

ABSTRACT

This final project makes a two-way or many-to-many video conference system based on real-time web. Many-to-many is a form of network topology that contains many peers who are connected to each other. This system is able to open a network of more than two peers in one room so that 3 people at the same time can run a video conference.

Video Conference is a technology that allows a group of people to meet without having to meet physically. However, the application of these technologies must be implemented without requiring the presence of Media Server that is used for media distribution, so that between clients are able to channel media to each other in the form of peer-to-peer. This video conference web application is built using a collection of WebRTC API technologies found in the browser and websocket protocol as an initiation process or as a signaling server. With the help of WebRTC technology, this web application can communicate real-time voice, video and data transmission. While WebSocket technology is used to handle the initiation session with the ability to provide full-duplex communication channels through a single TCP connection between client and server.

Keywords: WebRTC, Video Conference, Many-to-many