Simply Online

SIMPLE WAY TO CONNECT ONLINE

Agenda

1

Discuss about the project design, architecture, tech stack and use cases.

2

Update on the current status of the project. A minimum viable product to demonstrate current status.

3

Product Backlog, Completed user stories, Pending user stories and roadblocks faced.

TEAM MEMBERS

Ajay Kumar
Full Stack Developer

Amarendra Reddy
Developer

Pruthvi Raj Reddy
Database Administrator

Mounik
Developer

Sreeja Reddy
Quality Analyst

Ravi Teja Reddy
Developer

Project Description

- Simply online is a web application that aims to simplify the process of online classes. This application allows lecturers to create virtual rooms and share the room id with their students for seamless connectivity.
- Using webrtc technology, simply online allows group video-sharing features and screen-sharing capabilities. This application allows lecturers to easily take attendance with just a click of a button. This platform automatically marks attendance, eliminating the need for manual tracking.
- Overall, simply online offers a comprehensive and user-friendly solution for educators and students to enhance their online learning experience

Team Working Agreement

Participation:

All the team members are expected to involve in project discussions and attend the meetings promptly. Absence during multiple meetings will affect the team's performance and efficiency.

The team member can discuss beforehand with the team leader if he/she is going to miss the meeting or make it up for it before the next meeting is scheduled.

Communication:

The team will communicate with each other using WhatsApp group and meetings will be scheduled on Zoom.

Jira software will be used to track the assigned tasks. For any dependency on another task, mention it in the task comments.

Task management, bugs, sprint planning, and meeting minutes will be tracked in Jira.

To share the final deliverables, Google docs will be used where all the team members can edit the document.

Work Division:
The entire project work should be divided into equal parts, and equal responsibilities should be given to all the team members.
Each team member should complete their division of work before the deadline. If they are unable to complete the work on time, that hinders the performance of the entire team. If in case a team member is facing trouble and issues at some point, they can share it with others so that they can help each other and complete the work before the deadline.

Meetings:
All the team members will meet on zoom virtually every Tuesday and Friday. All the team members must be present, as attendance is mandatory unless there is an exceptional case.
The team leader would be responsible for sending meeting details and conducting the meeting.
A meeting track or meeting minutes report would be listed after every meeting to keep track of the project and its progress.
Every team member is expected to come up with ideas, participate in the discussion, and give an update on their progress for their part of the work.

Persona

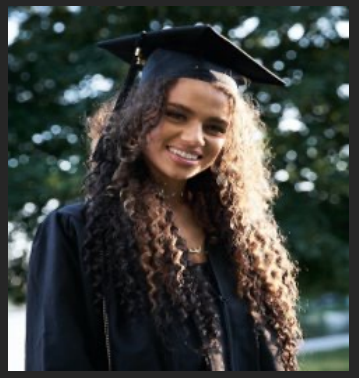
Name: Professor James
Age: 45
Occupation: University Professor

Profile:
James is a tenured professor in the Computer Science department at a large university. He teaches both undergraduate and graduate-level courses and conducts research in his field. Due to the COVID-19 pandemic, his classes have been moved online, and he uses various platforms to deliver lectures, holds office hours, and communicate with his students. He lives with his spouse and two children, who are also attending school virtually.

Goals and Motivations:

- Deliver high-quality lectures and course material to his students
  Engage his students and create a dynamic and interactive virtual classroom environment.
- Ensure that his students are keeping up with the coursework and meeting their learning objectives.
- Provide effective feedback and support to his students.

Persona



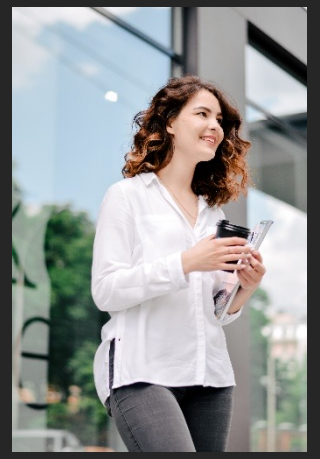
Name: Sarah
Age: 24
Occupation: College student

Profile:
Sarah is a full-time student pursuing a degree in psychology. Due to the COVID-19 pandemic, her classes have been moved online, and she uses Zoom to attend lectures, participate in group discussions, and communicate with her professors and classmates.
She lives in a small apartment with roommates and shares a room with one of them.
She has a busy schedule and often has to balance her coursework with a part-time job and other responsibilities.

Goals and Motivations:

- Attend all her classes and be an active participant in class discussions
  Stay organized and manage her time effectively to meet assignment deadlines.
- Have a reliable and user-friendly platform for attending virtual classes. Connect with her professors and classmates, and build a community within her course

Persona



Name: Ishika
Age: 27
Occupation: Elementary school teacher

Profile:

Ishika is a dedicated elementary school teacher who loves working with children. She has been teaching for three years and is always looking for ways to improve her classroom management and student engagement. Ishika is originally from India but moved to the US with her family when she was a child. She is fluent in English and Hindi and enjoys cooking traditional Indian dishes in her free time

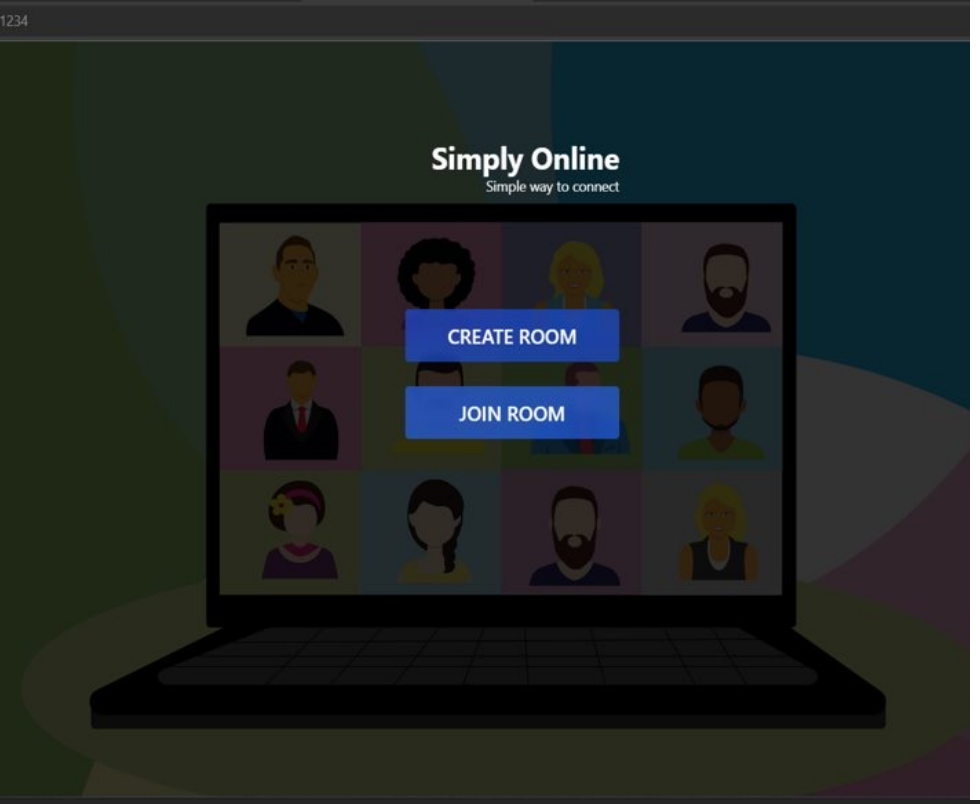
Goals and Motivations:

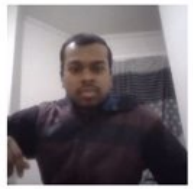
Ishika's main goal is to create a safe and engaging learning environment for her students. She wants to be able to take attendance quickly and efficiently so she can spend more time teaching and less time on administrative tasks. Sarah is also motivated by the opportunity to track student attendance and identify patterns that might indicate a need for additional support.

