PagerDuty Software Coding Interview Guide

At PagerDuty, we believe in testing out your everyday programming skills and are not expecting you to memorize theoretical algorithms or complex data-structures. We are looking for developers who code well, communicate clearly and seek to understand what is the right user experience for customers. Expect to show-case these skills during the interview.

As a Staff / Principal Engineer candidate, we also expect you to speak intelligently about coding practices and tradeoffs in the software development process. So, instead of extending the in person interview, we have provided a short assignment to complete, which will be the starting point for additional coding and discussion during the interview.

The structure of your interview

What to expect during the interview?

The Assignment

How should I prepare for this interview?

Leveraging our basic skeleton/sample code

The structure of your interview

Timeline: 60-min

- 5-min: Introduction to the interviewers/interviewee
- 20-min: Demo of your code and a request to make a small in person code change with discussion
- 25-min: Discussion of higher level architectural topics relating to APIs
- 10-min: Time to interview us and learn more about how it is working at PagerDuty

What to expect during the interview?

- We'd like to understand that you have a good grasp of the code that you've written and the tradeoffs made. Be prepared to clearly explain how you arrived at your implementation.
- Additionally, we're looking for mastery of higher level architectural issues that must be considered when putting such code into production or redesigning the system behind such code.

The Assignment

Please build an address book using the PagerDuty users API. You can provide any user interface you like: a command line interface, an HTML web UI, output in the browser JS console, etc. We expect that it'll take you about <u>an hour</u> to complete this exercise.

Requirements

- Provide a way to list all the users (you can choose how this is displayed)
- Provide a way to list all the details about a specified user (you choose how this is specified)
 - o First name
 - o Last name
 - Contact methods (sms, email, phone)
- Include whatever testing you feel is necessary

PagerDuty Software Coding Interview Guide

• Please provide your package of code or a link to a repository to the recruiter. Along with your code, include a README which describes how the code should be executed.

Guidelines

- Choose <u>any language</u> and <u>any development framework</u> to write your code.
- Feel free to use (or not) any of the sample code (links at bottom) we've provided as a starting point
- Make sure you are familiar enough with the language and framework that you'll feel comfortable fielding
 questions about it.
- Choose a way to model the requirements that you are comfortable with and comfortable explaining
- Familiarize yourself with our API documentation here:
 - https://developer.pagerduty.com/api-reference
- Take special note of the list users documentation
- Test API Token: y_NbAkKc66ryYTWUXYEu

How should I prepare for this interview?

- Please have your laptop prepared with your working application and a working development environment to make some small changes to your code
- Ensure your code is well-built (if using a compiled language) and runs reliably **before** the interview and you are not dealing with dependency errors/environment issues during the interview.
- We would like to understand your decision making process with respect to trade offs while you were working on your code
- We are looking for a fairly well structured, working application
- Additionally, we will be speaking to higher level architectural topics related to putting something like your code into a larger high throughput system

Leveraging our basic skeleton/sample code

If you don't want to start from scratch, you may choose one of the starter clients we have to get you going

- Java: https://github.com/PagerDuty/interview-skeleton/tree/main/java
- Elixir: https://github.com/PagerDuty/interview-skeleton/tree/main/elixir
- Ruby: https://github.com/PagerDuty/interview-skeleton/tree/main/ruby
- Python: https://github.com/PagerDuty/interview-skeleton/tree/main/python
- Javascript: https://github.com/PagerDuty/interview-skeleton/tree/main/javascript

Instructions on how to use the clients are available in the README for each code example.