



Video Conferencing Application With Speech Transcription

Capstone Project Phase II
Project Number 24-1-D-19

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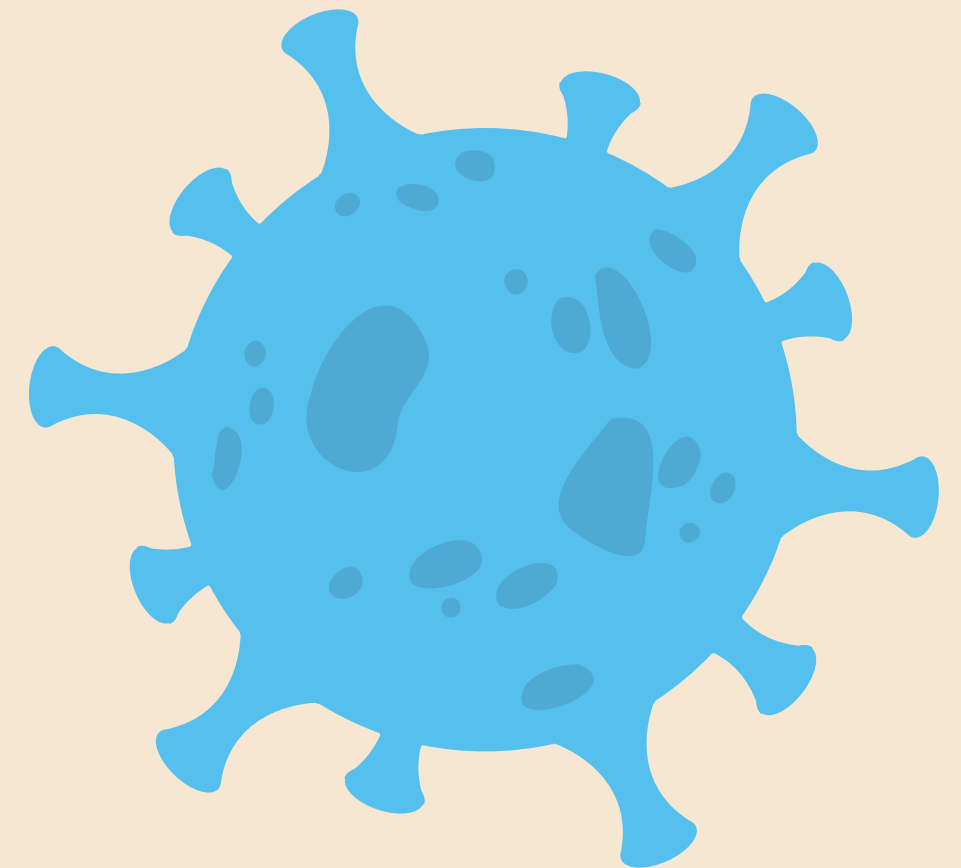
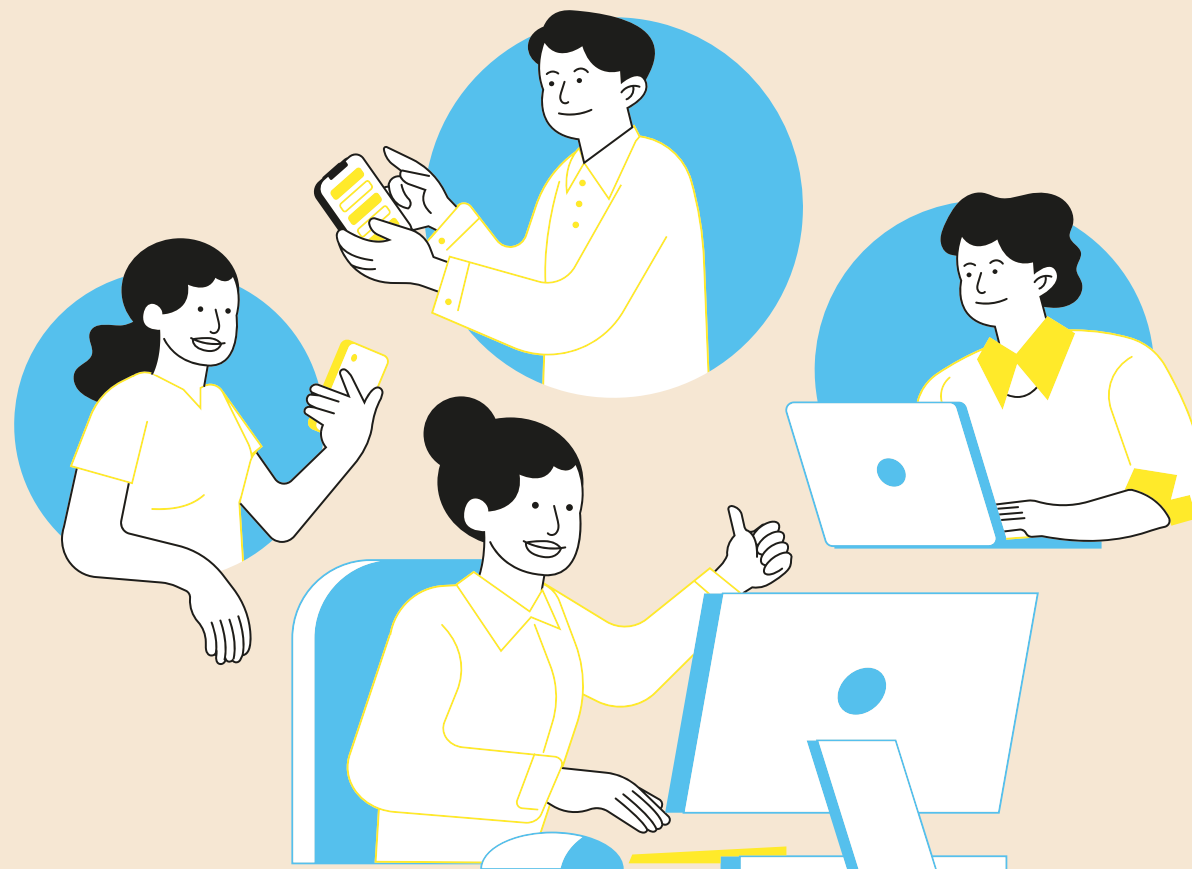
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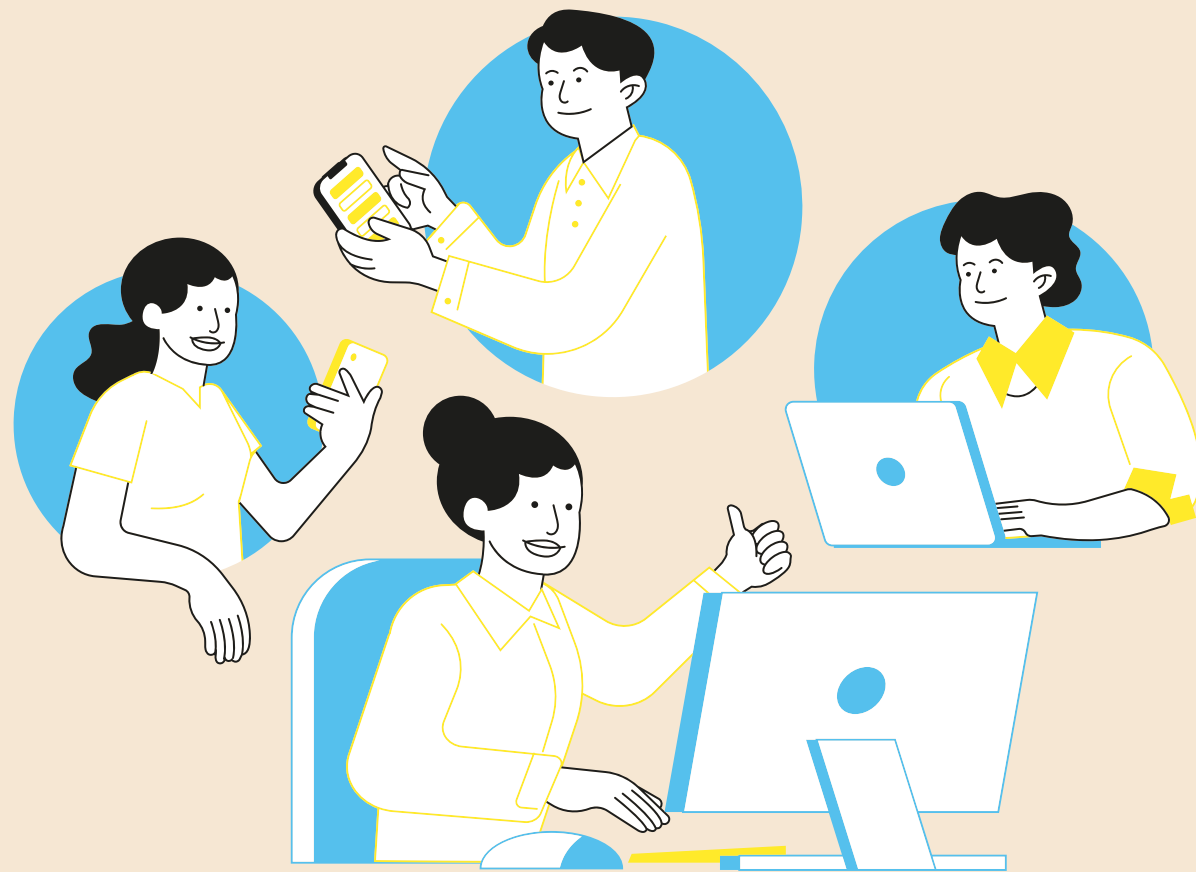
Introduction