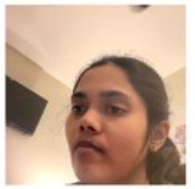
Minimal Viable Product (MVP)

The following are the features that we are covering in our MVP:

- Homepage
- JOIN ROOM
- CREATE ROOM
- Peer to Peer connection

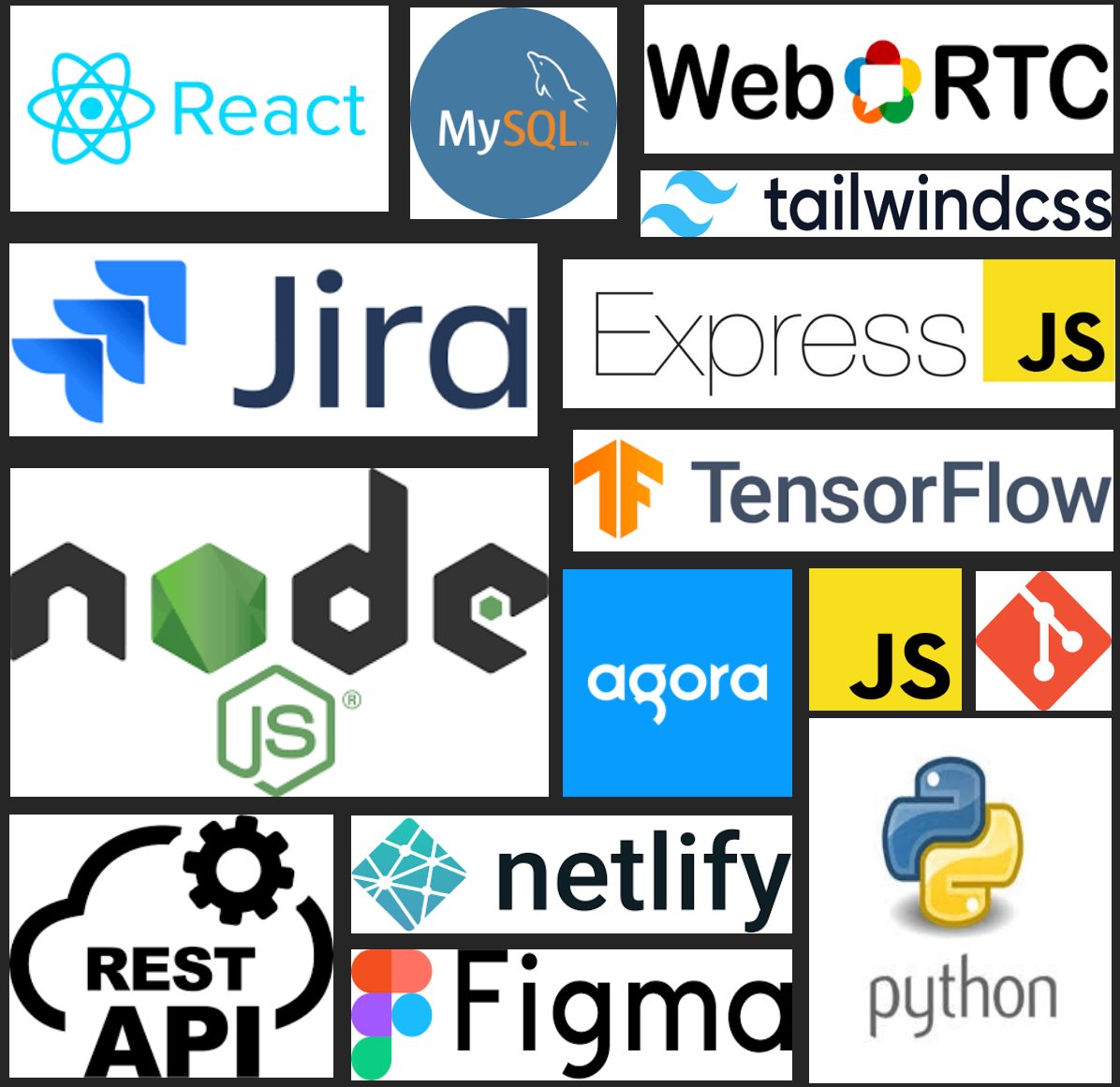




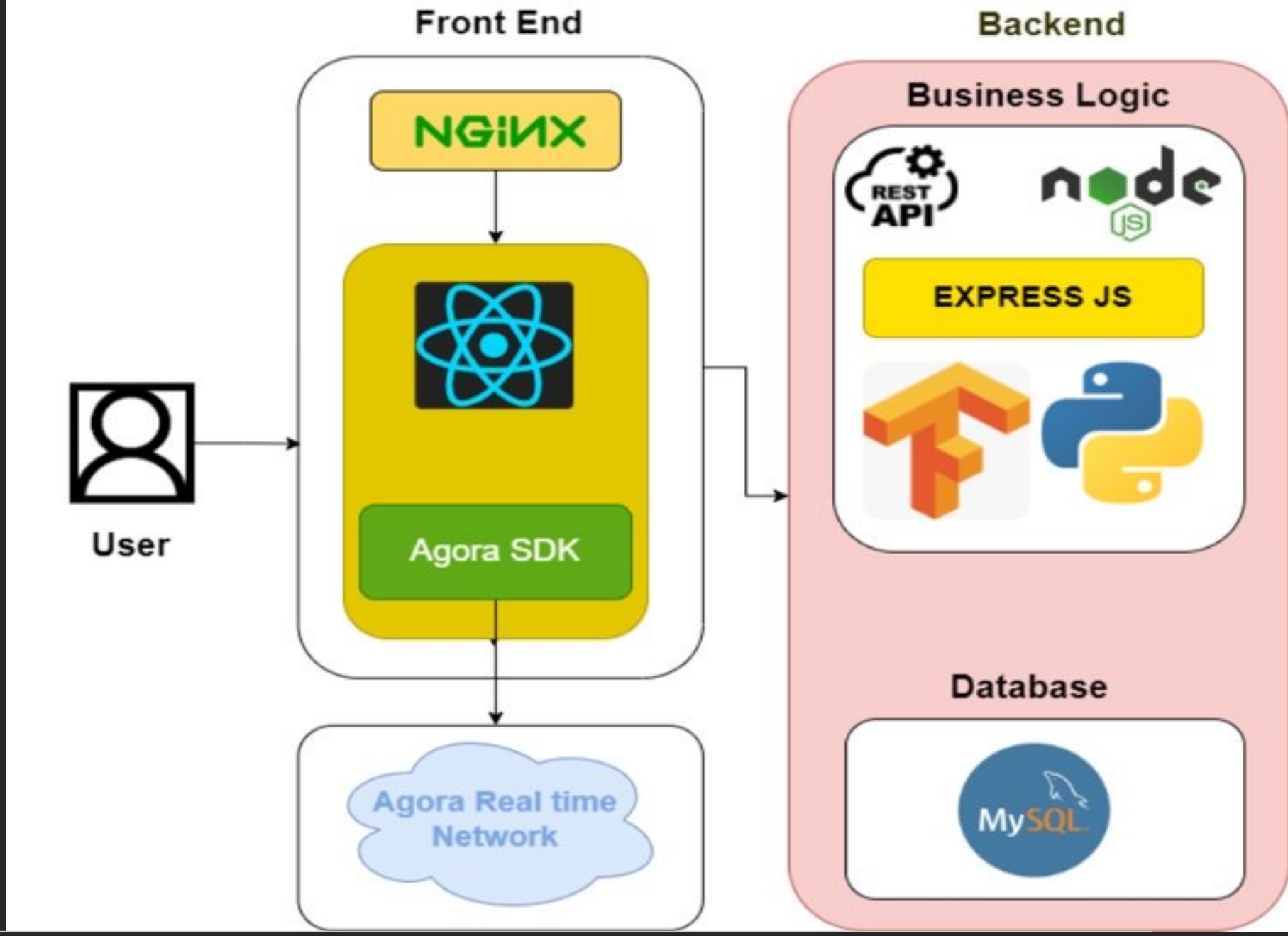


Minimal Viable Product (MVP)

