

MICROSOFT ENGAGE'21

Let's Meet!

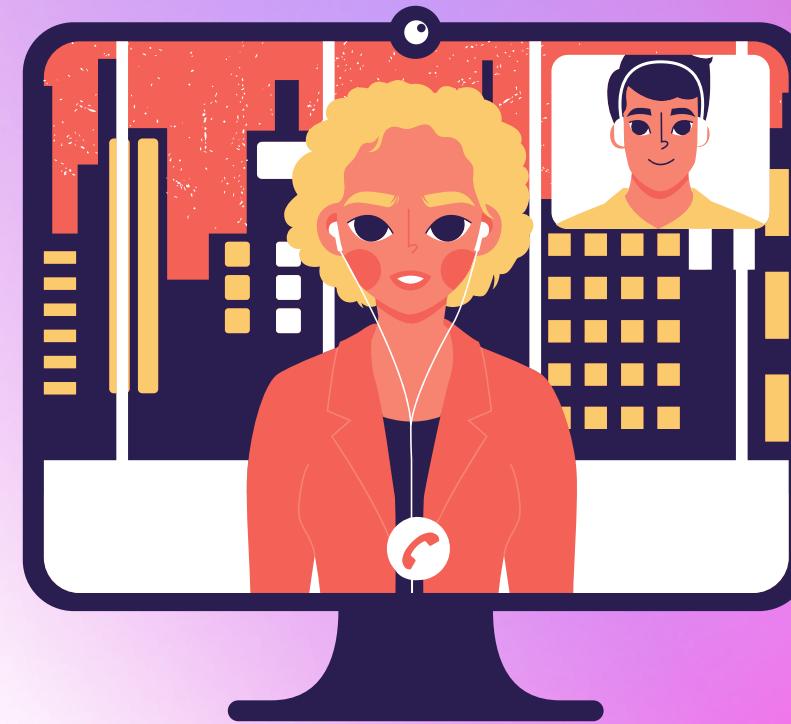
In this age of social distancing, Let's Meet.



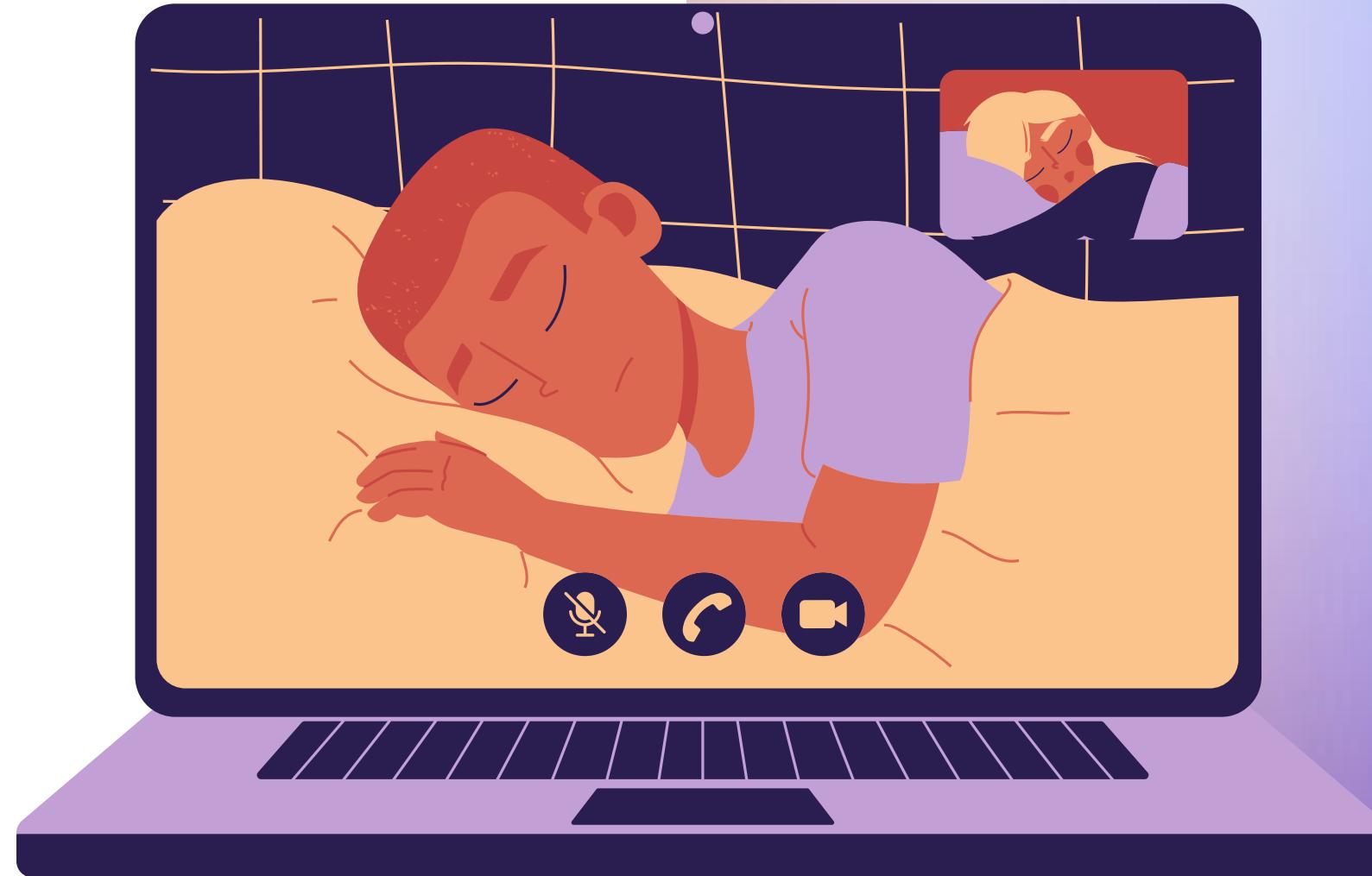
Build a Microsoft Teams clone.

