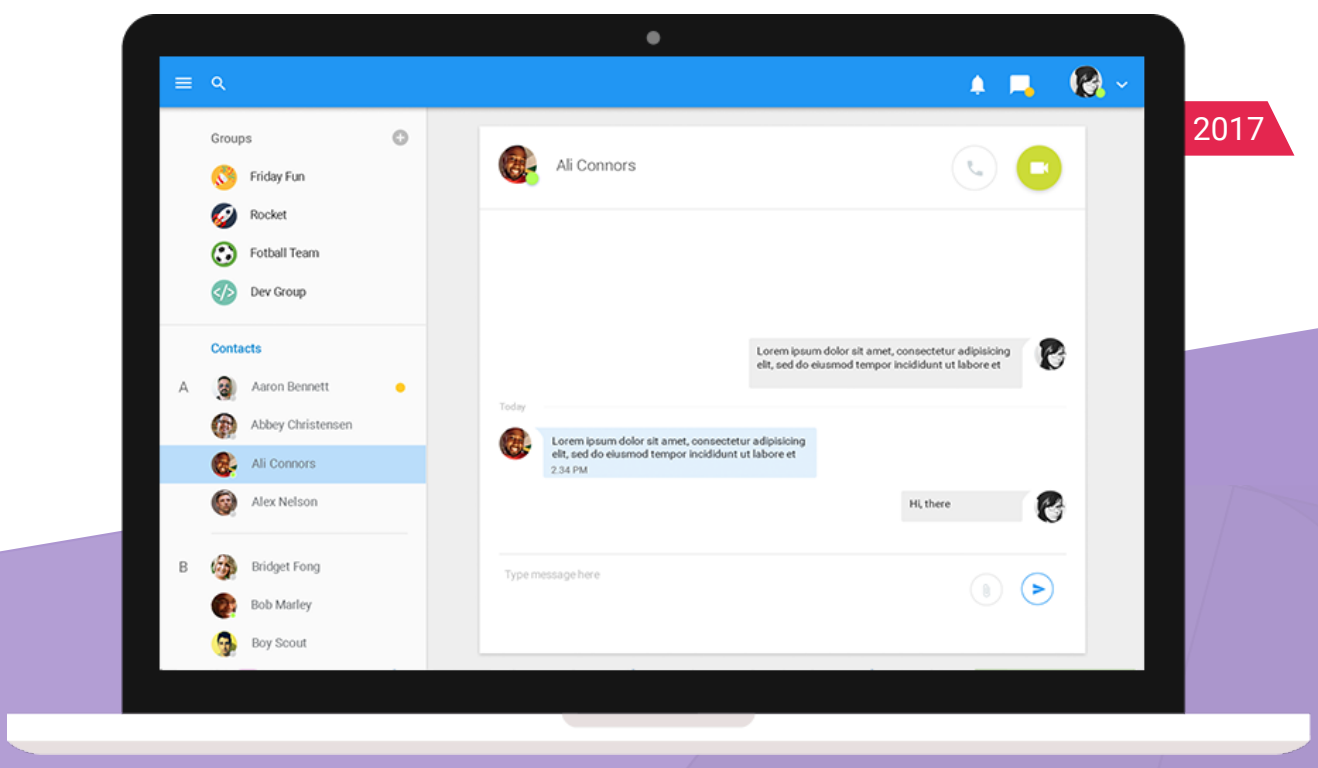
We have successfully completed over 150 projects in 65+ countries. across the globe. The majority of our clients reside in the United States, Canada and the European Union.

Web-based Video Conferencing App

A simple web-based video conferencing application that allows video/audio peer-to-peer communication and group text messaging without installation of any additional software. It's primary goal was to enable secure browser-based conference video/audio calls and text communication both internally (between the customer's employees) and externally (between the customer and its partners).



