I can plan my learning schedule in advance.			В	3

## SPRINT 3 STORIES NOT COMPLETED V

US 11	Admin Account	As an admin, I want to access all users and session data so that I can manage the platform effectively.	Given I'm logged in with an admin account, When I navigate to the Admin Dashboard, Then I see a "Users" section listing every user with columns for Name, Email, Role, and Account Status.	5	3
US 14	Group Session Scheduling	As a user, I want to join group tutoring sessions so that I can learn in a collaborative setting and save money on each session.	Given I am logged in, When I navigate to "Group Sessions", Then I see a list of all upcoming group tutoring sessions, each showing tutor name, subject,	8	3
US 15	File Sharing	As a tutor, I want to provide learning resources to students so that they can review and practice outside of tutoring sessions.	Given I'm logged in as a tutor, When I navigate to the "Resources" section of my dashboard, Then I see an interface for managing resources (upload, link). When I choose to upload a file (e.g., PDF, DOCX, PPT) or add an external link, Then I can provide a title. Given I have uploaded or linked resources, When I select one or more students or specific sessions, Then I can assign those resources so they appear only for the intended recipients	8	3

## SPRINT 3 TEST CASES V

Test Case	Test Case Name	Step Description	Exceptation Result	Execution Status
TC_7	Filte based matchmaking	When searching for a tutor, fill out profile information to see what tutors are available based on the criteria	Profile is editable based on my subject and age range, and a tutor will appear who meets the criteria.	Passed
TC_8	Scheduling events	After finding a tutor, book your session on the calendar	The booked session shows up on the google schedule API with the correct information	Passed
TC_9		When booking the sessions, check to see if an email was received based on your booked session.	User will receive an email with the information regarding the booked session.	Passed

#### SPRINT 3 VELOCITY S

- Total Story Points: 76
- Velocity: 51 Story Points Completed

METRICS
COMMITTED/COMPLETED
RATIO S

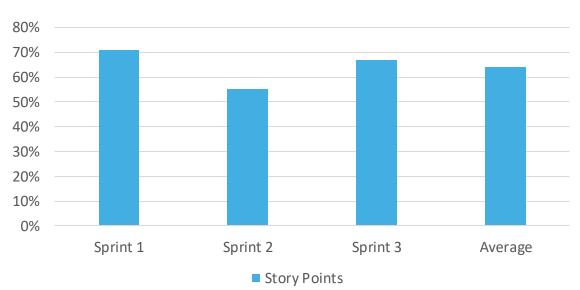
51 Story points completed of out 76 story points committed = 67%

Completed

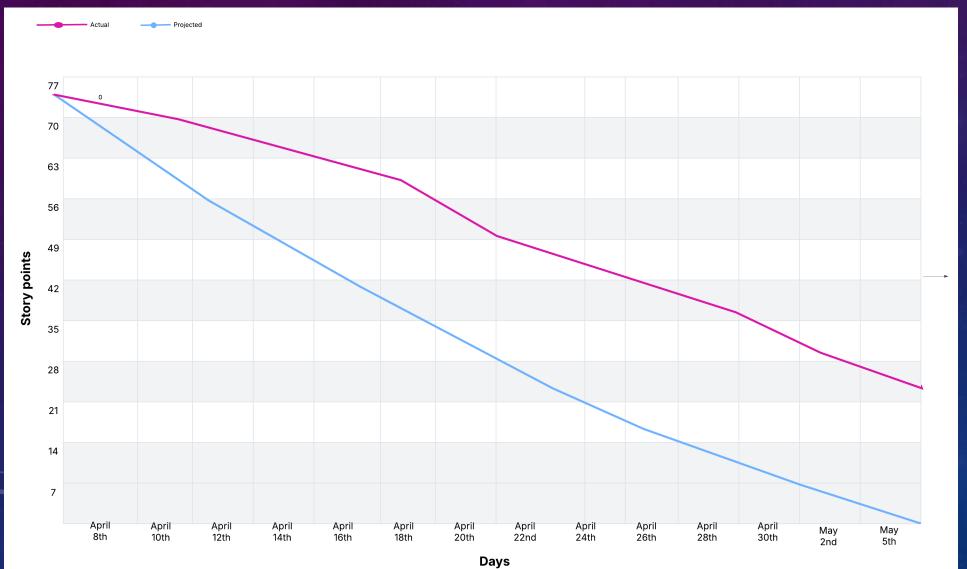


# HISTORICAL AND AVERAGE COMMITTED RATIO M





# BURNDOWN CHART SPRINT 3 M



# HISTORICAL VELOCITY/AVERAGE VELOCITY S

- Sprint 1 Velocity: 20/28
- Sprint 2 Velocity: 30/55 (Includes Prior Story that was not completed in sprint 1)
- Sprint 3 Velocity: 51/76(Includes Prior Story Points that were not completed in sprint 2)
- Average Velocity: (20+30+51)/3 = 33.6666 points per sprint

#### The Good

- Everyone did a better job with their own individual tasks.
- Everyone was open to changing things if challenges interfered.
- We had more meetings where we did more collaborative work.
- Communication improved with more updates in the chat.
- Made a lot of progress, given the little amount of time.