The solution should be a fully functional prototype with at least one mandatory functionality - a minimum of two participants should be able connect with each other using the product to have a video conversation.

THE CHALLENGE.



MY SOLUTION



Let's Meet!

DON'T JUST TALK, LET'S MEET.

Let's Meet makes it easy to start a secure video meeting. Join from any modern web browser, and you're ready to go.

THE AGILE METHODOLOGY.

Agile scrum methodology is a project management system that relies on incremental development. Each iteration consists of two- to four-week sprints, where each sprint's goal is to build the most important features first and come out with a potentially deliverable product.



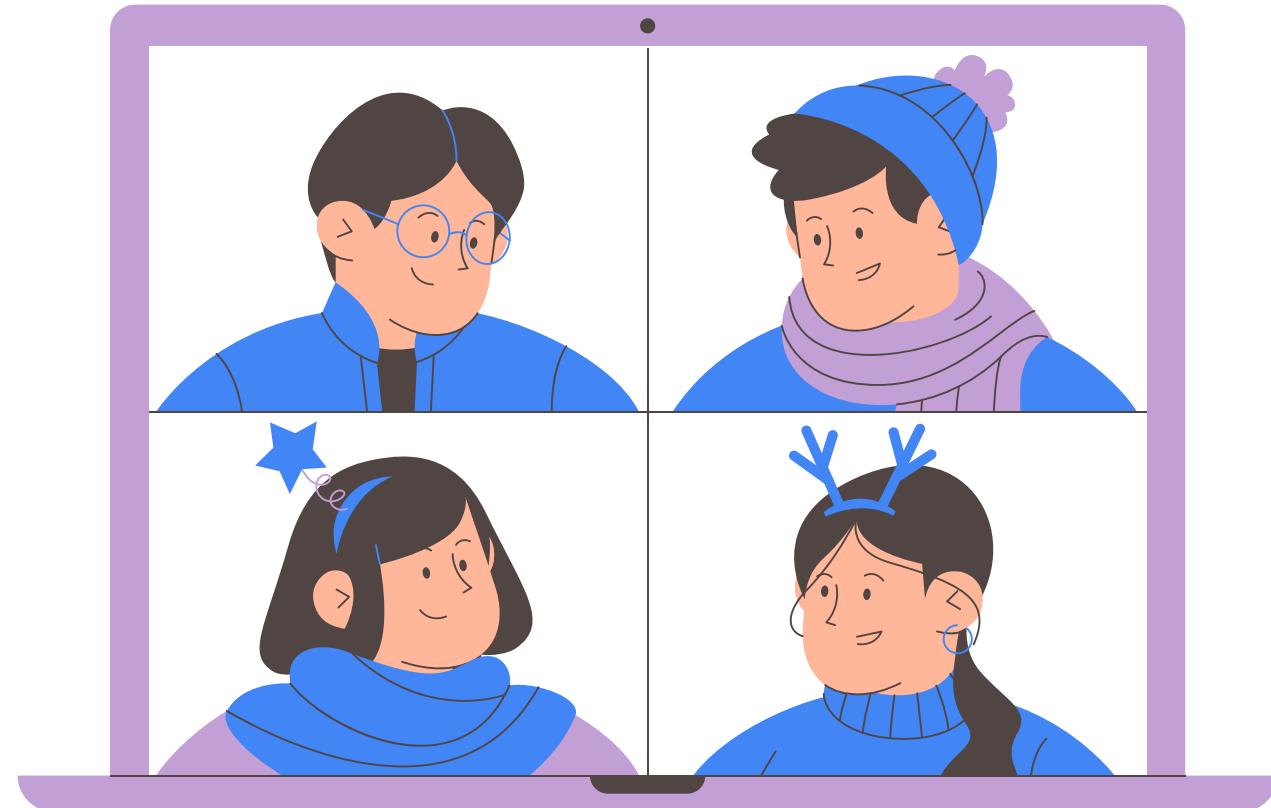
MICROSOFT ASSIGNED US THREE SPRINTS OF 1-2 WEEKS EACH: DESIGN, BUILD, AND ADOPT.