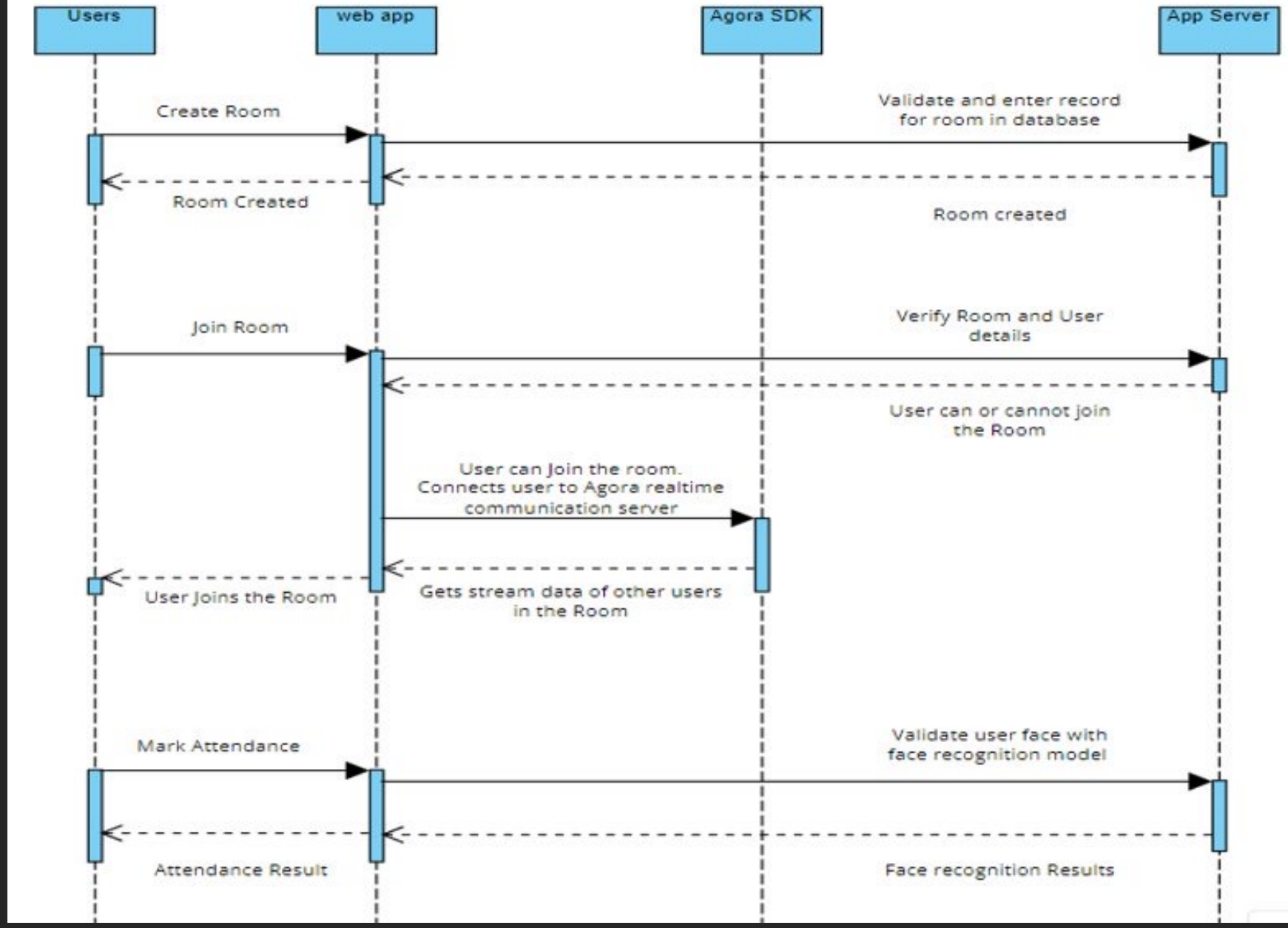
Technologies

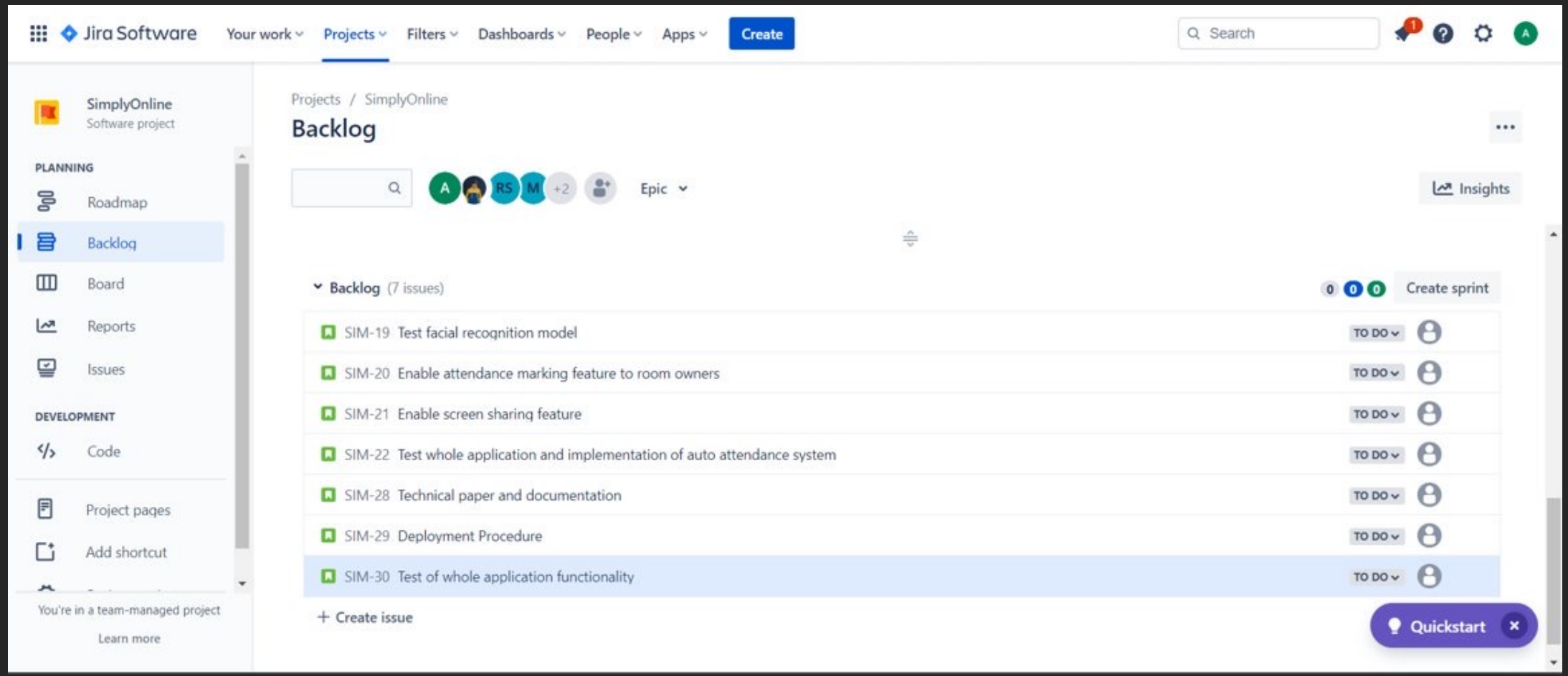


Architecture Diagram



Sequence Architecture Diagram





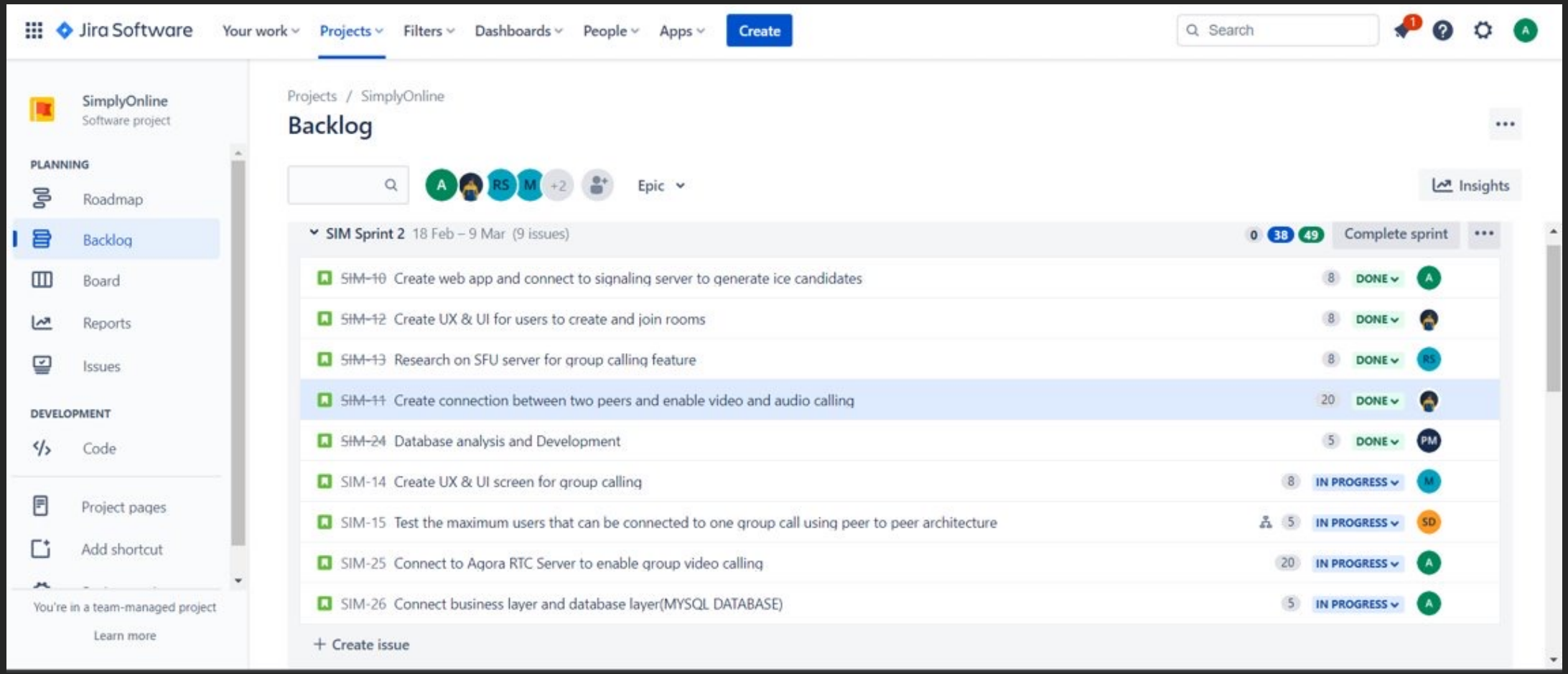
Product Backlog

	Type	ID	Summary
2	User story	SIM-10	Create web app and connect to signaling server to generate ice candidates
3	Acceptance criteria		The web app can establish a WebRTC connection between two peers using ICE candidates. The web app can exchange media streams between peers.
4			
5			
6	User story	SIM- 12	Create UX & UI for users to create and join rooms
7	Acceptance criteria		The UX and UI of the app are intuitive and easy to use for users. The create room flow is easy to use and includes all necessary settings for creating a new room The join room flow is easy to use and includes all necessary authenication details for joining an existing room
8			
9			
10	User story	SIM-13	Research on SFU server for group calling feature
11	Acceptance criteria		The SFU server can able to support a maximum number of participants in group calls and able to handle a variety of audio and video capabilities with different devices and network conditions.
12			
13			
14	User story	SIM-14	Create UX & UI screen for group calling
15	Acceptance criteria		The screen should be designed with a responsive layout that is suitable for different screen sizes and devices and displays the participants in the group call. The screen should provide options to start, join, and leave the group call and allow users to mute and unmute their audio and video feeds. The screen has a chat feature to allow users to communicate with each other during the call.
