

VC-ME Product Documentation

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INTRODUCTION

This application builds a 1-to-1 video chat, where each peer streams directly to the other peer - there is no need for a middle-man server to handle video content. This application uses XIRSYS Turn server for custom audio and video infrastructure architecture. Web Real-Time Communications – WebRTC in short – is an HTML5 specification that allows you to communicate in real-time directly between browsers without any third-party plugins. WebRTC can be used for multiple tasks (even file sharing) but real-time peer-to-peer audio and video communication is obviously the primary feature . This application is inspired by the video calling applications like Skype, Google meet in terms of functionalities.

PLANNING

Architecture:

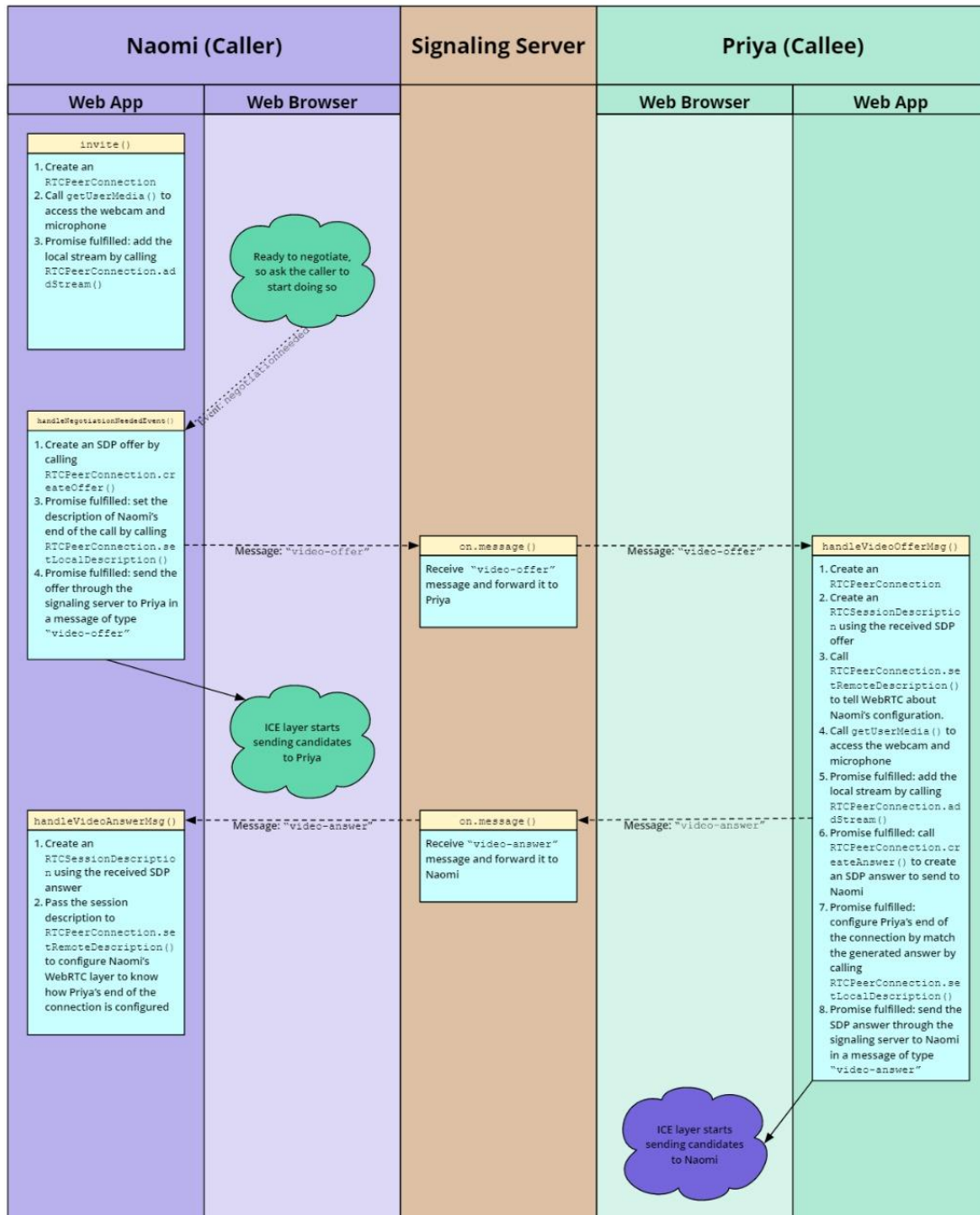
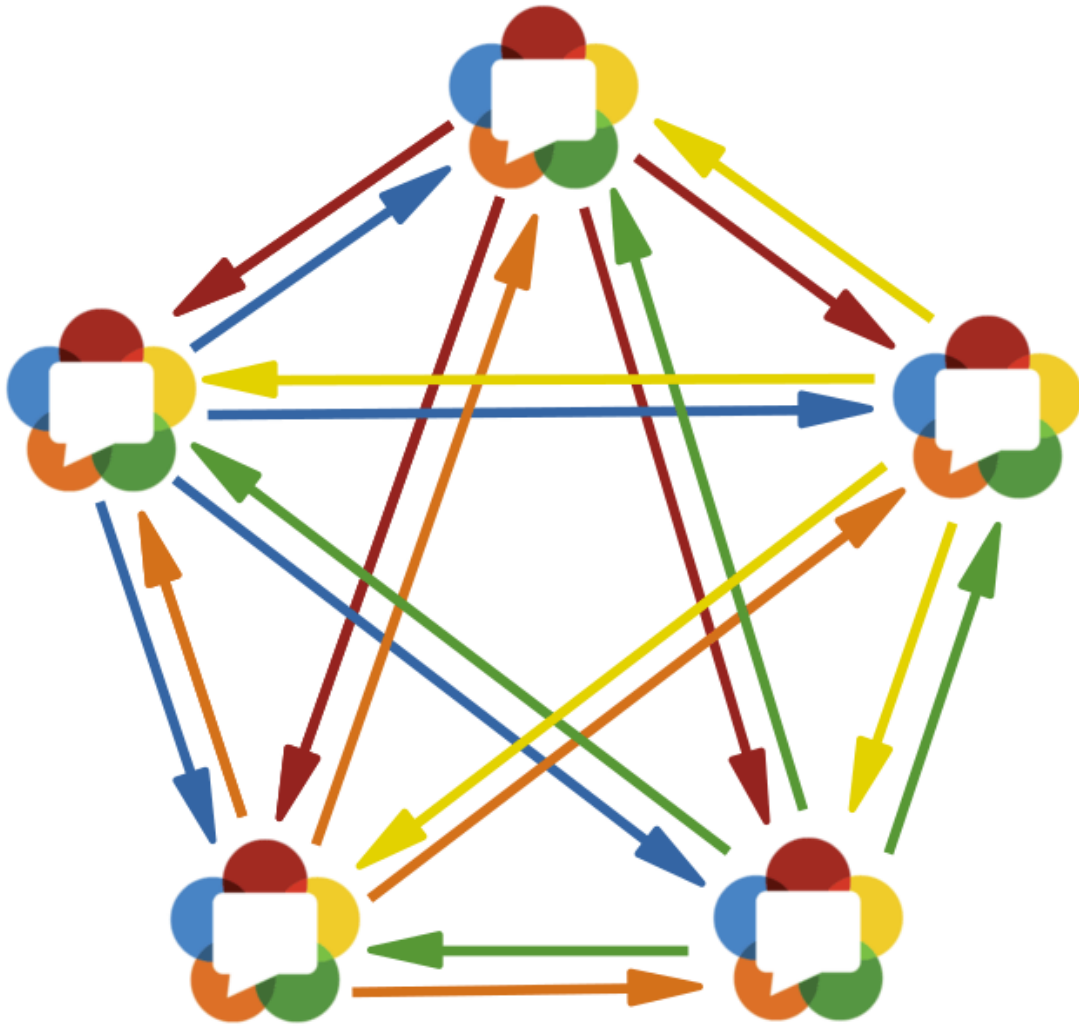


image from mozilla



img from webRTC ventures

This application utilises webRTC to transmit audio and video streams to every other user on the mesh network.

Timeline:

Date	Task
14-06-2021	Architecture Design plan
16-06-2021	UX Design plan
20-06-2021	UI Design plan
21-06-2021	Basic functionality
23-06-2021	Mesh Network for Video Call
27-06-2021	Testing
28-06-2021	Adding Screen Share Feature
29-06-2021	Record Feature
30-06-2021	UI/UX Development
05-07-2021	Adding Chat Feature (Adapt)
08-07-2021	Testing
10-07-2021	Final Documentation

CONCLUSION

Challenges:

- Not suitable for more than four users

Further improvements:

- Scaleable to more users
- Additional features like virtual backgrounds.
- Filters