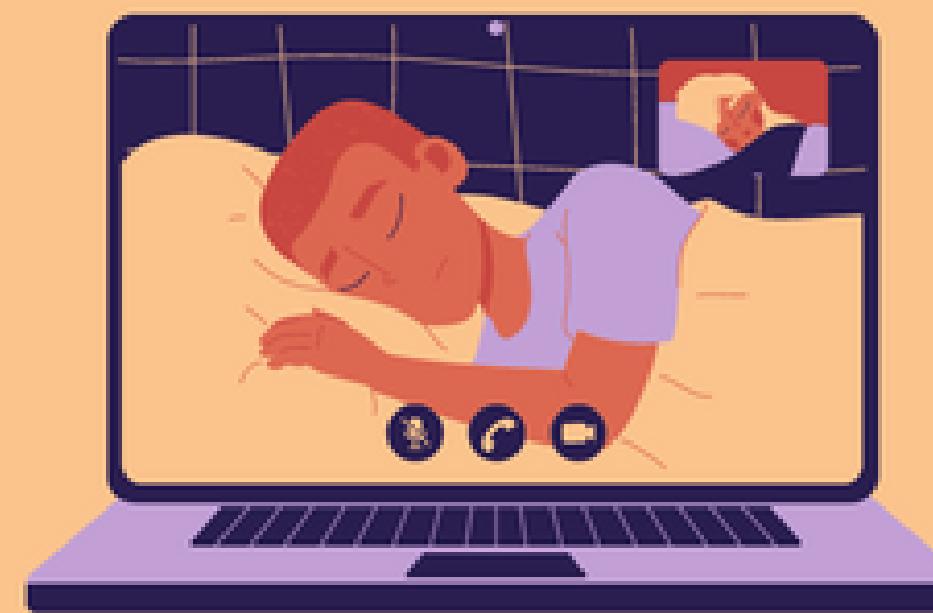
Week 1-2: Design and Research

| Develop a framework for the web app and choose on the SDK to be used

The First Week marked the commencement of our Mentorship Calls. In my first call with my mentor, he explicitly advised me to come up with a game plan and build an app flow which would eventually help me in deciding on what features I want for my web app.

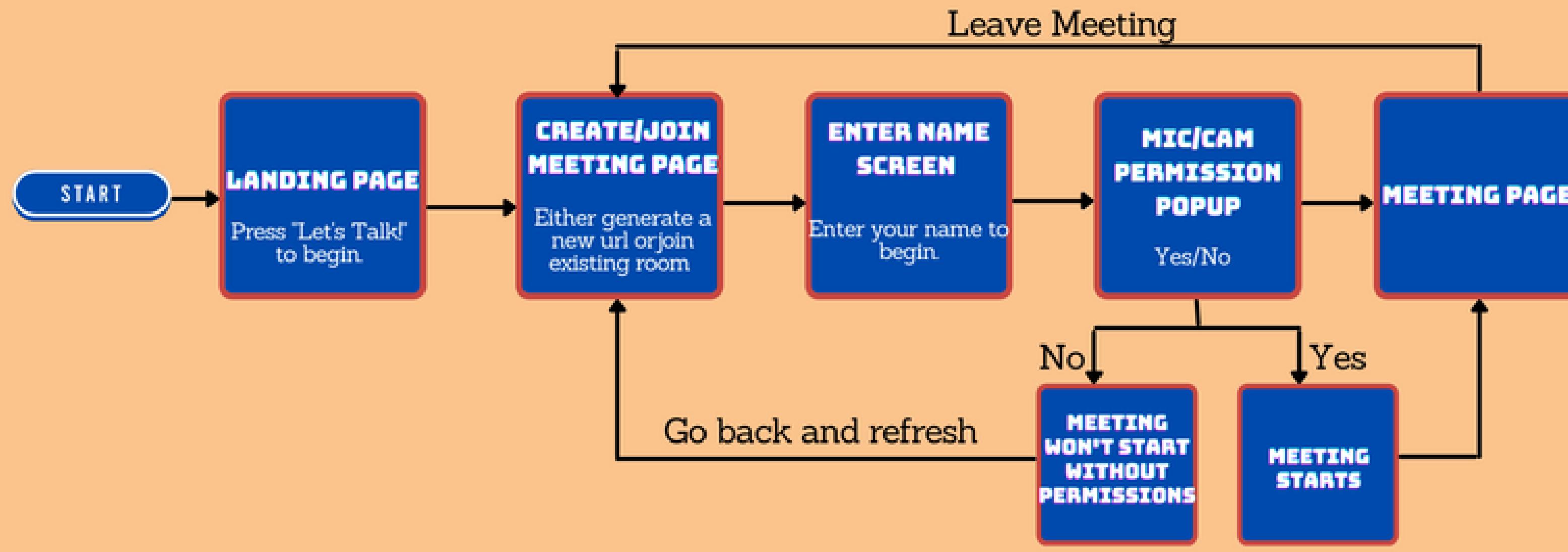
The Second Week was spent researching on various SDKs, eventually deciding on WebRTC.