16			
17			

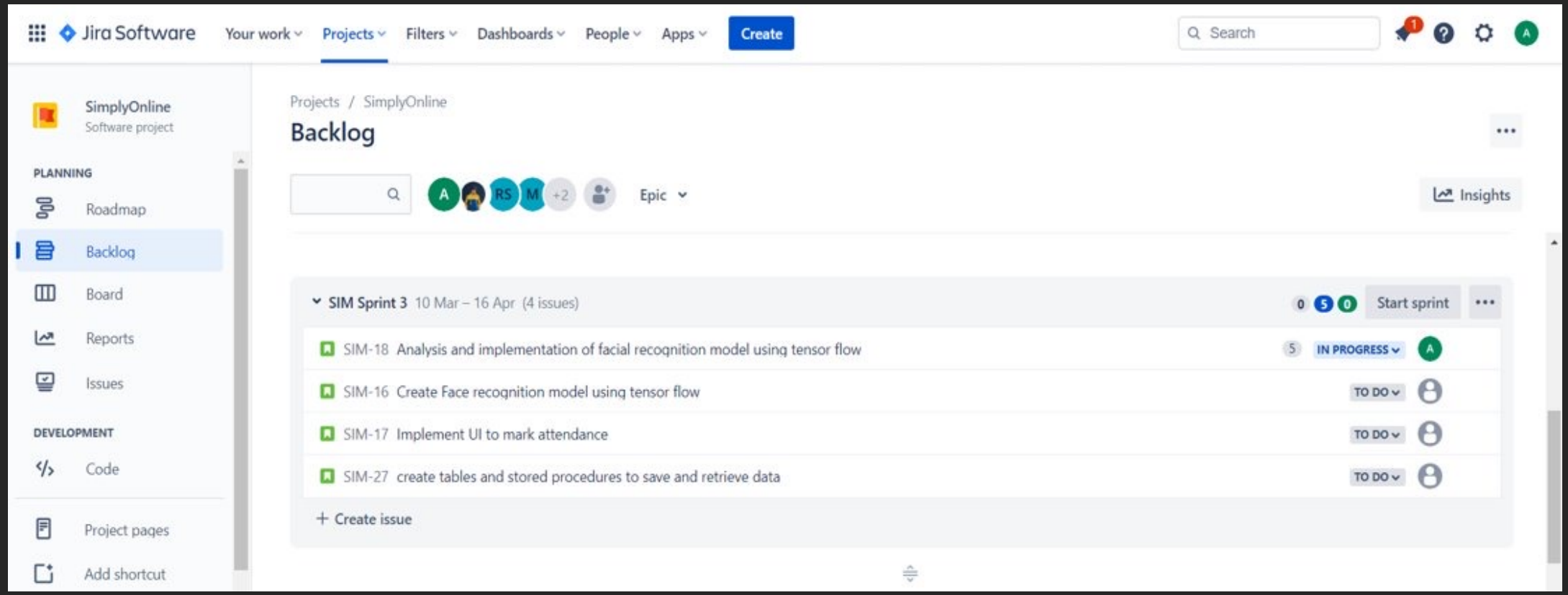
User Stories & Acceptance Criteria

17			
18	User story	SIM-11	Create connection between two peers and enable video and audio calling
19	Acceptance Criteria		Users should be able to initiate a video or audio call between two peers. Users should be able to receive an incoming call from another peer.
20			
21			
22	User Story	SIM-15	Test the maximum users that can be connected to one group call using peer to peer architecture
23	Acceptance criteria		Test the number of users that can be connected to the group call using peer-to-peer architecture. The test measure the quality and stability of the group call under different user loads and network conditions. The test was performed using realistic user scenarios, such as users joining and leaving the call or sharing their screens.
24			
25			
26	User Story	SIM-25	Connect to Agora RTC Server to enable group video calling
27	Acceptence criteria		The web or mobile application should successfully connect to the Agora Server using the provided SDK and application should allow users to join a group video call with multiple participants.
28			
29			
30	User Story	SIM-26	Connect business layer and database layer(MYSQL DATABASE)
31	Acceptence criteria		The business layer should be connected to the application, allowing for the proper handling of business logic and rules. The database layer (MySQL) should be connected to the application, allowing for the proper storage and retrieval of data related to the group call, such as participant details.
32			
33			

