

Liatrio Technical Principal Interview Exercise



Overview

The goal of this exercise is to get an idea of how well you will fit into our practice, if the way that we work is right for you, and to see how you present to a mixed audience, from CEO to various engineers.

First, a successful exercise does NOT mean that you solve all of the issues or questions without help. We are interested to see how you identify and work through problems, how you communicate, how and when you ask for help, and finally, how you demonstrate and transfer knowledge.

You are free to use any information needed to work this out. We all use Google, Slack, and our colleague sitting right next to us every day.

If you are stuck, or if something is unclear, communicate this in the Slack channel. Remember: at Liatrio, communication, collaboration, transparency and sharing are key pillars of our work culture.

Problem Statement

A potential client, XYZ, is a traditional on prem infrastructure shop that is interested in moving to the cloud as well as modernizing their product suite and architecture. Developers have been complaining about kickstarting new environments, long lead times and cycles for development, and lack of consistency between their environments. Operations has also been complaining about downtime during deployments and code quality being released into production.

Liatrio has been tasked with showing XYZ how to potentially do this. They want to migrate to the cloud and they've recently been interested in containerization.

Exercise

There are two options for the exercise - one is more hands-on and one is more strategy. Select one of the options for the exercise below.

Option 1 - Hands-on Product Delivery Proof of Concept

You can either build a simple application or leverage any open source “hello-world” application using the programming language of your choice. This exercise is not about your app dev skills but rather how you would build and deploy an application in a modern, scalable, and resilient way.

The application must be deployed using a pipeline (GitHub Actions, GitLab, AzureDevOps, Jenkins, etc.) to a public cloud provider of your choice. This can easily be done for under \$100, which is the maximum we will reimburse. Keep an eye on your costs and running services. Please reach out to the Slack channel with questions about specific costs.

Requirements

- Commit all code to a public git repository. Include a README.md containing detailed directions on how to run, what is running and how to clean up.
- A presentation (Miro, Mural, Slides, README, or medium of your choice) outlining your approach, solution, pipeline flow, and challenges incurred.
- Bonus points for sharing and presenting your point of view for an ideal software delivery pipeline
- Some things to think about:
 - How would you share your approach as an expert to our clients and get them excited?
 - How would you push/drive a team to solve this quickly and implement all the way to production?
 - How would you roll this delivery approach at a Fortune 100?

Option 2 - Strategy to Kickoff then Scale

Build out the strategy to kick off an engagement and scale your solution across the enterprise.

- How many people would you need to deliver and what skill sets ?
- What milestones would you target for the initial offering ?
- How would you propose expanding the engagement?

Make sure to include team size, composition and the client team representatives. Ensure you address Liatrio staffing personas, duration of engagement and anything else the client may find important. Address the following concerns to start with:

- What is your approach for exciting the customer to embark on the journey?
- What do you need from the customer before kicking off the engagement ?
- What is needed during the execution?
- What is your scaling strategy ?
- How will you measure success ?

Requirements

- Commit a README file to a public git repository with an executive summary
- A presentation (Miro, Mural, Slides, README, or medium of your choice) showing an engagement strategy from kickoff to scale and extension
- Some things to think about:
 - How would you share your strategy as an expert to our clients and get them excited?
 - How would you push/drive and scale your solution/approach across the enterprise?
 - How would you roll this delivery approach at a Fortune 100?

For either option: Be creative! There are many ways to be successful with the exercise and it is designed to approximate our work – situations are ambiguous, clients ask for recommendations on tools you are not familiar with, and there are multiple ways to approach the technical requirements.

You can use this exercise to showcase your experience and wow us with your skills. This exercise is also an opportunity to get hands-on experience on a new tool or environment and wow us with your problem solving!

Timeline

There is no hard timeline on when you need to complete the exercise, although generally candidates complete it in a week and expected time commitment is 4-8 hours. We understand you may be working on the exercise in addition to a full-time job, family, etc. Please let us know in the Slack channel of your anticipated timeline and if anything changes. Factor in time to prepare for your presentation on Zoom. For the presentation, you are free to structure it how you see best, and there is no one single way to be successful. A slide show or other visual aid is highly recommended, but we'll also want to see the code live.

Prep call, Presentation & Follow-Up

Once you have completed all of the items above, please communicate with us in Slack. We will schedule a presentation where you will demo what you did, what you learned, what you may have struggled with and any additional ideas or items that you may think of. At Liatrío, the audience is always a group of peers, but they can have varying skill and experience levels.

The presentation will be given over Zoom with a screen share, and one of our principals will meet with you prior to the presentation to review expectations and help you prepare.

The presentation will be 1 hour, with the team who conducted your interviews. This is your time, so come in ready to command the digital room and show off your finished solution and presentation for 30 minutes. The remaining 30 minutes are for the interviewers to ask you follow-up questions and for you to ask us questions.