Let's Meet.

WEB APP FLOW



Week 3-4: Implementing the Game Plan

WORKING ON THE MINIMUM CRITERION

This was achieved on the first day itself. Rest of the days were completely dedicated to adding functionalities and working on the UI of the web app.

THE FEATURES

Most, if not all features are implemented using JavaScript. The connections between two individuals are made using Socket.io.

MENTOR'S FEEDBACK

My mentors loved the idea I was working with. They asked me to improve upon the UI. Asked me to implement the chat functionality as well.



Week 4: The Adapt Feature

Include a chat feature in your application where meeting participants can share info without disrupting the flow of the meeting. Built upon the chat feature in my own app more.

Last 2 Days: The Final Touches

| Technical Documentation

MAKE SURE THE VISUALS ARE IN PLACE

Fine tuned the UI in my web app.

ADD A TIGHT DESCRIPTION

Worked on the GitHub for my code.
Also started work on my technical ppt
and product video

FINAL DEMO

Did a final demo run through with my
mentors. They loved my
implementation and advised me a bit
on my technical documentation.

Technologies Used

-HTML

-Bootstrap

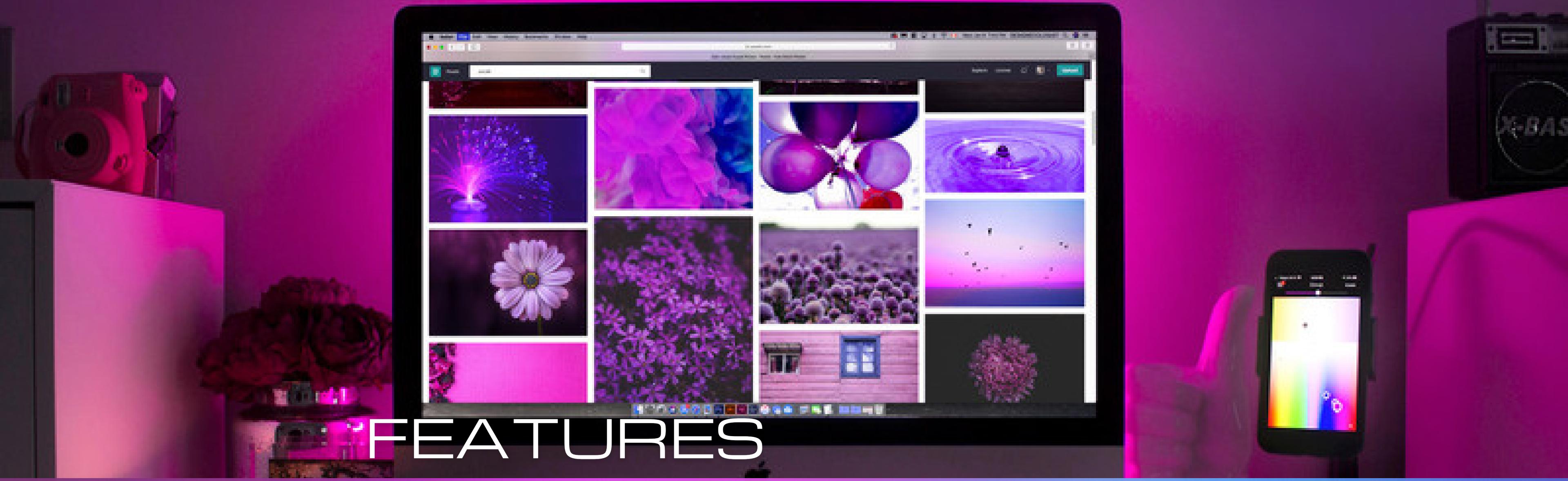
-Node.js

-WebRTC

-JavaScript

-CSS

-Socket.io



FEATURES

Fun stuff to do in the web app

- Video Calling
- Multi person video call (more than 2 people)
- Audio on/off
- Video on/off
- Screenshare
- Collaborative whiteboard
- Create a meeting
- Chat
- Status of joining and leaving
- Copy URL in-meeting
- Adding own name to profile
- Leave meeting