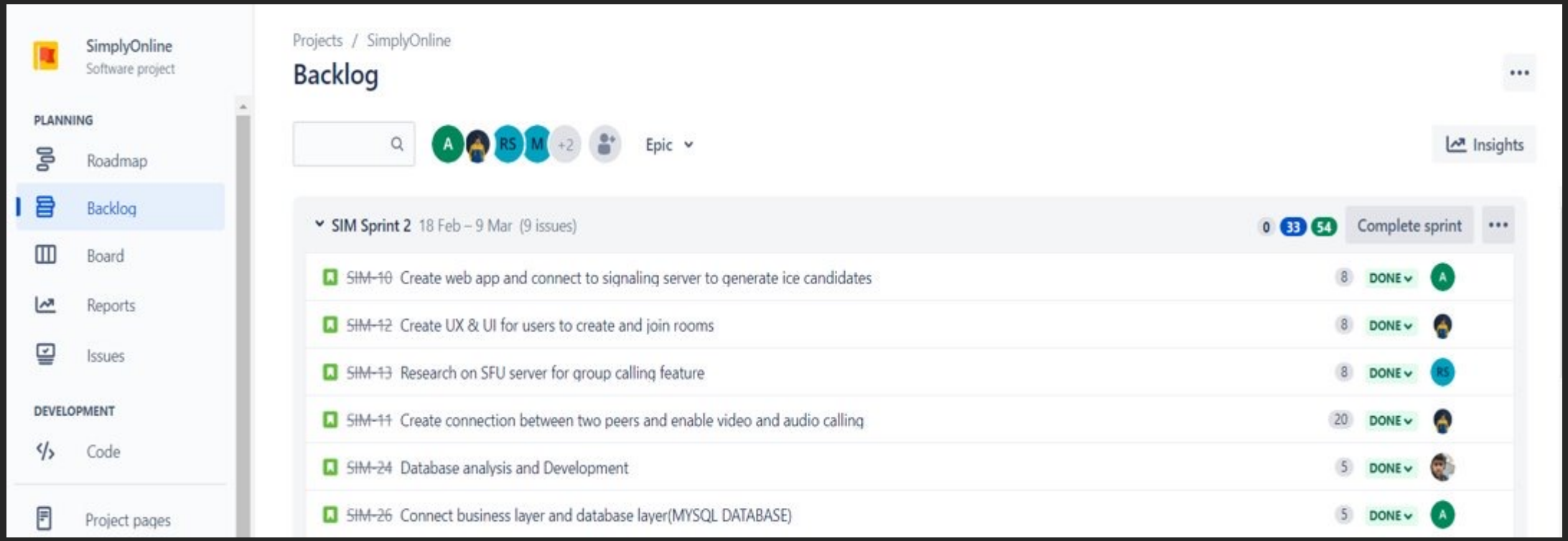
User Stories & Acceptance Criteria


Jira Software
Your work
Projects
Filters
Dashboards
People
Apps
Create
Search
SimplyOnline
Software project
PLANNING
Roadmap
Backlog
Board
Reports
Issues
DEVELOPMENT
Code
Project pages
Add shortcut
You're in a team-managed project
Learn more
Projects / SimplyOnline
Backlog
Epic
Insights
SIM Sprint 2 18 Feb – 9 Mar (9 issues)
0 38 49
Complete sprint
SIM-10 Create web app and connect to signaling server to generate ice candidates 8 DONE
SIM-12 Create UX & UI for users to create and join rooms 8 DONE
SIM-13 Research on SFU server for group calling feature 8 DONE
SIM-11 Create connection between two peers and enable video and audio calling 20 DONE
SIM-24 Database analysis and Development 5 DONE
SIM-14 Create UX & UI screen for group calling 8 IN PROGRESS
SIM-15 Test the maximum users that can be connected to one group call using peer to peer architecture 5 IN PROGRESS
SIM-25 Connect to Agora RTC Server to enable group video calling 20 IN PROGRESS
SIM-26 Connect business layer and database layer(MYSQL DATABASE) 5 IN PROGRESS
Create issue