After COVID-19 remote conference became more and more popular, but until now all the applications don't have the ability to save the transcript of the conference .

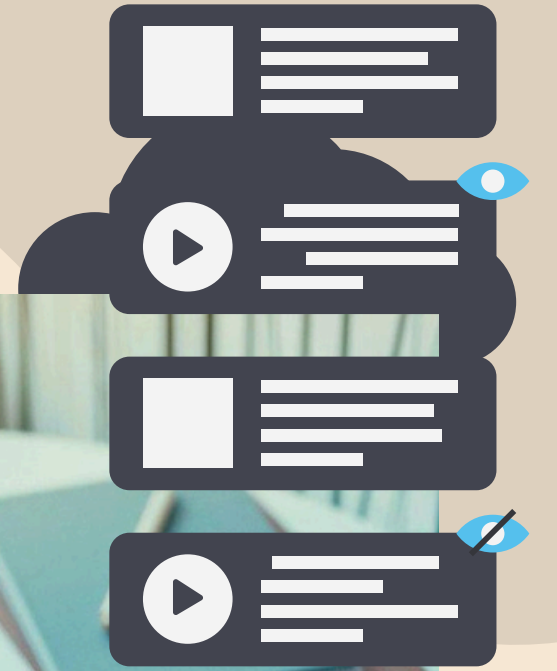
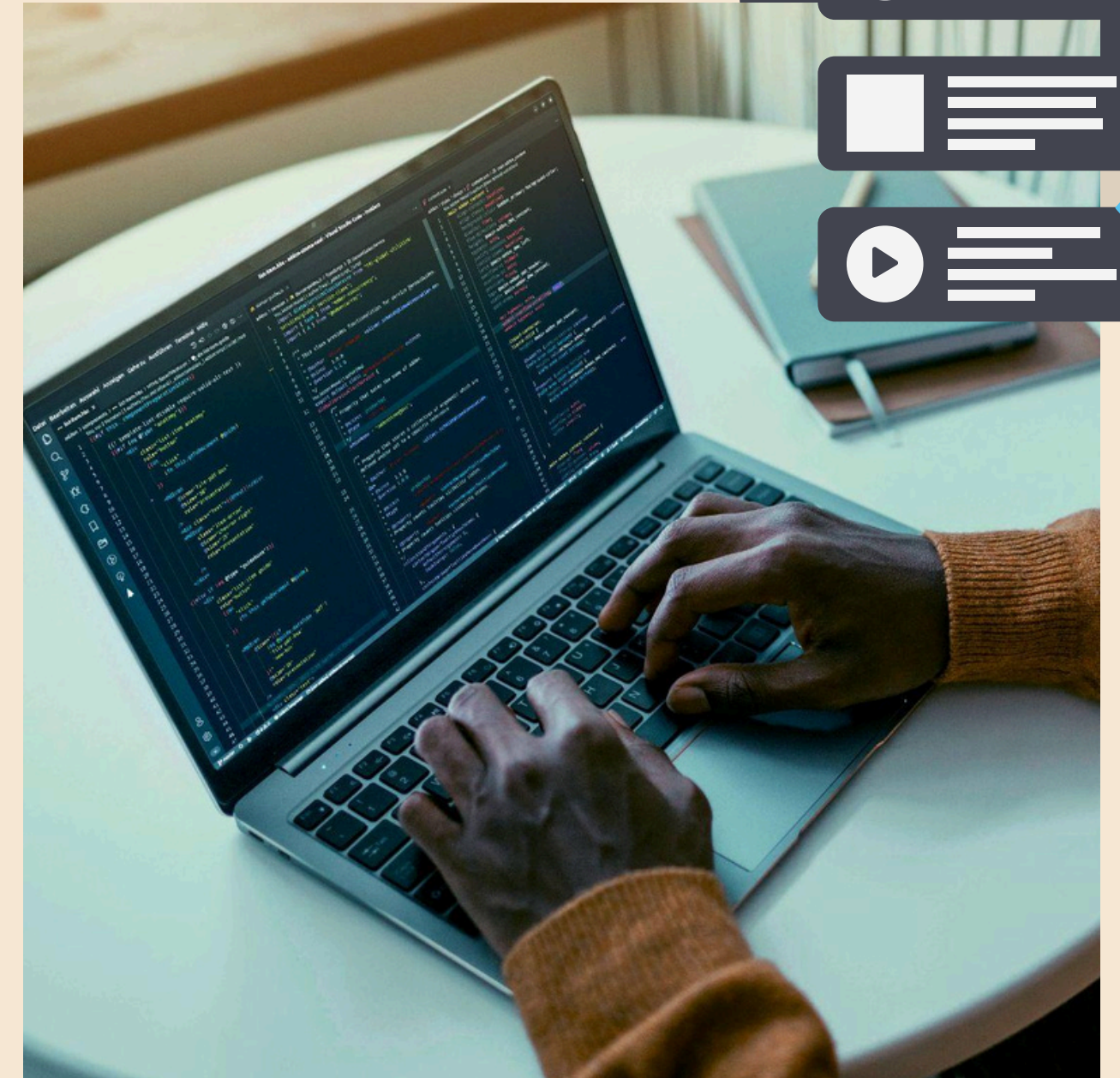