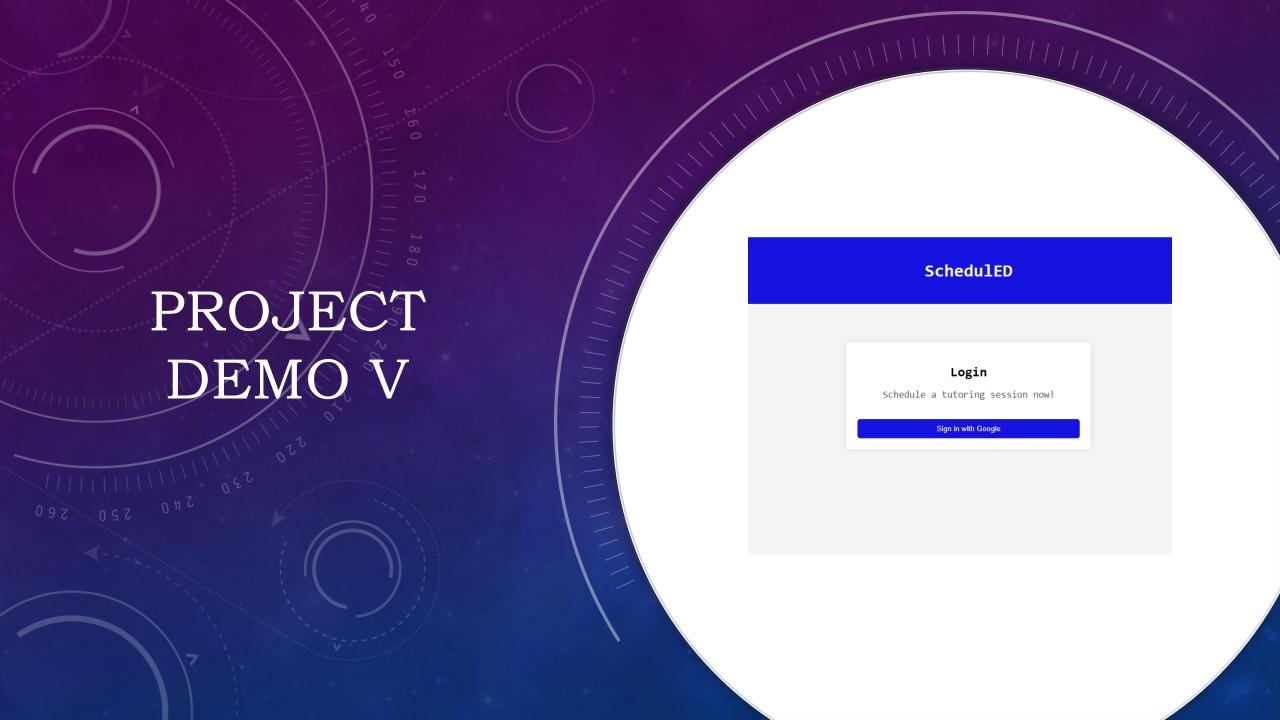
#### The Bad

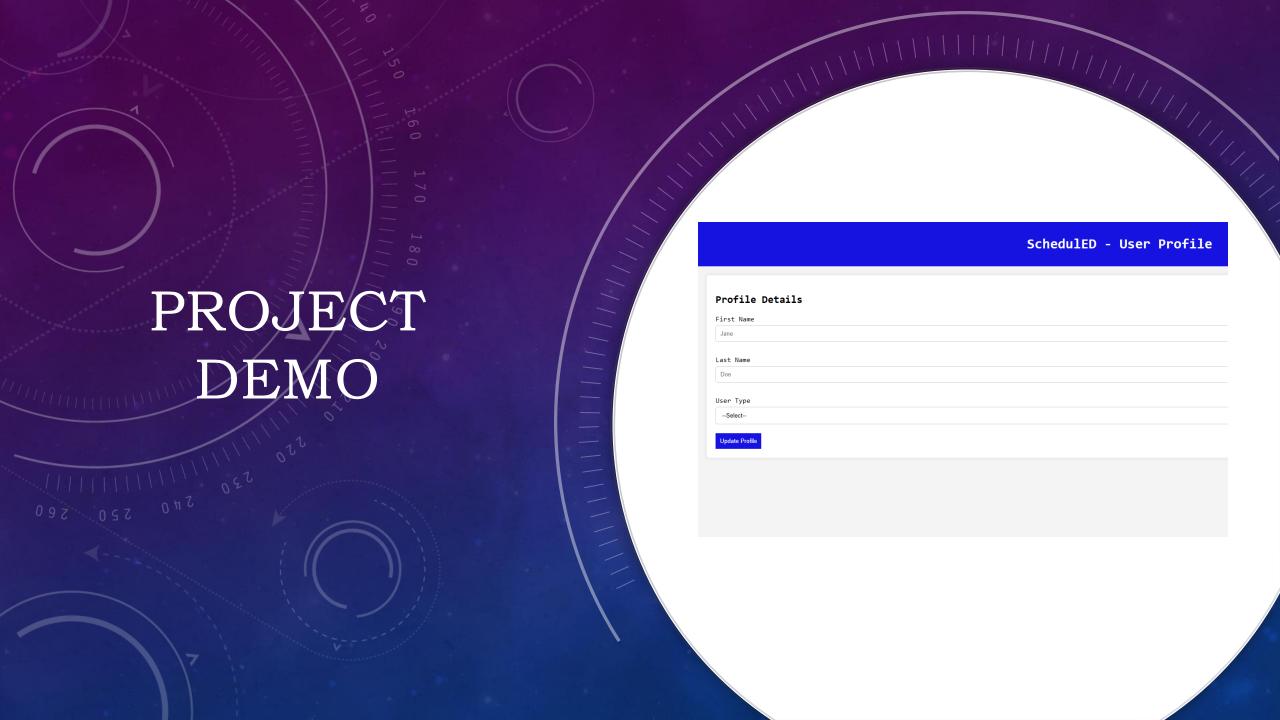
- Some features took longer than anticipated to complete.
- Some Features were more challenging than we initially thought.
- Due to work/grad schoolwork, meeting time could get a bit challenging.
- Time management, as always, we thought we had more time than we initially thought. The semester flew by.