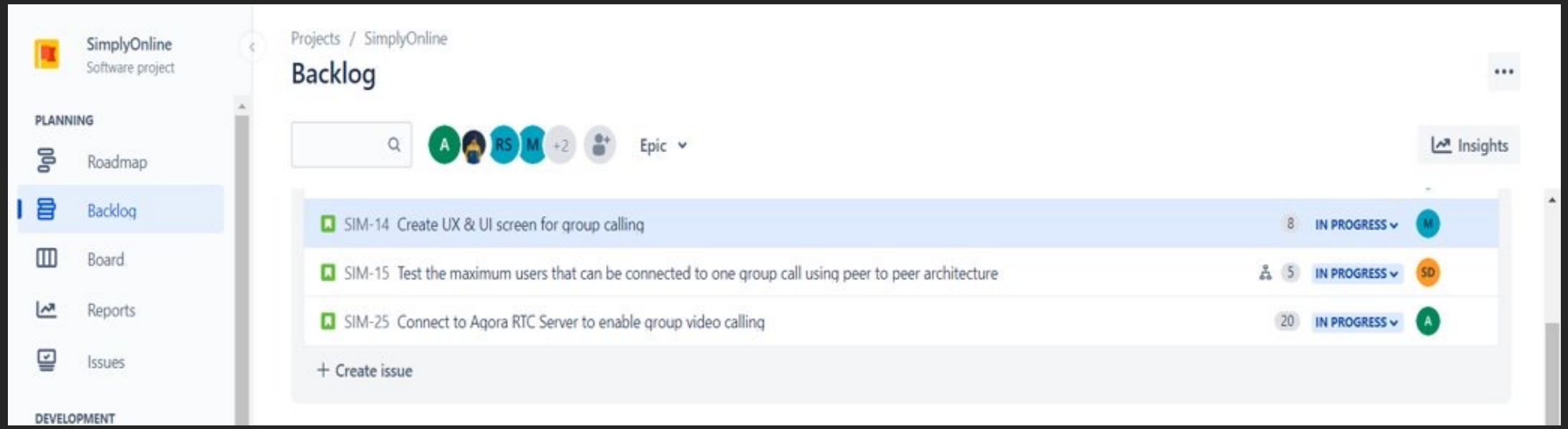
Sprint 2



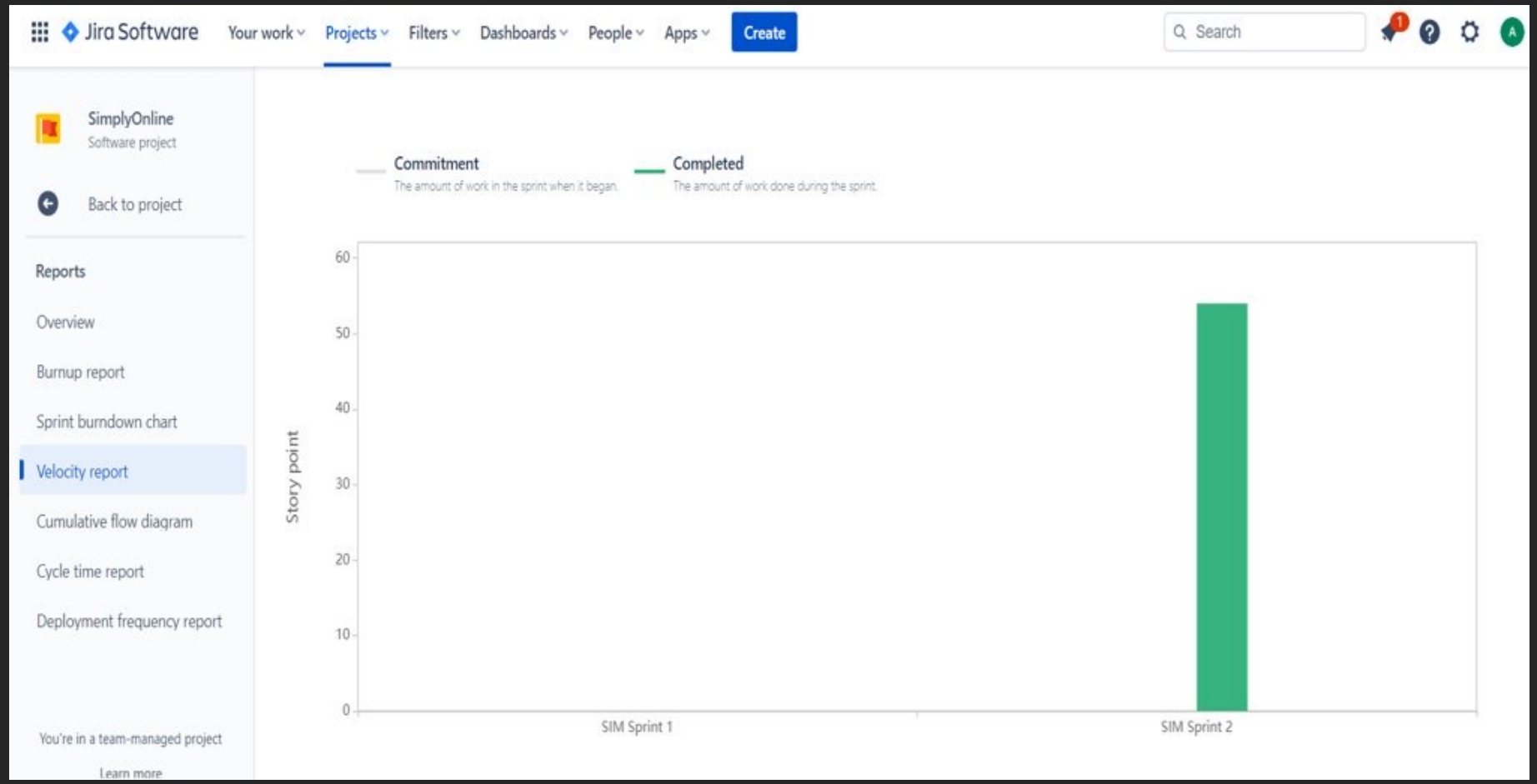
Sprint 3 Backlog



Sprint 2 – Completed Tasks



Sprint 2 – Pending Tasks



Metrics Velocity Report

Sprint 2 Burnout Chart

Retrospective

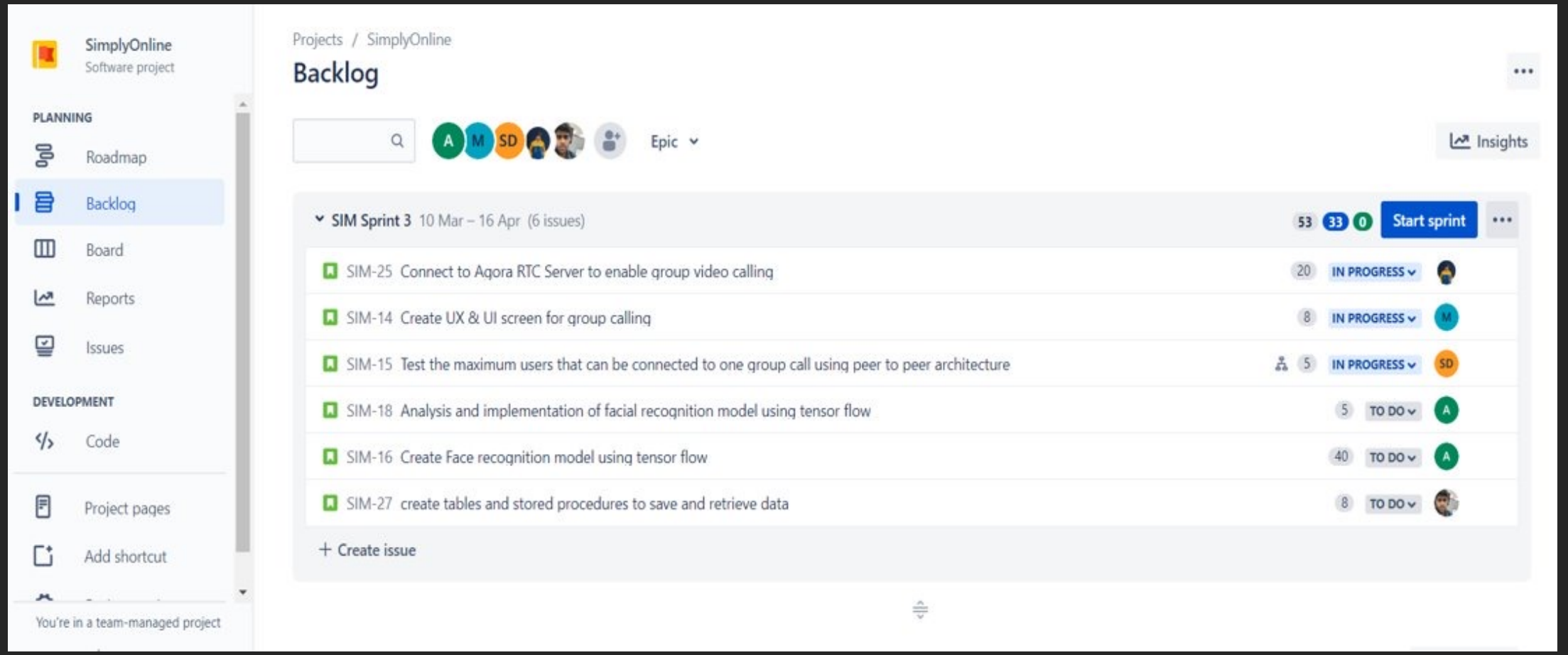
What went well

The team has demonstrated good collaboration and communication, with team members working together effectively and openly sharing information and being proactive in identifying and addressing issues or blockers that arose during the sprint.

Points need to improve

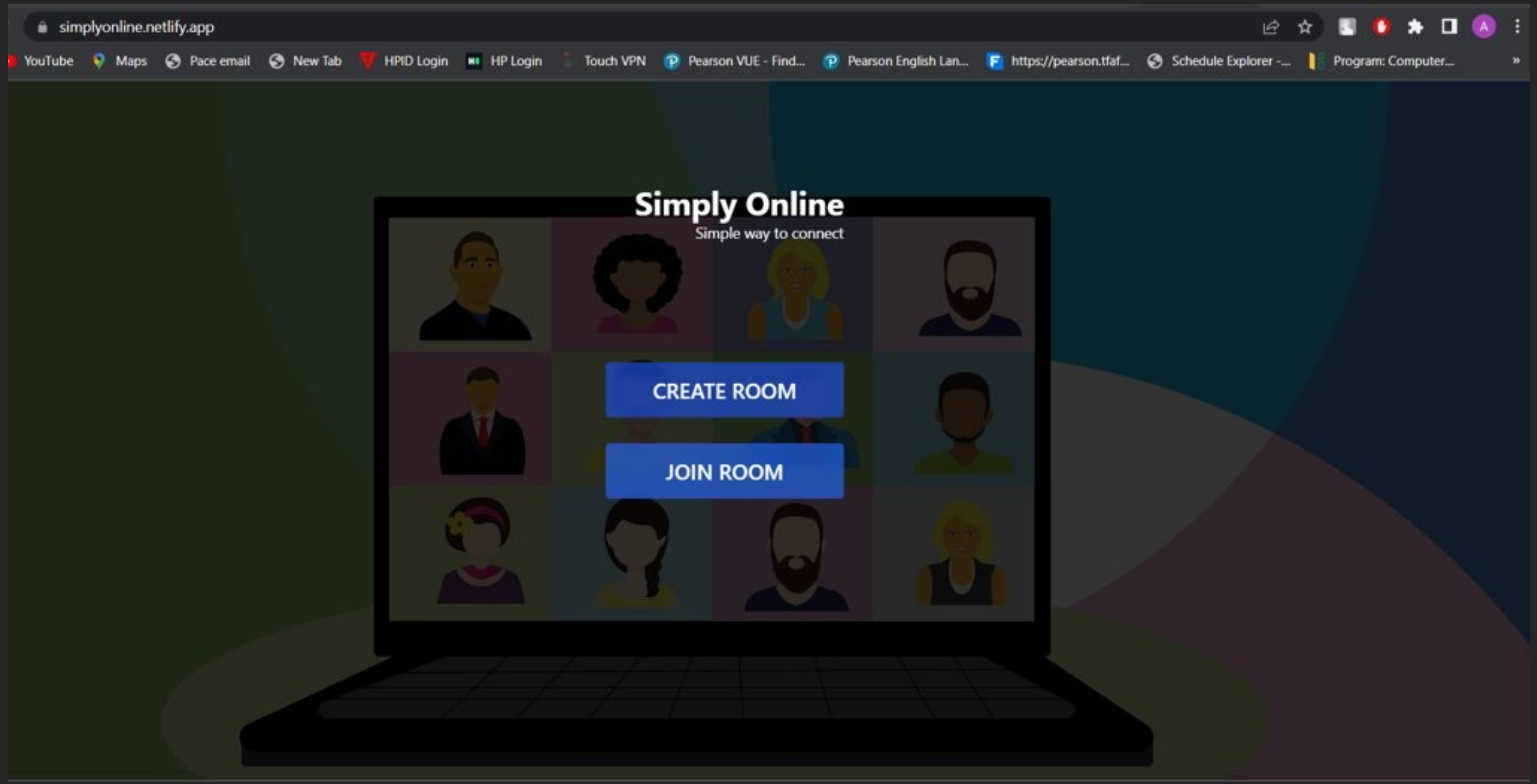
The team needs to improve their estimation and planning skills to better anticipate the amount of work that can be completed within a sprint, and to avoid overcommitting or underdelivering.