Project Goal



Why we need such system?

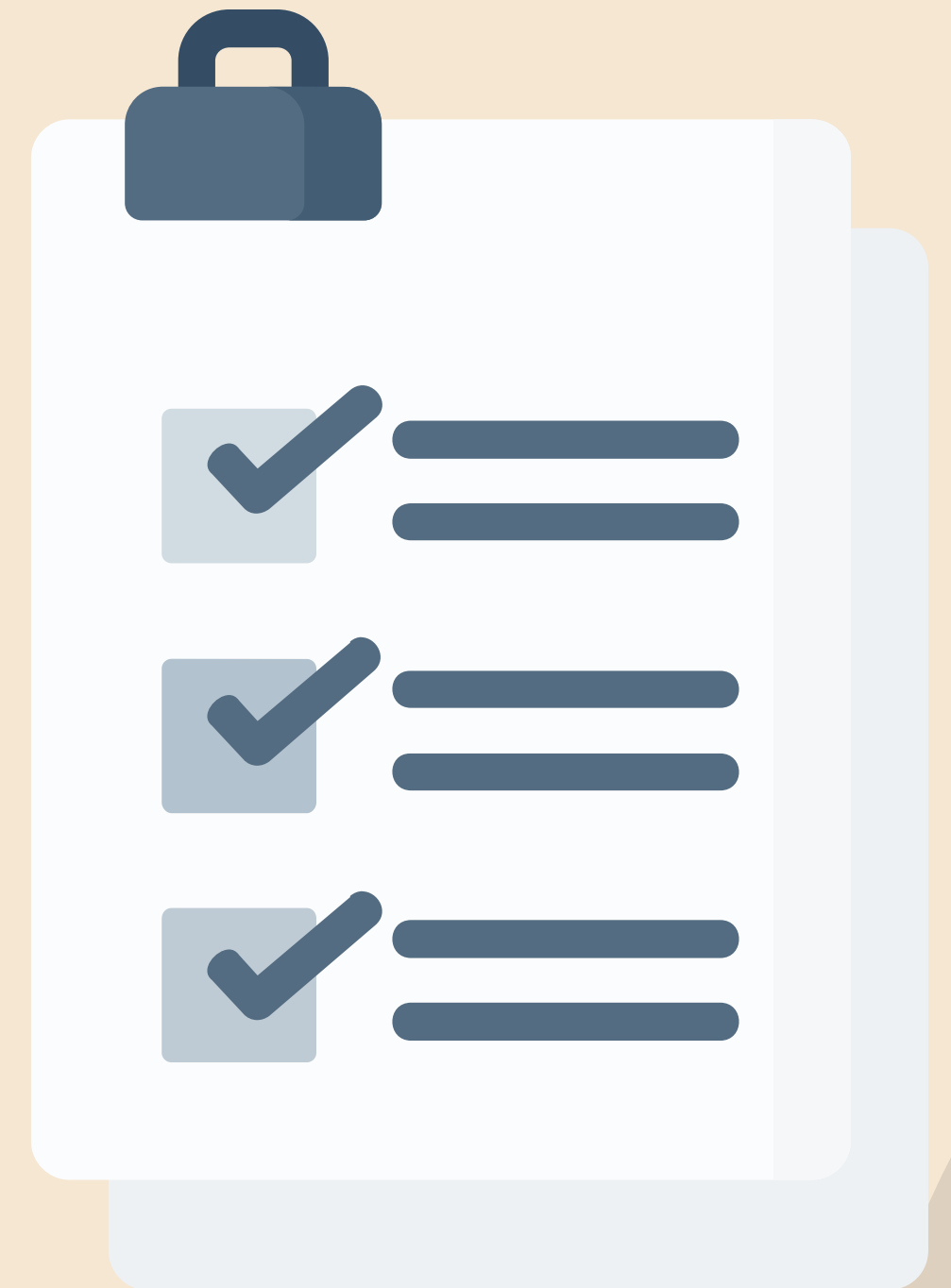
-  Individuals with hearing problems
-  language barriers.
-  Study and learning.
-  Note-taking



