SWE 304 PROJECT STUDY 1 (2026)

Due date: 26 February 2026, in class.

In this project, you are expected to publish a simple Java Spring Boot Rest-API web application on AWS or AZURE cloud. Specifications as follows:

- Each group will work on different topic, pick a topic from this link: list https://github.com/ozmen54/swe212-2026/blob/main/SWE212_ProjectDescriptions_2026.pdf
- Use Java (version 25), Spring-Boot framework (version 4.0.1) and Maven build tool (version 4.0.0).
- Use MySQL or PostgreSQL as database server (version, you pick one).
- No container technologies are expected, otherwise is penalized by minimum -25 points
- Create a Linux instance on AWS (or Azure) with proper configurations.
- Install a DB server (MySQL or Postgresql) on the cloud instance, and load the db dump file to the database.
- Install Nginx web server on the cloud instance and configure it to function as reverse proxy.
- Postman or a browser will be used for tests.
- You can use sftp or scp for file transfer.
- You must show that all CRUD operations are working in local computer and on the cloud instance after you published it (See Figure 1).
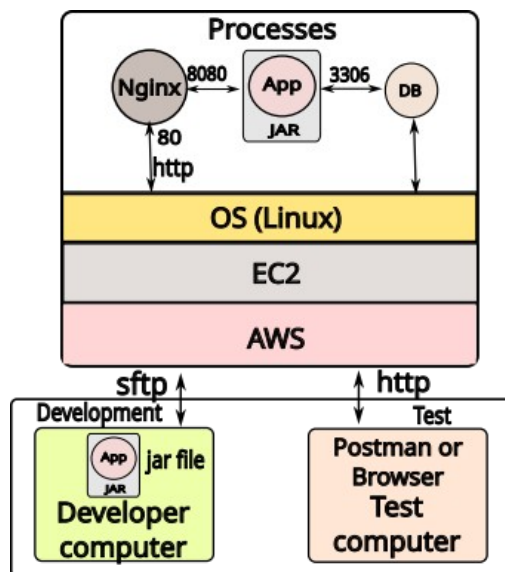

Figure 1. The schematic view of the project work.

Grading:

No	Task	Grade
1	Development on local computer and creating a jar file	30
2	Creating a cloud instance and configuring it properly for web project	30
3	Transferring the application jar file to the cloud	10
4	Installing DB and uploading initial data	10
5	Installing Nginx and configuring it	10
6	Testing with web browser and postman	10

PS: Group presentation is required, group members must show up to in presentation to collect points.