Abstract

With the exponential growth in the mobile device market over the last decade, Social interaction with video chat applications are becoming an increasingly popular option to interact with users, and their popularity and adoption are rapidly spreading. There is complete dimensional change the way we communicate and interact with users via video streaming in various environments. Video calls have become an integral part of today's communication with over 175% increase in regular live video usage among millennials in just the last 3 years under TokBox data. Thus video chat apps are hiking in its popularity with incremental speed as for businesses as well as for personal usage. Moreover, as about business usage of video conferencing, according to a [survey of 2019](http://videoconferencingdaily.com/) responding said they could report an increase in cloud-based video conferencing application needs. These stats are telling. Video call app development and related technologies are on the rise. This project is analysed and designed to learn various disruptive video streaming methodologies, techniques and implement user friendly video chat application which is simple secure and low latency. With disruptive technologies traditional way of implementing requirements have altogether changed with high leap of advancements in technology advancements. This provides a scope for learning API based cloud service providers like Facebook Messenger, FaceTime, Google Duo,WhatsApp, Skype, WeChat and others. Next is to have the right design wireframes to avoid any future functionality issues and help to choose technology stacking a better way. In a nutshell, video conferencing can be developed from the scratch with server side implementations using open source technologies like WebRTC or jumpstart application using SAAS based services from providers. The project implementation involves understanding and learning various SAAS API providers, implementations and frontend javascript technologies. Proposed P2P audio and video calling application does not require any installation of extra plug-ins. The application reduces the users data usage and reduce the cost of perform audio and video calling. The features of the proposed system are provide a real-time audio and calling application for users to interact with each other; and able to let each other chatting with text and screen shareto each other.