System requirements

Functional

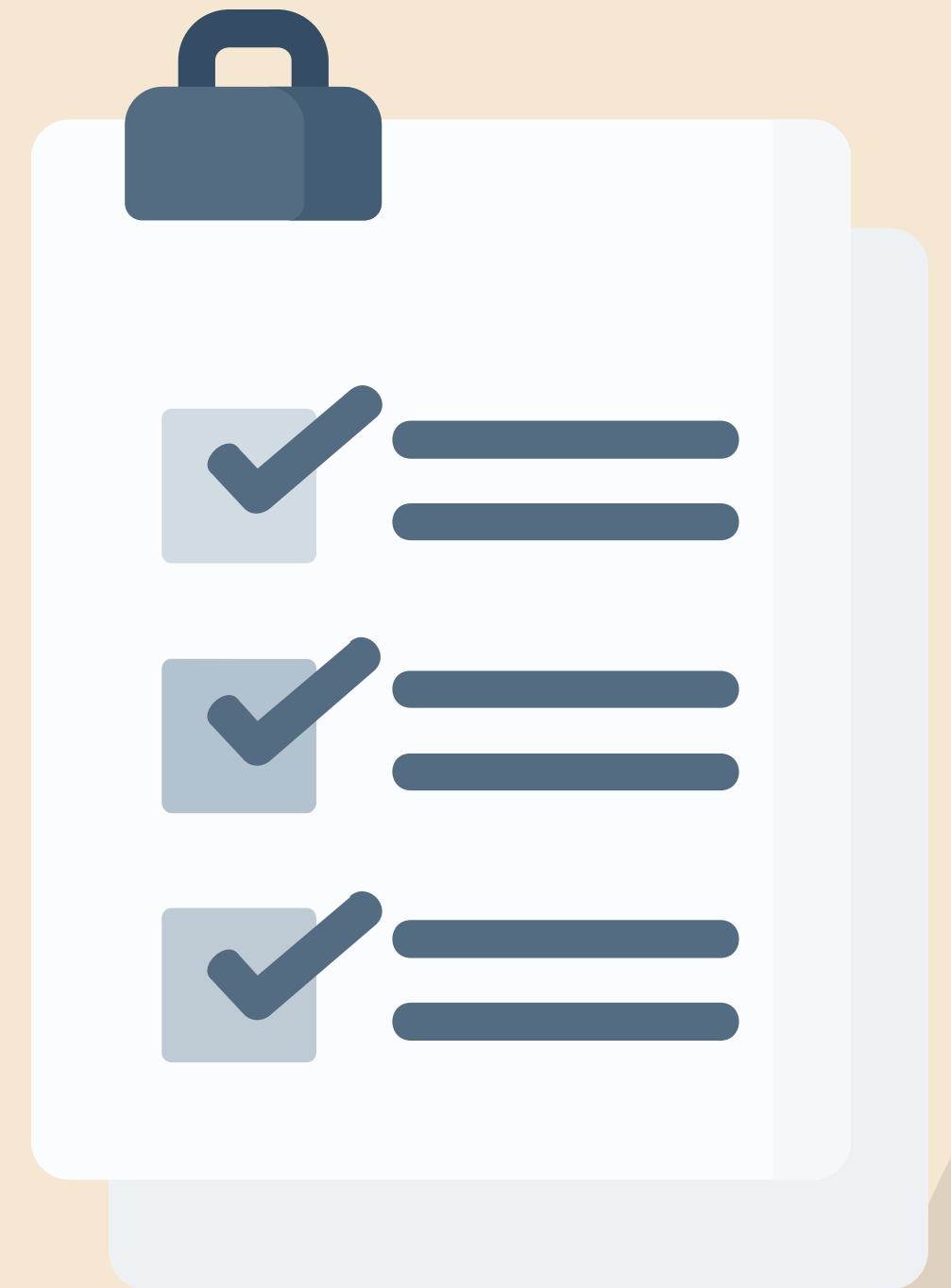
- video calls.
- meeting controls.
- speech-to-text integration.
- data privacy.
- viewing transcriptions.

