

# Instant Messaging Chat App

**Design Goal:** implement a lightweight, reliable web real time communication tool which supports useful instant messaging features.

## Main Features:

1. Instant messaging between multiple users
  - online user list displayed
  - messages associate with sender name
2. Private messaging between two users
3. Display previous messages

Further implementation:

- optimize user interface
- private message:
  - send private message to multiple users
  - improve user interaction: 1. Add a button which current user can choose to send the message publicly or privately. 2. Add an action: current user click on different user names to choose who to send private messages to.
- message history:
  - display customized number of latest messages
  - chat history search

## Framework and Programming languages

socket.io, JavaScript, JQuery, MongoDB, bootstrap

Tuesday, April 25, 2017

Further migration

- migrate to reactJS
- apply bootstrap styles
- add WebRTC audio and video features

## **TimeLine**

week1: Design, make a blue print.

week2: Create a prototype, implement fundamental skeleton .

week3: Finish up all specific features' implementation.

week4: Testing and optimization.