2017

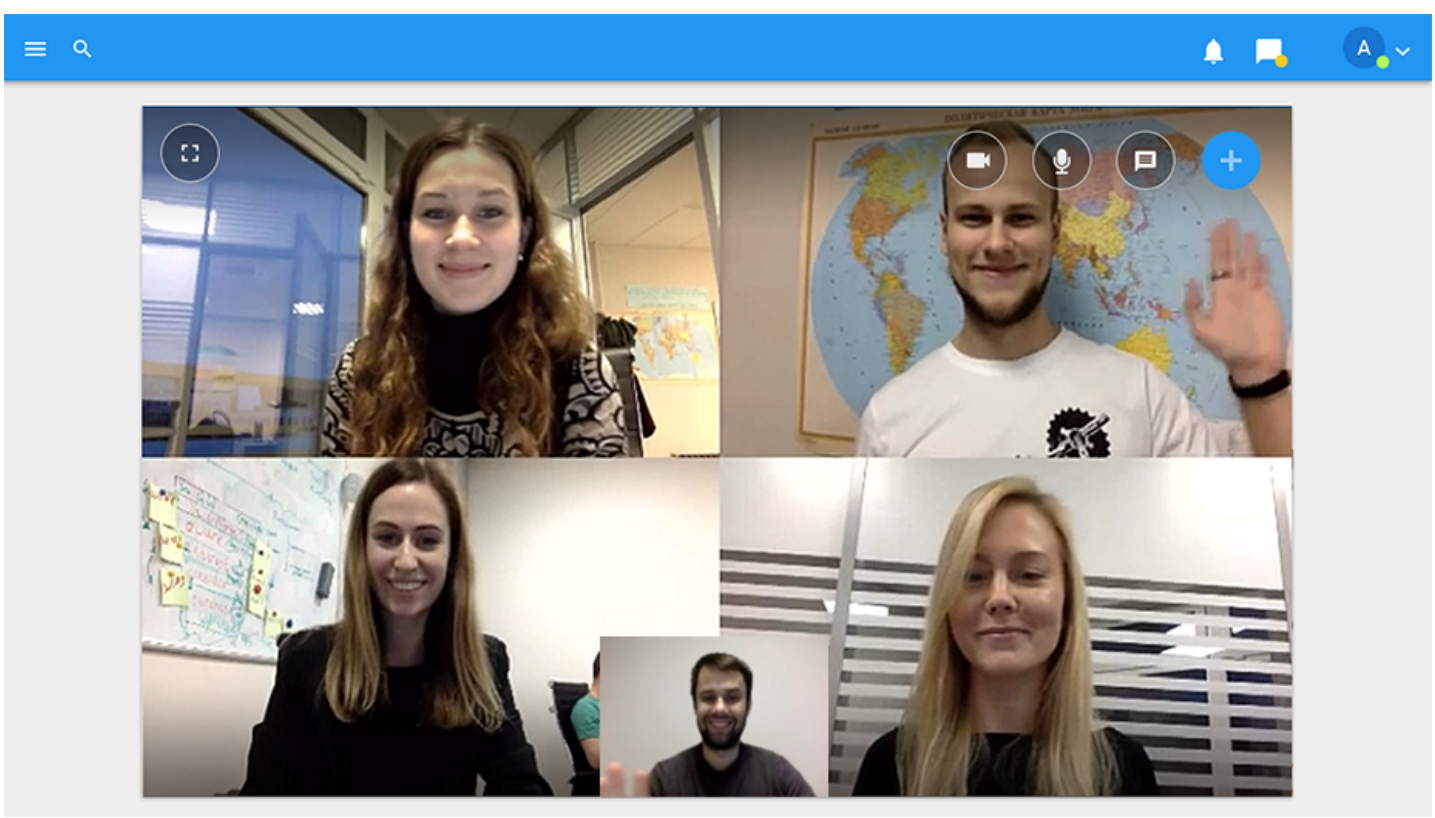
Business Challenge

The customer's company required a private network with free and secure video conference calls between its employees and partner representatives. The company needed a simple group popup notifications, etc.). The key functionality requested included group chatting and group calling. The video conferencing app should ensure high security and high quality of audio and video streams for up to 5 peer-to-peer connections at a time. Online chat conversation should have been made accessible to up to 3000 users. The chat should work on desktop devices only (PCs and laptops). Customer required a nice-looking, dynamic and flexible UI of the requested video conferencing app.

Solution

XB Software team, represented by business analyst, WebRTC and React developers and QA, was responsible for the creation of the corporate communication tool for video conferencing. To ensure the security of the app use and prevent from any eavesdropping or recording, XB Software team applied WebRTC technology that has all necessary protocols and APIs to meet this requirement.

The front-end of the application is implemented using React.JS and CSS, which helped create the attractive design of the video conferencing app. The back-end of the app was made using Node.js and MySQL. Other technologies applied include JavaScript, Redux and WebSockets, which allowed creating a dynamic and flexible video conferencing app.



The developers added features typical for any video conferencing app, such as fast connection/disconnection with a video group, text messaging, notification icons and a search bar for instant information discovery. User settings were added to enable users to adapt the video conferencing app settings to their needs.

To increase the efficiency of the customer's teamwork, XB Software equipped the video conferencing app with users group chat, content sharing and conference recording capabilities. The application includes a user authorization form to secure the communication.

Peer to peer communication and group chatting within a private chat were enabled. Private video/audio calls allowed adding up to 3000 users to chat conversation (text messaging) and up to 5 users for a video/audio call.

Applied Technologies

React, node.js, MySQL, CSS3, JS, Redux, WebRTC, Websockets

Duration

2.5 month

Estimated man-hours

440+

Result

XB Software WebRTC and React developers built a simple browser-based conferencing application with a simple login form and group chat creation. Each user can start a call/group video call, create/delete chats, message users, and connect/disconnect when required.

User interface was built in accordance with the principles of material design, which makes the video conferencing app look-and-feel attractive and user-friendly. The created application supports desktop, tablet and mobile devices and works on Windows, Linux and Mac and runs flawlessly in any browser that supports WebRTC technology (including Chrome, Firefox and Opera).

Customer

A US company that produces roofing equipment, rooftop pipe and equipment support systems. It helps roofing contractors to work more efficiently by providing quality tools and equipment at competitive prices.

Thanks for watching!

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