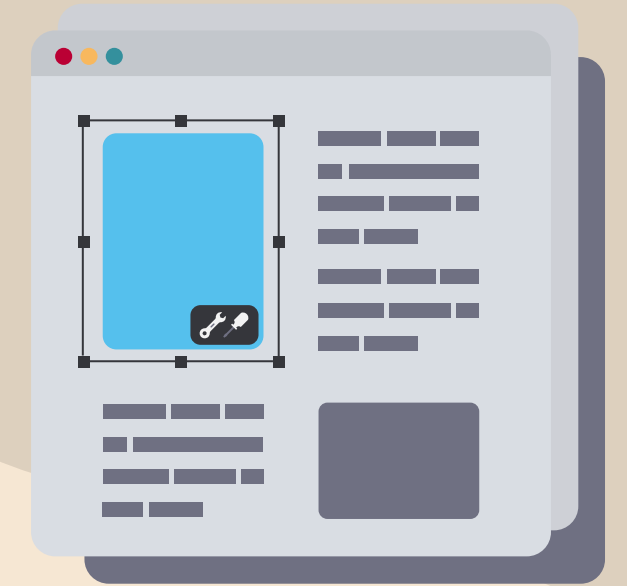
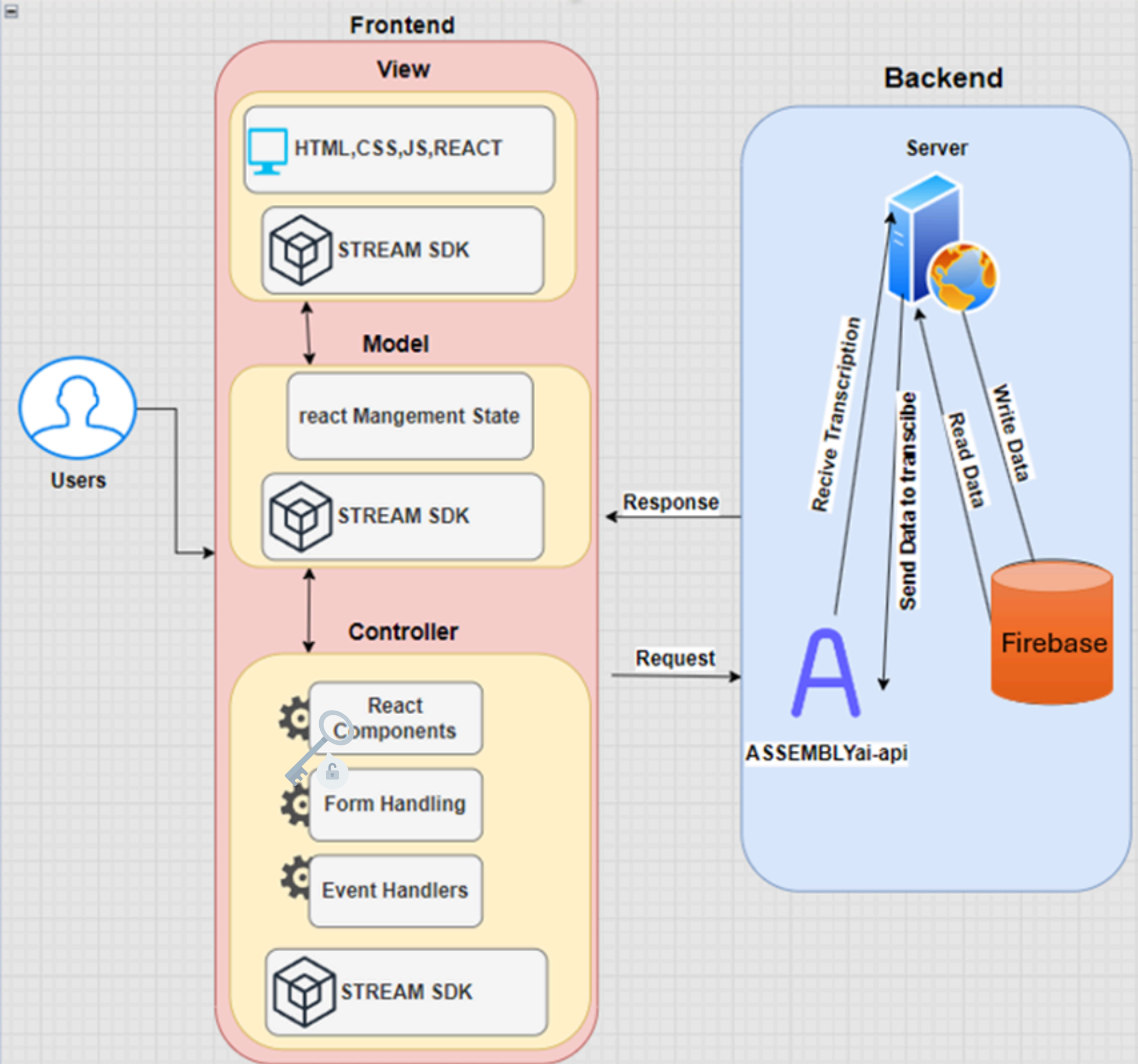


System requirements

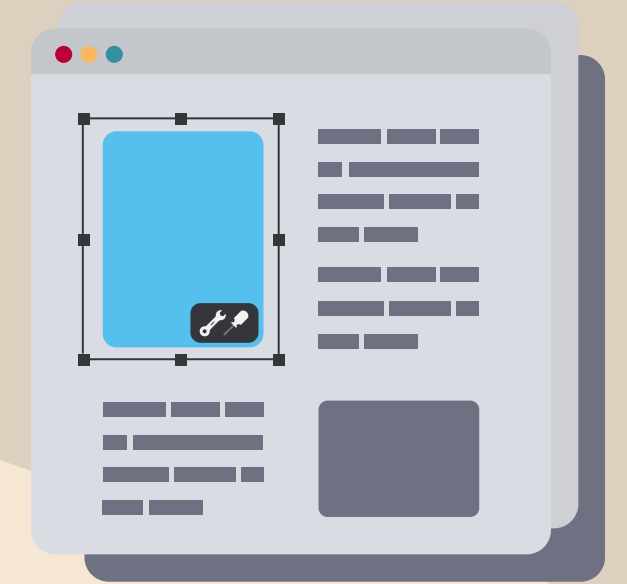
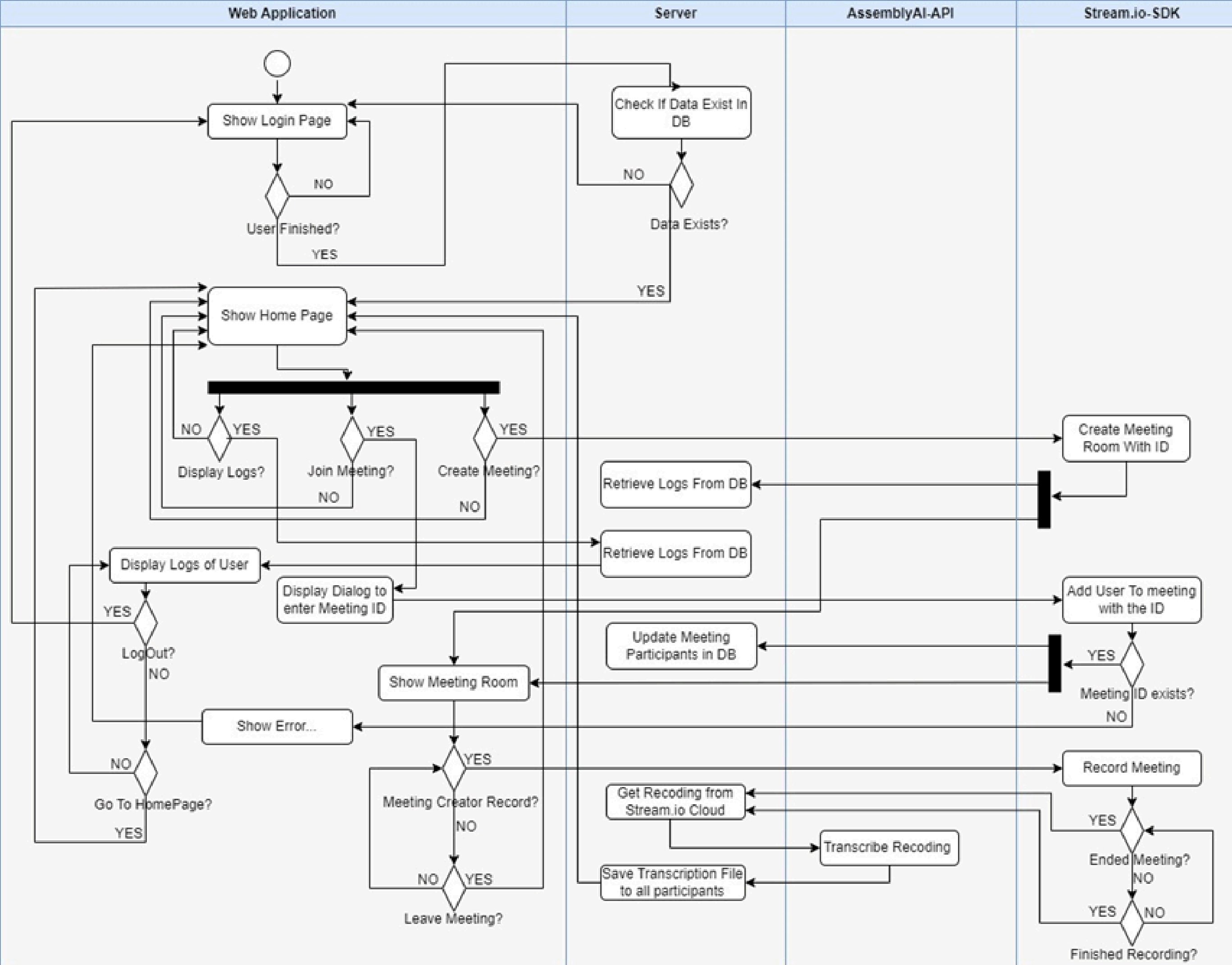
Non-Functional