IN THE FIRST WEEK, I EXPERIMENTED WITH A BUNCH OF DIFFERENT SDKS FOR IMPLEMENTING THE VIDEO CALL FUNCTIONALITY, NOTABLY WEBRTC, AGORA AND JITSI

IN THE SECOND WEEK, I STARTED IMPLEMENTING THE FUNCTIONALITIES USING AGORA, EVEN ENDED UP DEVELOPING A WHOLE WEB APP WITH IT.

I VERY QUICKLY REALISED, MANY FUNCTIONALITIES I WISHED TO IMPLEMENT WERE NOT EASILY IMPLEMENTABLE USING AGORA, WHICH CAUSED ME TO SWITCH TO WEBRTC. THIS COST ME HALF A WEEK.



Why WebRTC?

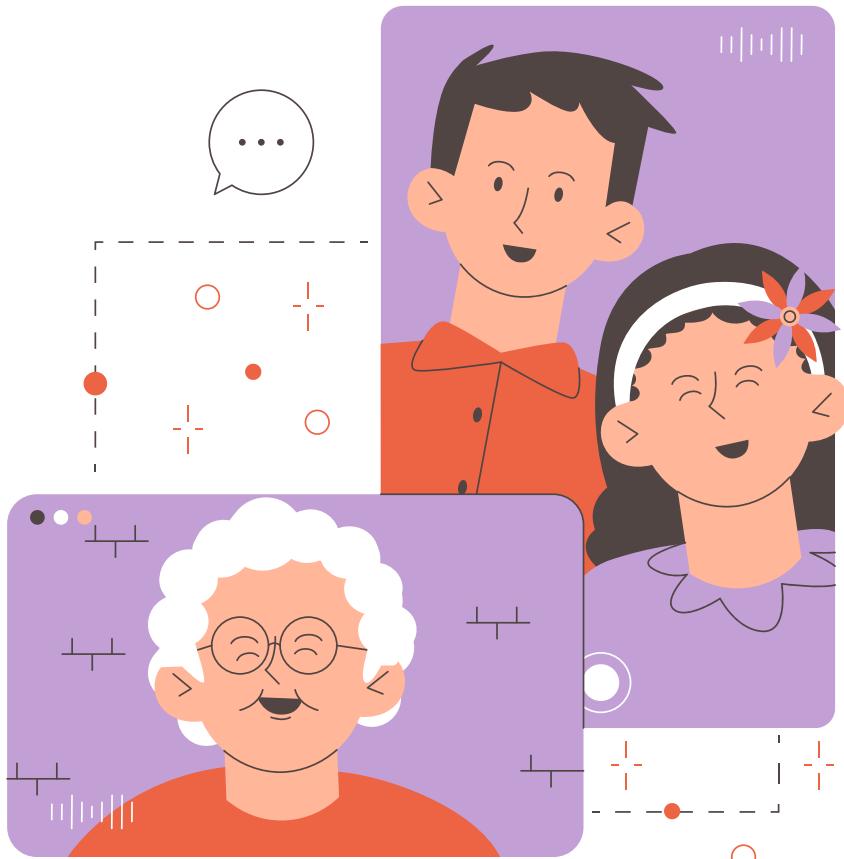
WEBRTC WAS MY FINAL CHOICE DUE TO ITS EASE OF USAGE AND SIMPLICITY.

THE USP

| Why Let's Meet.

1. It's Unique UI

Since Day 1, the role of UI was very heavily implied by Microsoft and the Acehacker team. A lot of work and effort has been put into creating an intuitive and easy to use UI.



2.

The Collaborative Whiteboard

Being an engineering student, the importance of chalk board teaching is very well known to me, which was lost due to the online mode of teaching. This is still a very new feature in most of the prevailing Video Call web apps, including Microsoft Teams.

3.