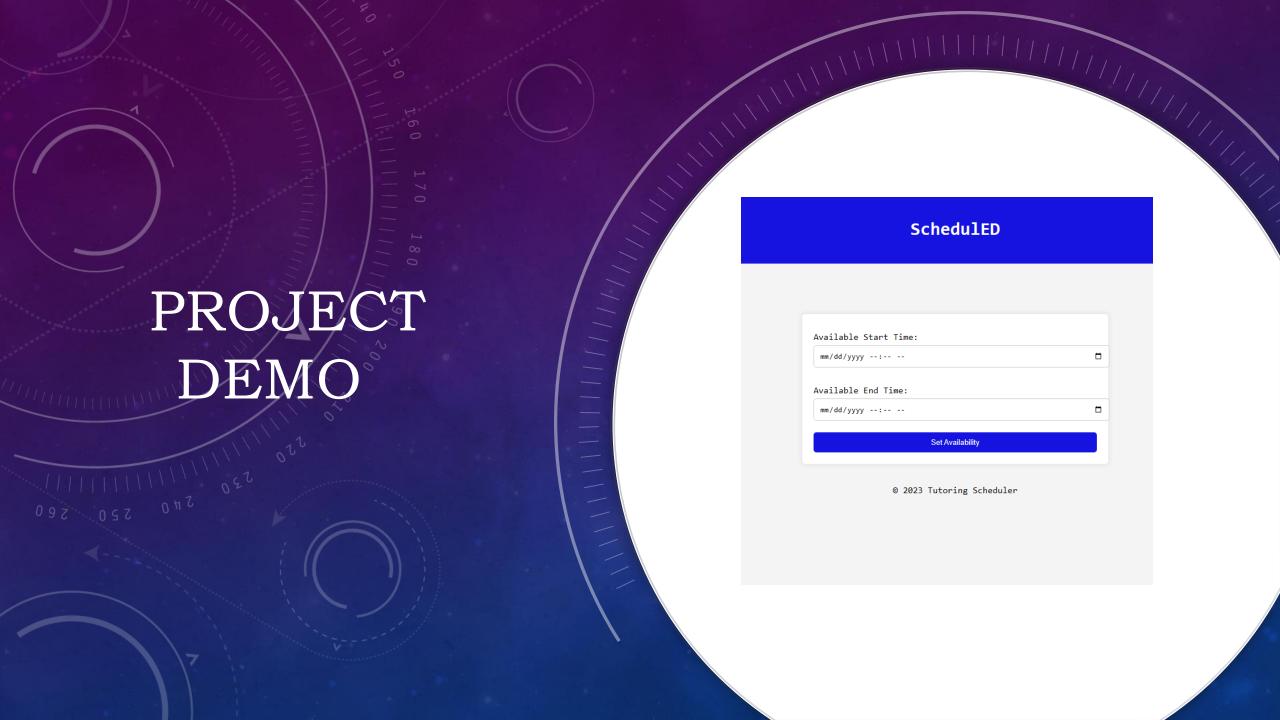
## Final Thoughts for improvements

- Meet as many times as possible because much more is accomplished when we work as a team.
- Always have a backup plan and be willing to adjust your original plan.
- Reach out to the professor more with questions when problems arise.
- Always keep the communication flowing.
- Be realistic with our expectations.

#### RETROSPECTIVE S







#### GROUP WIKI LINK

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