- Low latency and responsiveness.
- scalability.
- Device Compatibility .
- User-Friendly Interface.
- Maintainability.

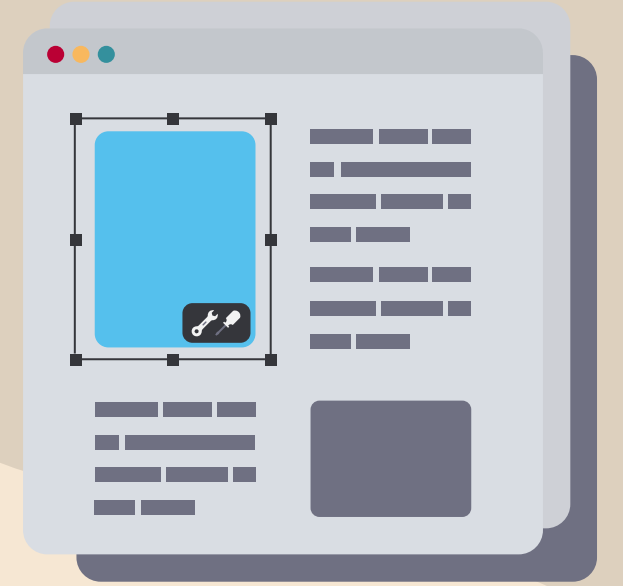
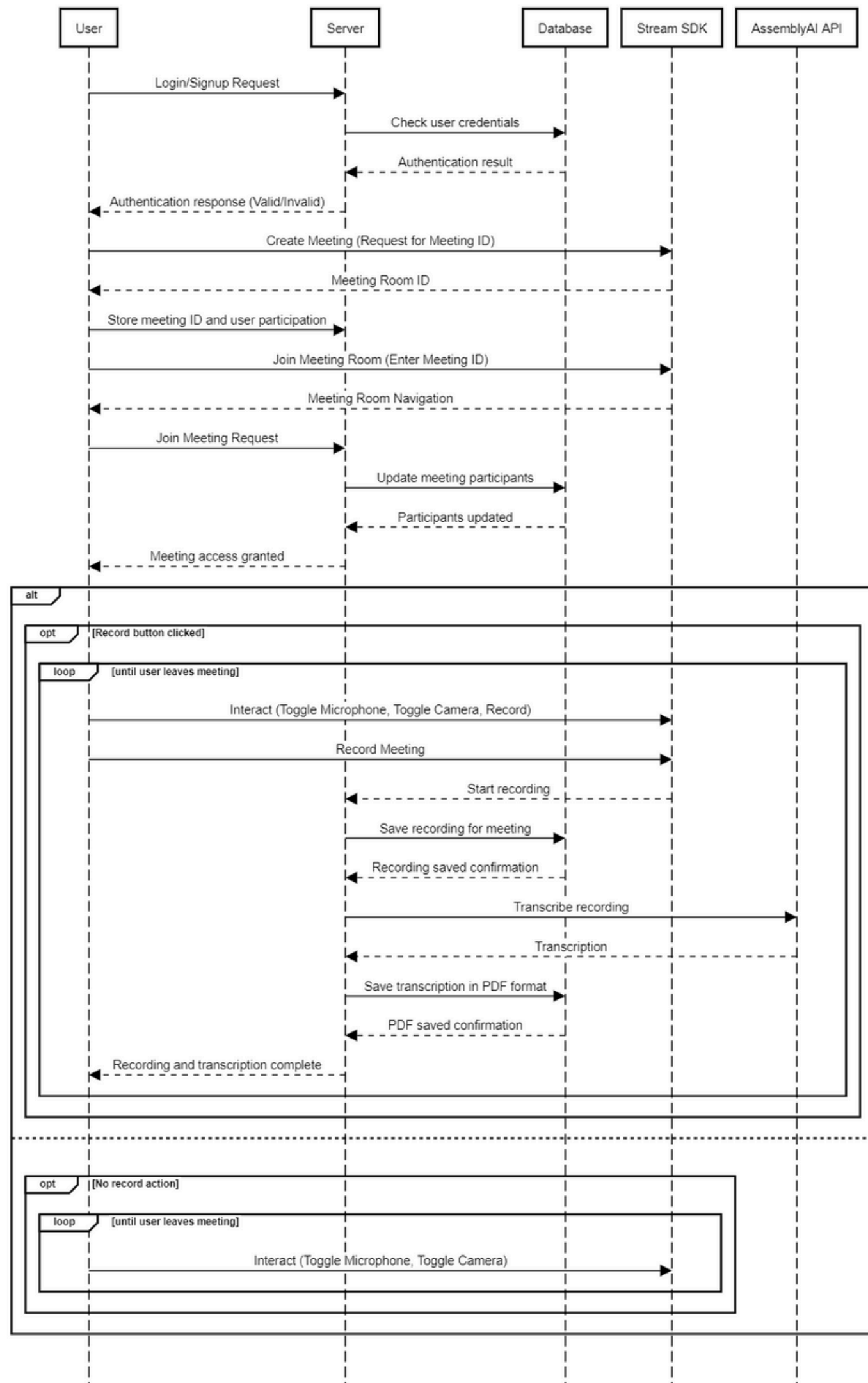