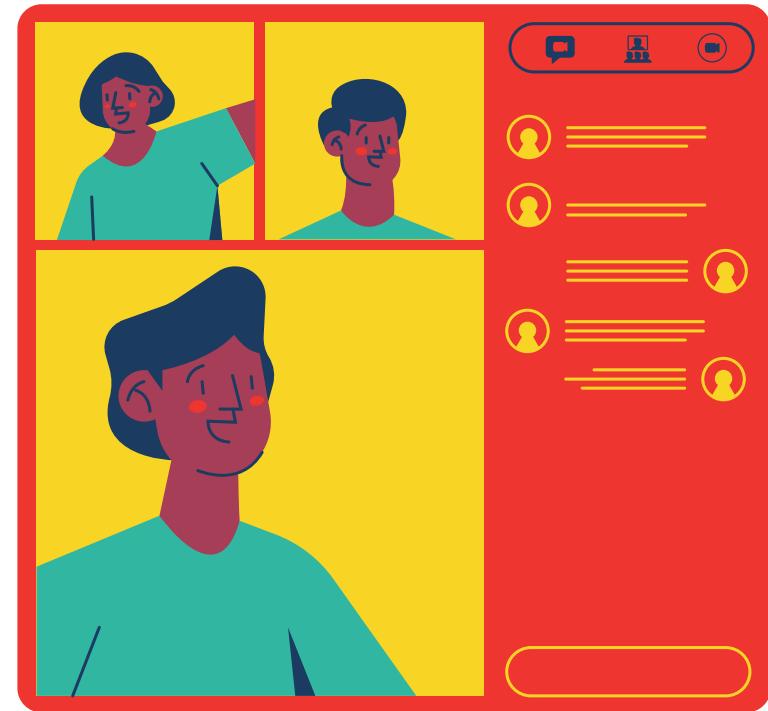
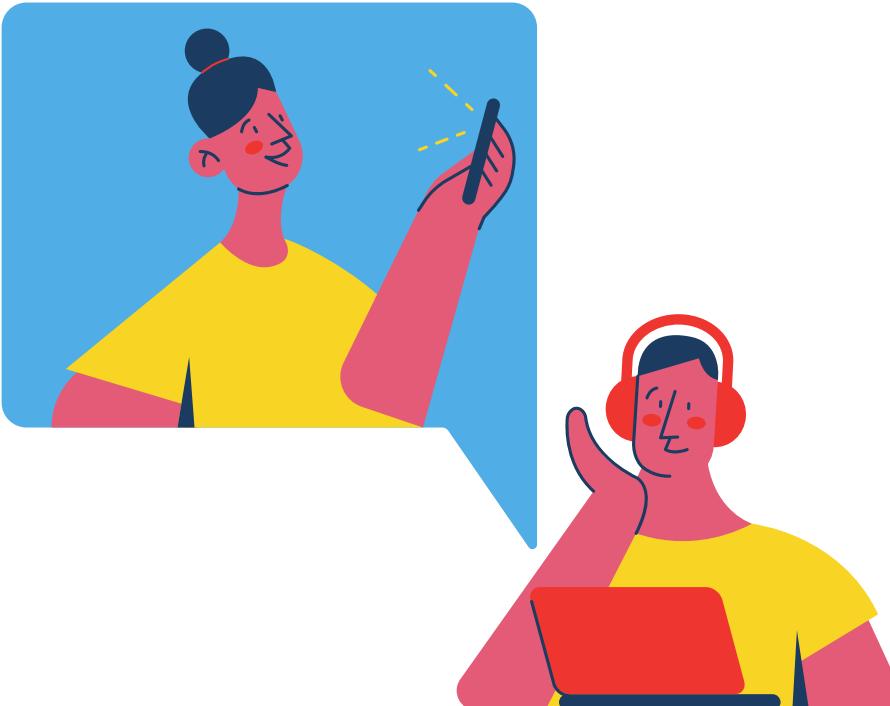
Ease of Use

No sign ups required. Just Click on the link, and begin talking.