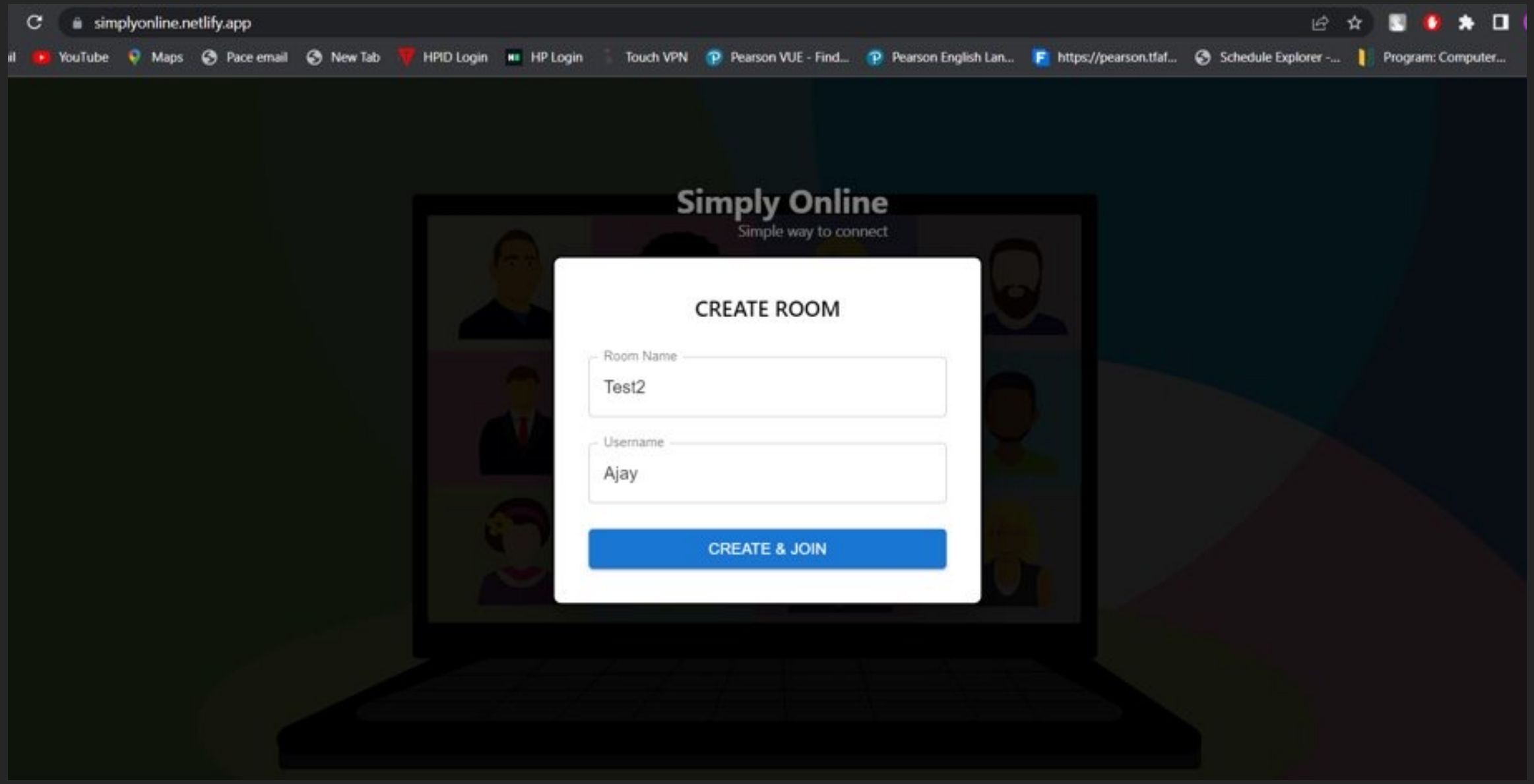
The team needs to improve their focus and time management, to ensure that they are making the most of their available time and prioritizing their work effectively.



Stories for Sprint 3

Project Demo


simplyonline.netlify.app
YouTube
Maps
Pace email
New Tab
HPID Login
HP Login
Touch VPN
Pearson VUE - Find...
Pearson English Lan...
https://pearson.tfaf...
Schedule Explorer -...
Program: Computer...
Simply Online
Simple way to connect
CREATE ROOM
JOIN ROOM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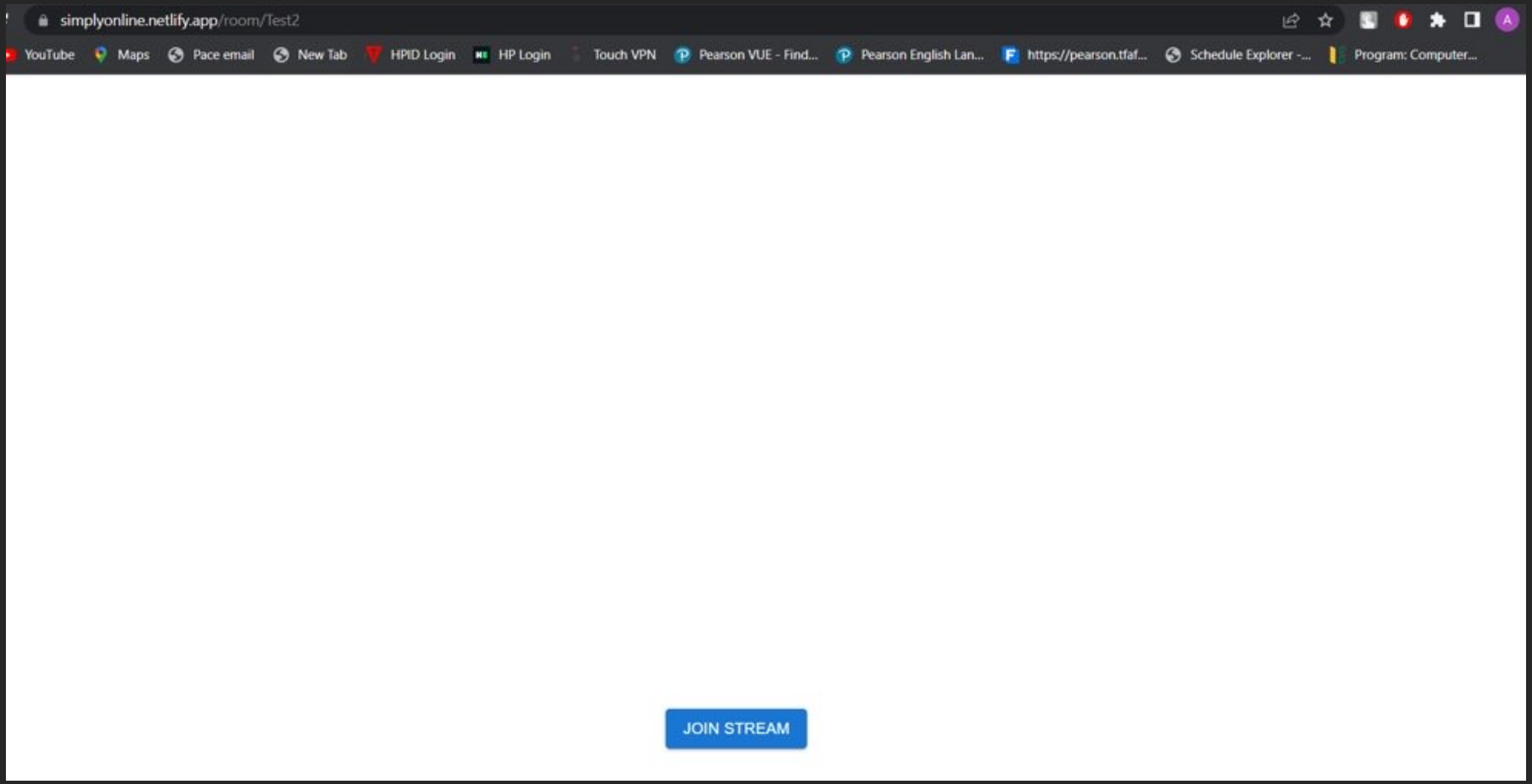
Pearson VUE - Find...
Pearson English Lan...
https://pearson.tfaf...
Schedule Explorer -...
Program: Computer...
Simply Online
Simple way to connect
CREATE ROOM
Room Name
Test2
Username
Ajay
CREATE & JOIN


