

# Random Peer to Peer Chatting Application using WebRTC

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**Abstract:** *Because of its ease for real-time communication and simple features, messaging has become an inextricable aspect of our lives. Because of their quickness and potential, messaging or chat services have become an indisputable part of how people communicate in today's world. By exchanging messages in real time, the chat program makes it simple to communicate with individuals all over the world. People are increasingly using immersive experience to connect with one another. Chat apps are rising in popularity because they can virtually retain the feeling of real-time interaction, from group messaging in live chat to e-learning and team collaboration through chat rooms to file sharing between coworkers. However, when it comes to deciding how to create the app, the consumer experience is critical. Our goal is to create a chat software with real-time messaging services that provide users with a genuine and highly interactive engagement. Our goal is to create an application that is dependable, safe, and runs in real time, without concern for user volatility or concurrent constraints. Make sure the chat application has the right security safeguards when working with sensitive material like regulatory requirements and confidential user information. As a solution to the above-mentioned requirements, we propose a random peer-to-peer chatting application using technologies like WebRTC and PeerJS. The recent improvements in WebRTC show how efficient this implementation could become. Here in this project, We propose PeerJS, which is a wrapper in JavaScript to use WebRTC without considering connection drops as everything is handled properly. At the same time, the signaling needed by WebRTC is provided by PeerJS although a custom signaling server can be created from scratch in a matter of minutes*

**Keywords:** WebRTC

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