

Overview

Before your interview, we would like you to complete the following coding challenge. Your solution will be discussed during the interview.

We ask that you utilize Java or Python for backend and frontend frameworks you are most comfortable with to complete this challenge. We encourage creativity but value efficiency. We recommend spending 6-8 hours on this project. This should give you enough time to get something working, but we don't expect you to display your complete breadth of engineering knowledge in this challenge.

AI and CodeGen

We recognize the use AI is available to you. We ask that you explain to us what you use, as well as be able to explain all the code no matter who wrote it.

What We Are Looking For

- Complete the requirements as described below
- Deliver a functioning product
- Provide clear instructions to build and run your project
- Exhibit use of software engineering best practices
- This exercise is conceptual in nature and does not need to be a fully finished product
- During the interview, we will:
 - Ask you to describe your design and implementation decisions.
 - Ask you to talk about testing scenarios and considerations for real-world deployment.
 - Ask you about the next set of features that you would want to implement or any improvements on your current implementation.

Problem Description

PART I

Provide a basic ATM (Automated Teller Machine) User Interface. At a minimum, this UI should offer the following features:

- Customer authenticates with a pin
- Show the current account balance

- Simulate the withdrawal of cash
- Simulate a deposit
- Show a daily withdrawal limit

PART II

Provide a HTTP REST API service layer to support the above implementation.

- Provide the API specification via Swagger / OpenAPI
- Utilize a persistent data store

Submit the following when complete

- Provide complete steps to compile and run your project.
- The full source of your solution in a GitHub, Bitbucket or Gitlab repo.