

# BAMBU Backend Engineer Test

In this test, we will be building an API of a simple **user profiling system**. The system can register a new user who will be categorised into a profile type (or rank) depending on the user's answers of some profiling question prior to registering.

For this case, the user will be asked two questions, their savings amount and their loan amount. There are same 5 options for each questions: 0, 2000, 4000, 6000, 8000, and 10000. The difference is that for saving, each option maps to score 1 to 5 while for loan the option maps to score 5 to 1. Do keep in mind that in the future, the number of question a user need to answer might change to many more than just 2.

The user will be profiled based on the score. Profile **A** is if the score is  $\geq 8$ , **B** for  $\geq 6$ , **C** for  $\geq 4$ , and **D** for  $\geq 2$ .

You are to design and build an API which provides an endpoint to cover this requirement. The endpoint will receive the answers of the questions (not the score) and will save the users to the database and return the **profile** to the client.

## Guidelines

You may build using one of these programming language (and framework): NodeJS (Express, Hapi, or Sails), Java (Spring Boot), C# (ASP .NET), or Python (Django).

You are given 3 days (72 hrs) to complete the task. Given the time constraint, try your best to write production ready code. Your submission would be reviewed based on these criteria:

1. API and Database Design
2. Code quality
3. Tooling choices
4. Performance

**DO NOT** copy a solution. If we found your work is exactly same with another candidate, we may have to terminate the review process.

To submit your work, deploy this to a server and give us the URL. You'll also need to send us the link of the GitHub repository containing the required source to us and we are willing to have a look on how you build the system step by step. Good luck!