Target Users

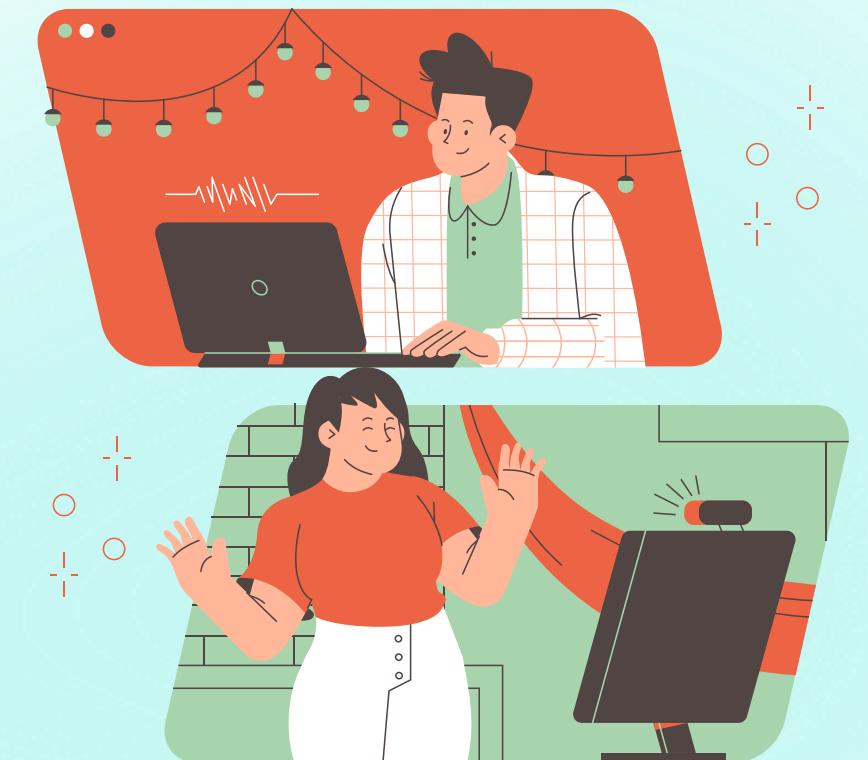
EDUCATIONAL INSTITUTIONS

Due to it's Screen Sharing and collaborative Whiteboard capabilities, this is an excellent add on to the educational tool kit.



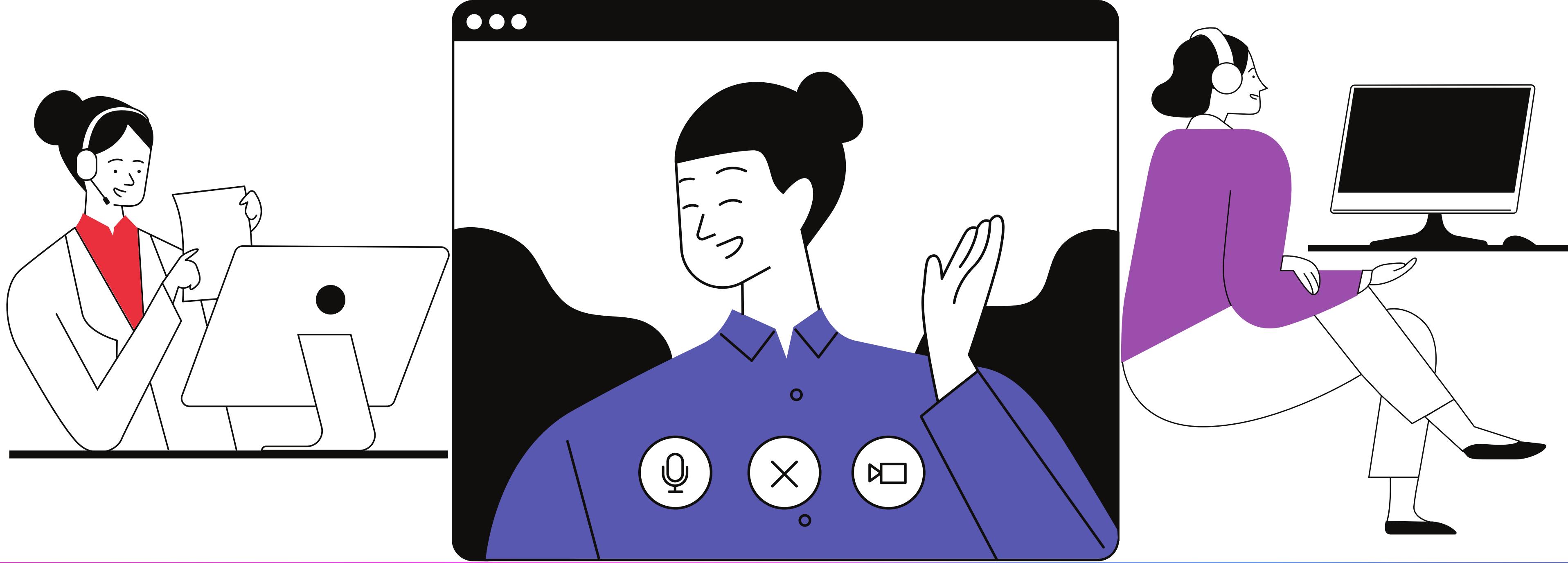
OFFICE MEETINGS

Owing to the need of holding all meetings online, as well as collaborating and brainstorming while ideating, this is the perfect addition to the board room.



LOVED ONES

Have virtual dates, meet your grandma living far away from you, look at your friend's pet, the possibilities are endless!



Future Goals

Add a signup/authorisation page

Improve upon the chat functionality a bit more

Increase scalability



Meet The Developer

Shruti Sinha

PART TIME CODER, FULL TIME DIET COKE ADDICT.

