## **Background**

A lot of companies either use social media directly (FB, Twitter) or social media CRM systems (Conversocial, Intercom.io, Hootsuite etc.) for customer support.

Although these CRMs can provide good management tools, the influx of request is usually too high for operators to efficiently deal with. True Al provide artificial intelligence powered solutions where customer service operators automatically get presented with the possible suggestions on how to answer a particular query. For instance, a conversation can look like

Customer: Hi, my wifi is not working?

Operator: I am sorry, did you check if there is fault in your area.

Customer: No, how should I do that?

Operator: If you tell me your post code, I can check it for you. :)

Here, the first three utterances (in blue) can be referred to as the *context* of the conversation, and the last utterance (in green) as the *response*. True Al's deep learning powered algorithms can give suitable suggestions if the context is provided (see illustrative screenshot at <a href="https://www.trueai.io">www.trueai.io</a>).

In our system we have an API at our backend that can be interacted with to transfer over context, utterances and return suggestions.

#### Task

In this task, you are required to make a prototype of a Chrome plugin. We will assume that you have no experience in developing Chrome plugins, but you will learn it as part of this task.

Chrome plugins can seamlessly integrate into an existing web app (see e.g. Gmail plugin called Streak). Assume that True AI wishes to create a plugin for Slack (slack.com) to provide AI services to companies that use it.

This task can be broken into various sub parts, that can be executed in the below order:

- 1. **Task**: Plan development of a Chrome-plugin for Slack. The output of this task will be a description of your plan.
  - **Assessment**: Forward planning skills; breadth of knowledge as Full Stack Engineer.
- 2. **Task:** List technologies you plan to use and justify your choices. (Also, if you would use a different technology for production level than for prototype, explain your rationale) **Assessment:** Choice of most appropriate technology for the task.

- 3. **Task:** Design the key UX and UI components (prototype level, see "Functional, UI and UX requirements" for details).
  - **Assessment:** Feel, ease of use, appearance, and use of best practices.
- 4. **Task:** Build the first version of a working prototype. Assume that communication with our backend is already dealt with and you have successfully transferred the context and received the suggestions in other words, hardcode a JSON with example suggestions into the extension.

Assessment: Coding style, logic, clarity and best practices .

### Functional, UI and UX requirements

The plugin will receive the discussion text from the active Slack conversation. When a chat is opened (page is loaded), messages from this conversation will be sent to True AI backend that processes the conversations, and creates response suggestions for it. When an operator opens a new conversation in Slack, the plugin calls True AI backend that sends it the appropriate response suggestions. The plugin then displays these alternatives to a human operator, in a way that looks like a seamless part of Slack. Finally, the plugin should be easy to install and it should be easy to change its settings.

### Users and use cases

Key users of the system will be the customer service agents, who start getting suggestions into their workflow.

# Communication, duration and delivery

- We encourage you to clarify with us any ambiguities before starting the task. While we want you to work independently, we are happy to give some feedback during the task.
- You will have 7 days to finish this task.
- Please include any necessary instructions for running your extension, a screenshot for how the running extension looks like on your machine and send the code in an email attachment.