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# Microsoft Teams Clone

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### **Product Overview**

- Web Application using Nodejs, HTML, SCSS, Javascript, React
- WebRTC, Simple-peer and Socket.io used for making connections and transferring data
- Firebase Realtime Database for chat functionality and Firebase Authentication for authentication
- Heroku for deploying

#### Instructions to test

The following are steps you can do to test the app locally on your system

- Clone the repository, install node in your machine
- Run npm install in root directory and root/client directory both
- Go to your firebase console, register for a new project and copy authentication and database api KEYS. For help refer <a href="here">here</a>.
- Make a file .env.local and copy your firebase credentials there
- Go to file root/client/src/components/navbar/footbar.jsx and make sure line 41 is uncommented and line 40 is commented.
- In root directory, run nodemon server.js in your terminal to start the server
- In root/client directory, run npm start in terminal to launch the website

#### **Functional feature**

- User Authentication
  - Used authentication of Firebase
  - Sign up to app using your email id and set up a password (at least 6 characters)
  - Log in if you already have an account in this app
  - App use cookies to set up session, to avoid every time sign in
  - Forgot password functionality, sends email with link to reset password
- Video chatting
  - o Can make room or join room, also send link to your friends to join
  - Share screen functionality
  - Pin video functionality
  - mute/unmute video and audio
  - Can message anyone during meet
  - Copy room ID button to make it more convenient
- Text chatting
  - Messages can sent during before and after video chat
  - Messages are saved in database, so you can continue chatting any time

## Limitations

- More than 4 people can not video chat, some people will experience black screen if more people join
- Heroku cloud sleeps the app if not used for long, makes website slow to load if left idle