simplyonline.netlify.app/room/Test2
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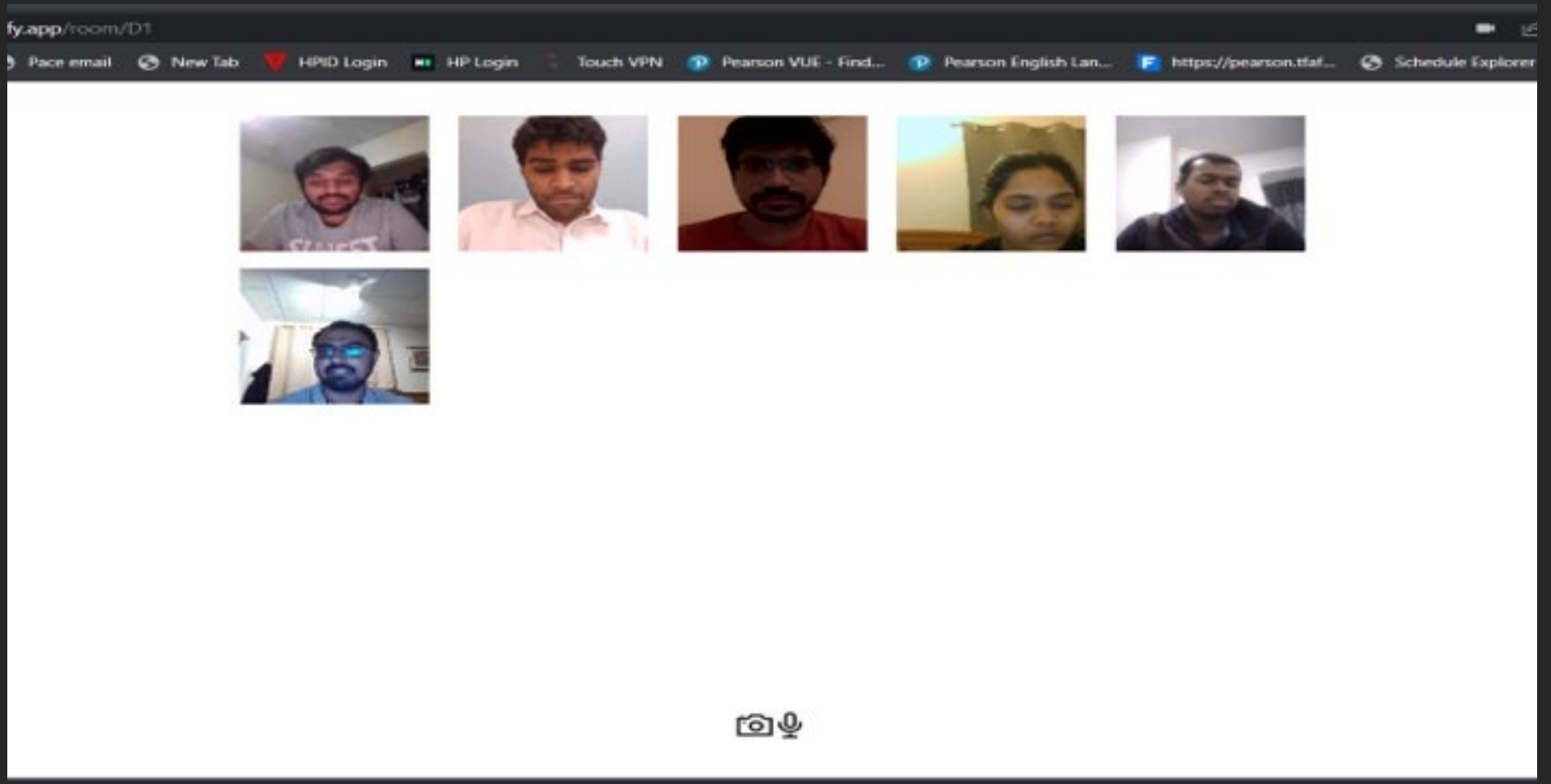
Pearson English Lan...
https://pearson.tfaf...
Schedule Explorer -...
Program: Computer...
JOIN STREAM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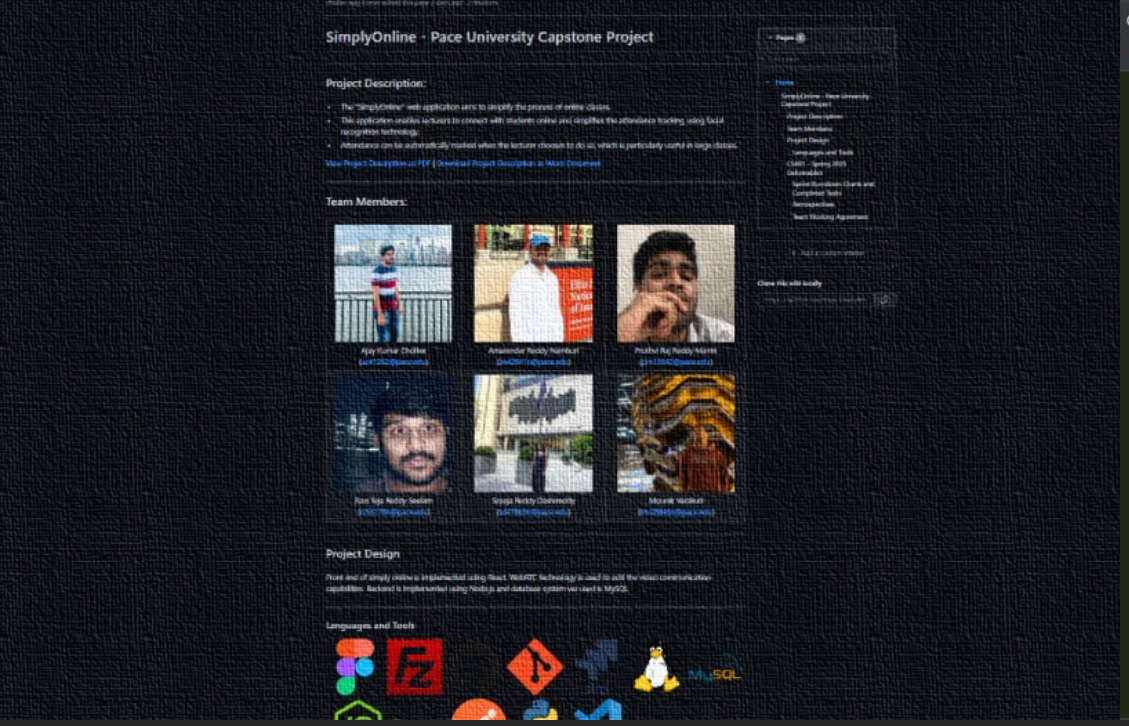
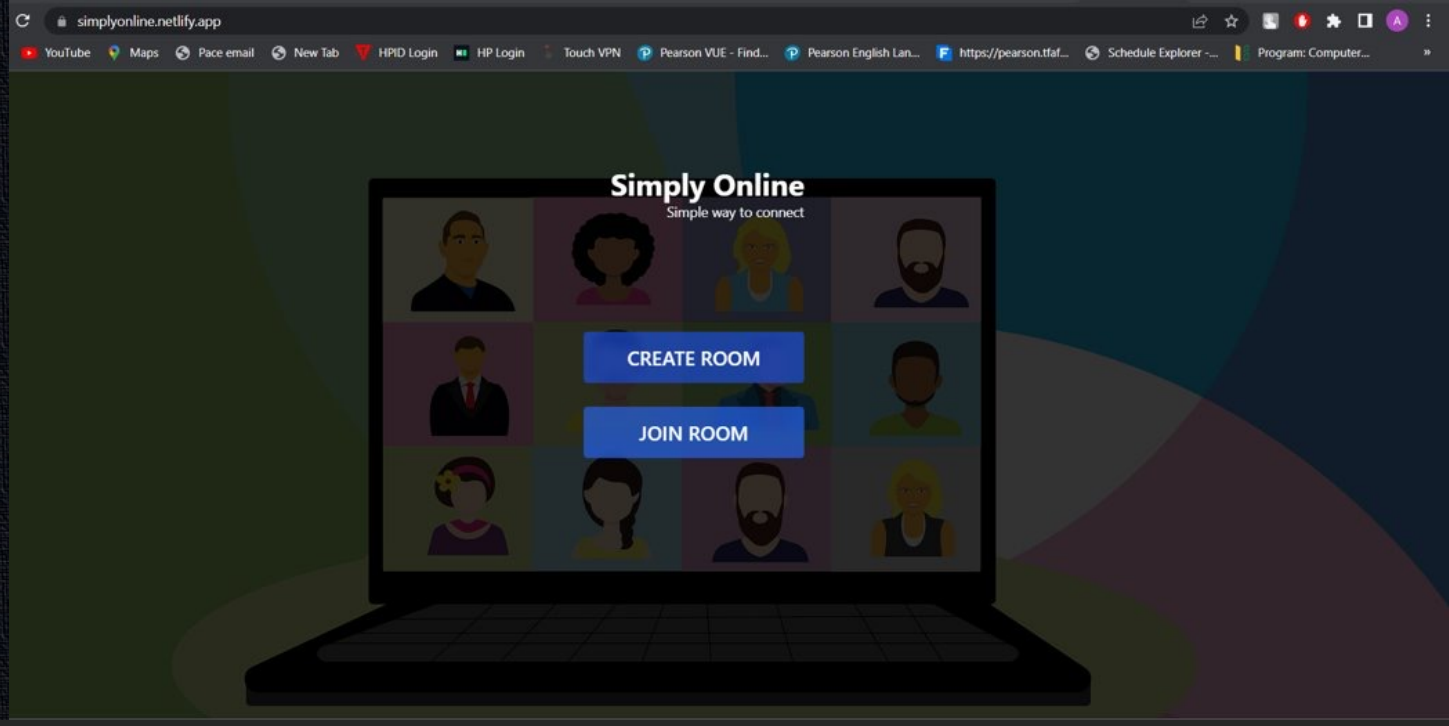
Schedule Explorer





https://github.com/htmw/SimplyOnline/wiki

https://simplyonline.netlify.app/

Thank You