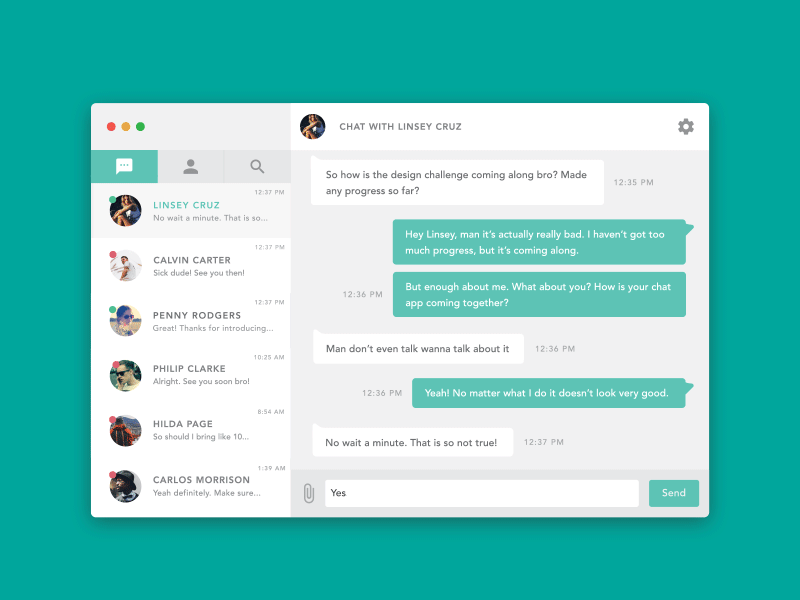
**Assignment**



**Project:**

Start by building the web app chat shown in the animated image, it will be a simple chat tool to communicate between two peers.

**This assignment is divided to consecutive levels, Choose a level for doing the assignment.**

**Level 1**

Create a **RESTful API** endpoints needed to implement the application,  
Like getting contact lists, get a chat history for a single contact, chat related apis to send text, attachment ..etc , or any other endpoints you think it’s important to have!

**Level 2**

Building the front-end part of the chat, this will consume the endpoints you already built in the previous steps.

**Level 3**

Build a realtime chat with other clients of this chat, showing a alert notification once a new message sent to the desired client;

**Level 4**

Implement a chatbot as one of the contact list, . Simulate that we are chatting with a **reservation bot** which can collect information from clients like name, email and ask them about a prefered date and check if selected date available from the previously saved dates.  
  
**Note: We’re not restricting you to handle language recognition related tasks, Just use a fixed language terms.**

**Level 5**

Surprise us! Build something we haven’t thought of or what you think is valuable addition, like trying making this chatbot more intelligent.

**What we focus on review**

* You should mainly use frameworks and/or libraries, but we will also be interested in seeing your own approach.
* Quality and structure of code.
* Candidate communication if he/she has an issue.
* How the candidate sets his/her priorities.
* Commit style (commit as often as possible with clear description).
* Good Project structure (Maintainable, Readable and Modularized).
* Application fulfill our functional requirements.

**It’s prefered to place your code on (Bitbucket/Github) and send us the link to your repository where we will find both the source code and the compiled version.**

**Good Luck!**