Solution Description - Architecture



Activity Diagram



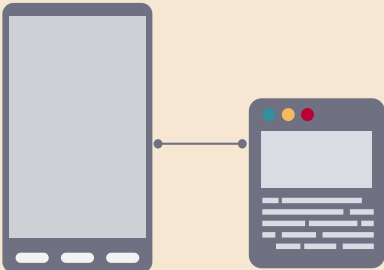
Sequence Diagram



Success Criteria and Achievements

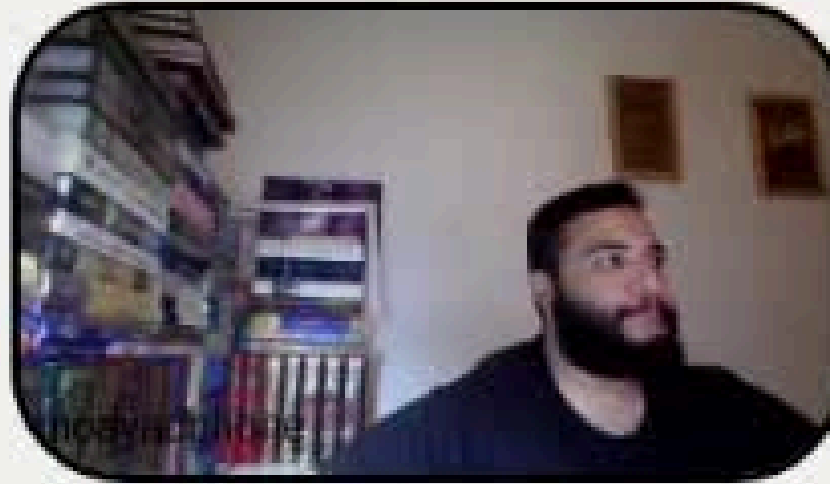


Criterion	achivement
video calls	create and join meetings
Transcription integration	transcription files
user controls inside meeting	full control
data privacy	user data encrypted



Now, lets see real meeting and check the transcription file generated by the system





