Aim of the project

To develop a video conference software similar to Zoom and the webApp should run on a web browser. As a group we adapted the software processes, practiced coding, and learned new things. We ended up with [SURA](#) project.

Functionality of of the project:

- Login/register
- Create a meeting
- Join a meeting
- Pre-Viewing before Joining
- Invite others
- mute audio
- stop video
- chating
- share screen
- Record Screen
- Minimizing/ maximizing other video.

How to instal and run the program:

You can also check our [github](#) for more informations

- **As an End-user:**
  - 1- Firstly, register an account in the web app: [SURA](#)
  - 2- Login with the configuration you signed up with in the app: [Login SURA](#)
  - 3- After Logging you will have a choice to either join an ongoing meeting or Create a new Meeting.
  - 4- After creating a new meeting you will be asked to allow mic and video to be able to interact with the others.
  - 5- Then you will be in the pre-viewing room and you will be asked to click on the green cell phone to enter the call room.
- **As a Developer**:
  1. After downloading the zip file or cloning the repository
  2. Go to your terminal and **install npm**: `npm instal`
  3. If you are using a Vscode go to server.js right click on the file -> open integrated terminal and install npm.
  4. To be able to use the database: Don't forget to add the .env of mongo_URI in the same folder of server.js
  5. Finally, to **run the app**: `npm run devStart` or `node server.js`
  6. Go to your browser at: http://localhost:3000/ and now have a local hosted web app.
  7. To Deploy The app: we used **Heroku** & **azure** but you can use any other like AWS,GCP up to you. -
     a. For heroku:
        i. Login and create: [Heroku](#)

Table and pie charts

Table
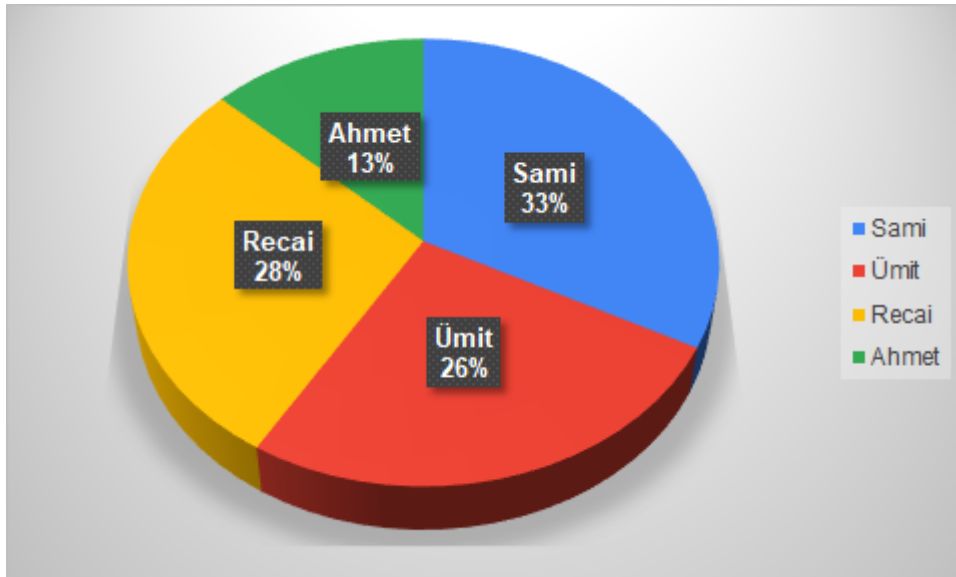
Missing parts/the features you intended to include in your software but could not implement them. Give reasons.:

- Change Camera: due to errors in some mobile types.(uncompleted)
- Deafen function: due to en
- Setting options:
- Mobile Application: as from the start we designed our application to work on a web browser, later when we decided to convert into a mobile application, we couldn't divide our program into 2 parts (Client/Server). This cause us to experience the importance of the project planning

Reasons:

1- lake of time

2- lake of knowledge

3- lake of team members

4- faced a joining error.

Experience

(experience you have gained as a group and as an individual. The risks you encountered and how you solved them.)

Group experience: first of all, being in a group does not seem easy. We improve our communication, time management, awareness of responsibilities, and overcome problems. After all these experiences we believe we are able to handle future projects better.

Sami: In general, I gained the opportunity to work with others as a team towards a goal. I learned how to work in a group better. Before this project I avoided group work, but now I'm more relieved and acceptable to the idea of working in groups. I learned that asking for help is not a sign of weakness. I Also gained the importance of a couple of management project skills, such as planning, time management, prioritizing, pair programming, needs of denominations, and the importance of refactoring.

Recai: Working with a project group increased my planning and time management skills, also this work provides us the capability of solving more complex problems than i usually do on my own. Using different perspectives increased our work's quality by discussions and explanations from different team members.

Ümit: Hard to be group leader. But I managed it. Organizing people is a hard thing but i solved with my determination. I learned how to be professional in project, i apart from friendship on the project. This one is biggest experience for me. And In 5 or 10 years later, if i work on project, i will use these experiences.

Ahmet: If I had to start as a group in our zoom project, we encountered many problems, bugs, optimization problems and similar problems. I learned how to do them by working and thinking together. I understood the importance of group work in a project and the importance of everyone fulfilling their responsibilities. We gained a lot of experience in this project, but the most important for me was group work and communication within the team. Our approach to the problems we experienced in the project and the steps we took brought us closer to the final. He told me about the difficulties we sometimes experience and the problems that cannot be solved, actually the importance of group work. That's why yes we may have had many problems, but my biggest experience is that no matter how big the problem is, working and thinking together without giving up is the key to get us to the final.

The risks we have encounter:

- **Risk of time**: sometimes our team members had mid-terms, exams or had other course projects. So all of the people in the group missed the meetings. We doubled the meeting period.

- **Risk of expatriates**: e.g. javascript, we had no one with enough knowledge of javascript therefore, we had to go through javascript courses and tutorials to overcome this risk.

- **Risk of members**: this lecture has 5 groups, and all groups have more than 5 members. We believe if we had more members we would have developed a much better project.

- **Risk of failing**: e.g. when we deployed the app, rooms were not joining together, and with the due date becoming closer and closer we hesitated about our abilities to complete the project.

Appendix:
On 28.02.2021 we were asked to group up and pick a leader. Then we found an open source project to start developing it towards the goal project(zoom clone). By 31.05.2021 We were able to finish our project, by holding in total 43 meetings and having more than 40 tasks assigned to our members where 95% of the tasks were done on time and only 4 tasks needed to be delayed.

Source codes: The project source code is available at: github