Kipsu Interview Project Requirements

Overview

At Kipsu, we strive to empower our customer partners to quickly and easily connect with their guests in a personal way. One of the ways we achieve this is by automatically populating customizable message templates with information about a guest. For this project, we'd like you like you to create your own implementation of this process.

For example, imagine that a staff member at a hotel is sending a text message to a guest. Such a message might look something like this:

> *"Good morning Ethan, and welcome to Hotel California! Room 304 is now ready you. Enjoy your stay, and let us know if you need anything."*

This output would be generated from a generic template containing placeholders/variables, where the name and room number are substituted based on guest information, the hotel name pulled from the hotel's data, and the greeting from the time of day. If a different template was used, the message could have an entirely different sentence structure, set of placeholders/variables, and meaning. This concept will be the basis of the coding exercise.

Requirements

We want to see your implementation of this process. More specifically, your code should:

1. Have some sort of structure or object for working with template messages that have placeholders/variables (i.e. firstName, lastName, roomNumber, etc.) embedded in them
2. Load in message template information from a JSON file that you will have had created. Structure the file however you see fit
3. Load in guest and company information from the JSON files that we have provided
4. Support a greeting variable that will change based on the time of day (e.g. "Good morning" / "Good afternoon" / "Good evening")
5. Allow the user to specify which guest and which company should be used to populate template messages.
6. Allow the user to either select one of the message templates that was loaded in from the JSON file or to enter in a new message template
7. Generate a final message output that is a result of populating the specified variables of the message template with the correct values from the other data

You can use any programming language you like. We care more about how you approach the problem than what specific languages you are proficient in. No GUI element is required, but feel free to expand in that direction if it suits you.

Evaluation Criteria

When we review your work, here's what we'll be looking for:

- A well thought-out, well structured, and working solution
- A thorough understanding of object-oriented principles
- Consideration for and proper handling of edge cases
- Creativity and consideration for potential future maintenance/expansion

We not only want to see that you can meet the functional requirements of this project, but that you can more importantly create thoughtfully designed code that other developers would have no problem understanding and expanding upon.

Generally, the candidates whom we advance tend to complete it in 2 - 4 hours; if it takes you longer to come up with a great solution, don't worry (but at the same time, we don't want to take 40 hours of your valuable time).

Deliverables

Code

You have a few options when submitting your code to us:

1. Zip up your code and send it directly to us. Note that email attachments containing code can sometimes get automatically blocked by the email service provider.
2. Share a link to a code repository. If you choose to manage your project through GitHub or any other service that makes your code public, please don't include the word "Kipsu" anywhere in your project. We'd like to make sure that future candidates cannot base their solutions off of your work.

3. Upload your code to a file storage service like Dropbox or Google Drive and share a link to it with us.

README

Provide a README that includes the following:

- Instructions for how to run your program
- An overview of design decisions
- What language you picked and why
- Your process for verifying the correctness of you program
- What didn't you get to, or what else might you do with more time?

Questions

We encourage you to reach out to us with any questions that you may have while working on the project. We're happy to provide insights and clarifications as needed.