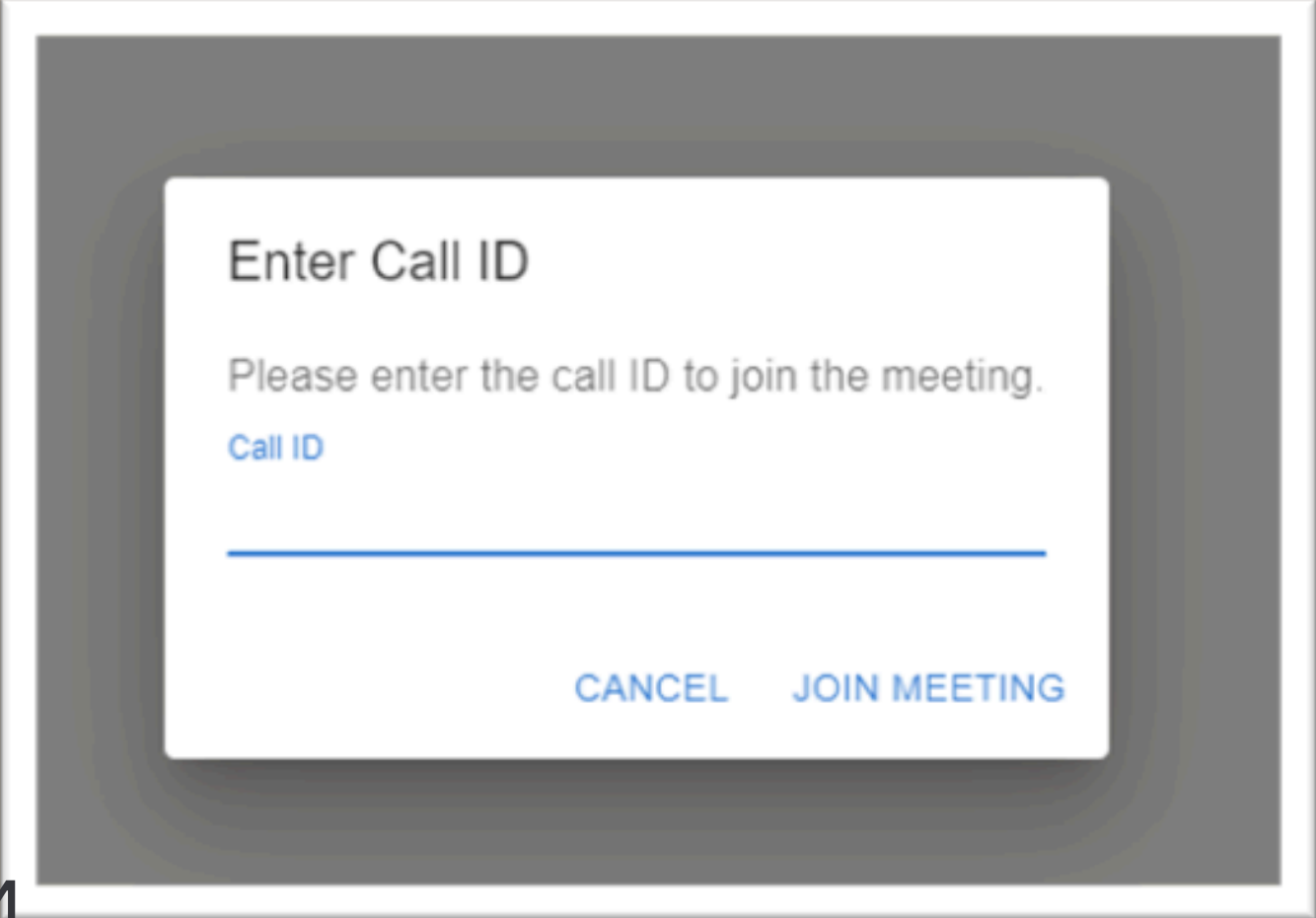
Challenges we faced

- Accuracy of Transcriptions.
- Sensitive data.
- Gateway Timeout Configuration.



Testing



Test	Tested Function	Expected Result	result
1	Page load	First page load<2s	lodaing time~400ms
2	Join meeting process.	A pop-up should appear asking for the meeting ID.	



RAM

VIDEO CONFERENCE

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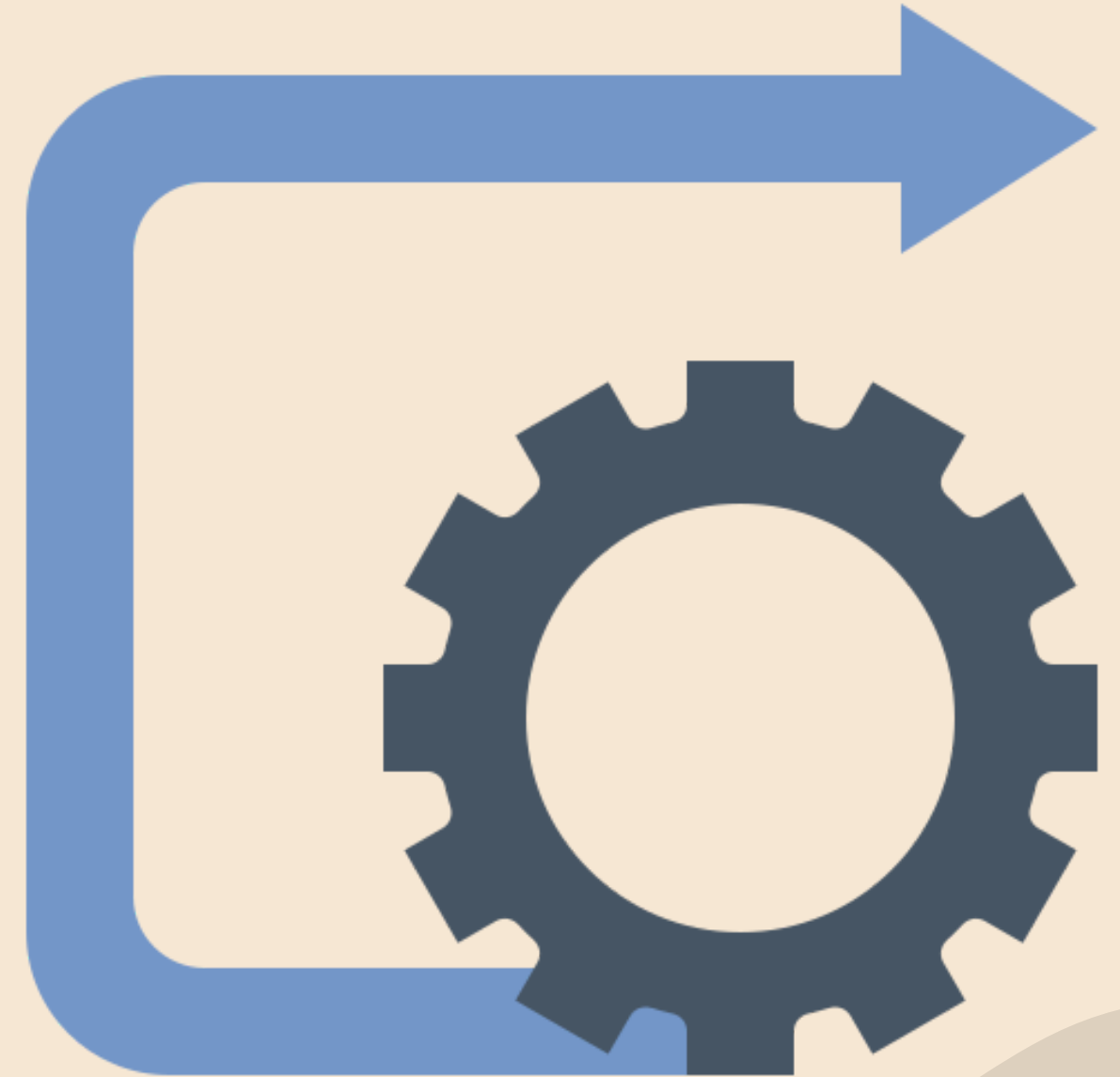
Conclusions

- Functional achievements.
- Performance.
- Challenges Addressed.



Future work

- Improving the UI.
- Multilingual website.
- Adding chat messagnig between users.
- Real-Time transcript.

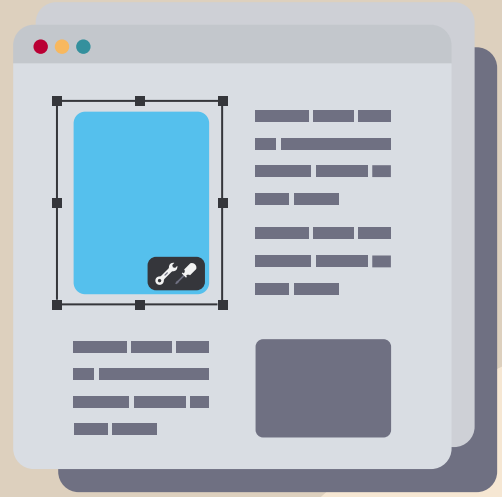




Video Conference

Website

The fu
online



Thanks!

Do you have any questions?
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<https://github.com/RamiAmasha31/rm-video-call>

