# REST API Hackathon

## Task

You have recently joined a development team that has been given the task to create a RESTful service which will deliver information about historical US presidents and biographical detail. Your API will define two web methods.

1. The first web method will return a collection of all president representations from the database.
- If there is at least one president in the database, return a JSON array of objects and HTTP status 200
- If there are no Presidents in the database, the response should have an empty body and HTTP status 204
- If there are any other errors during the lookup operation, the response should have HTTP status 500

2. The second web method will return the biography for a specific president. The president will be identified by its id.
- If the requested president is found, return its biography string and HTTP status 200
  - Be sure the biography is returned as valid JSON; for example:
    `{"bio": "On April 30, 1789, …"}`
- If the id in the request is less than or equal to zero, the response should have HTTP status 400
- If there is no president with the given id, the response should have an empty body and HTTP status 204
- If any other error occurs during the lookup operation, the response should have HTTP status 500

## Points to consider:

- Does the API provide the required service methods? Do the methods operate correctly and return the correct data?
- Are Spring and MyBatis used appropriately and correctly configured? Is auto-wiring used appropriately?
- Have the web service methods been tested using a test Spring context? Do they rollback any database changes?
- Were RESTful standards followed in developing the web service? Do the service methods handle errors properly?
- Was MyBatis used to develop the interaction with the database? Was the correct data retrieved from the database?
- Have best practices been followed at all stages? E.g., in Java, Spring, MyBatis, and SQL.
- Verify the functionality of the DAO and RestController by writing proper JUnit tests.
- Use a Spring test context in the tests and ensure that the tests will all rollback.