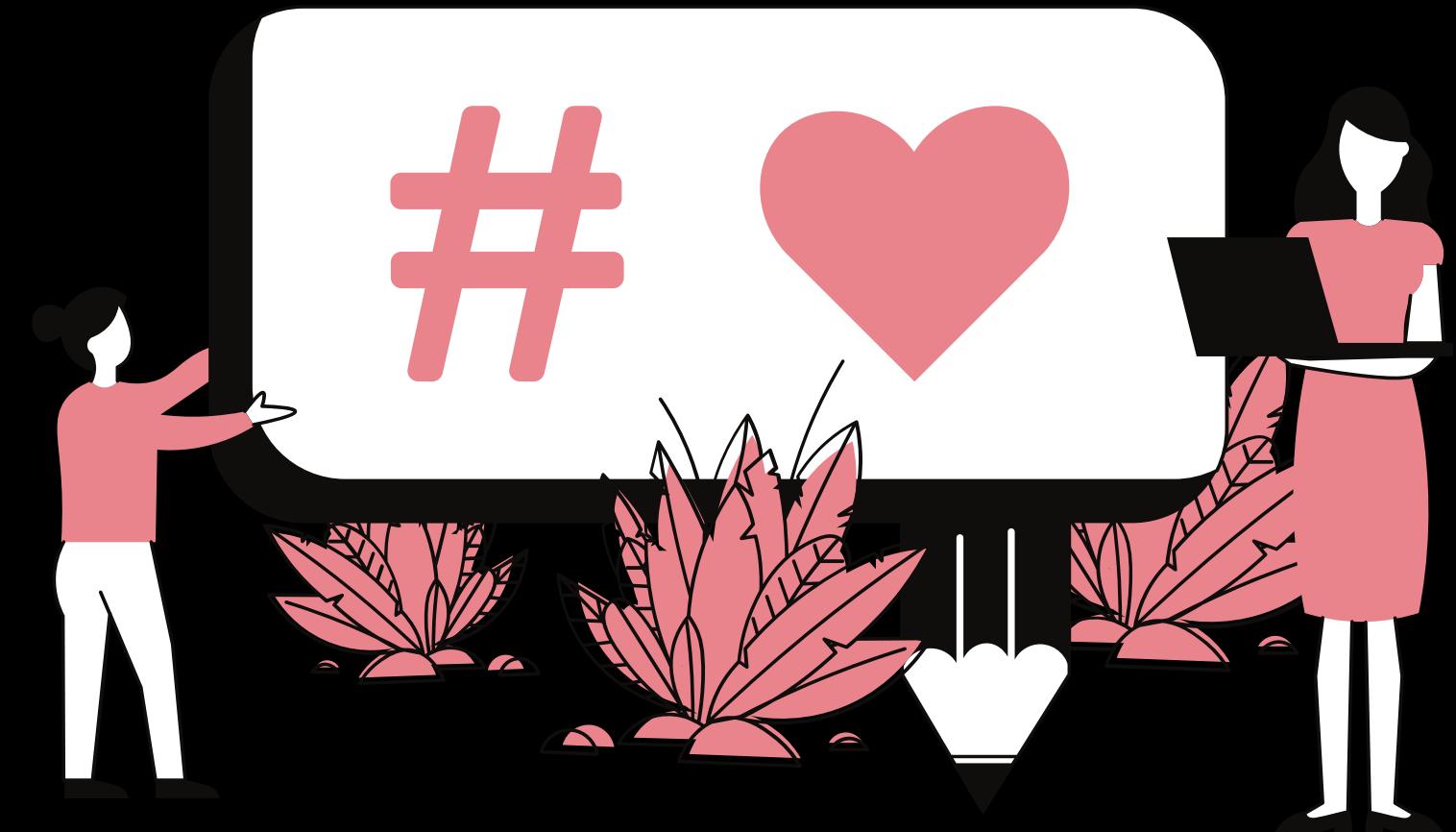
I am currently a B.Tech. student from Indira Gandhi Delhi Technical University for Women, majoring in Mechanical and Automation engineering with a minor in Computer Science starting my 3rd year in August. My major interests lie in Computer Vision, Artificial Intelligence and have recently been exploring the Web Development domain. My free time is spent free styling with my guitar.

Happy meeting!

I'll catch you online!

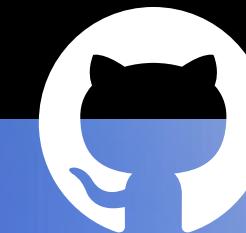
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LINKEDIN

<https://www.linkedin.com/in/shruti-sinha-8b68a4131/>



GITHUB

@shrutayyyy



EMAIL

shruti.sinha18060@gmail.com