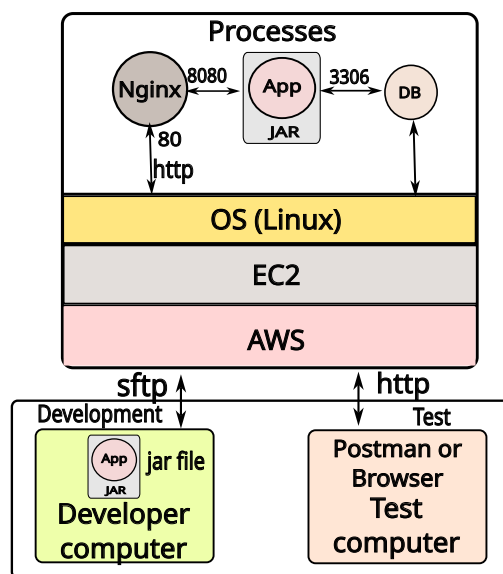# SWE 304 PROJECT STUDY 1 (2025)

Due date: 6 March 2025, in class.

In this project, you are expected to publish a simple Java Spring Boot web application on AWS or AZURE cloud. The application will have a DB connectivity, and your application problem will be decided in the class one week before presentation. Note that, you are not expected to use container technologies in this project, instead you will create a jar file of you project using the build tool and ftp it to the cloud instance as shown in the class. In your local computer the "jar" file must be created using Maven build tool in your local computer. You must show that all CRUD operations are working in local computer and on the cloud instance after you published it. The application will be tested using Postman and web browser (See Figure 1).

Figure 1. The schematic view of the project work.

You are expected to create a Linux instance on AWS (or Azure) with proper configurations. After that, you are expected to install DB server (MySQL or Postgresql) on the cloud instance and load the db dump file to the database. Next you will Nginx and configure it to function as reverse proxy. The "jar" file must be transferred to the cloud instance using SFTP tools. Finally the application web pages must be accessible in the presentation. Presenting only Json data will be sufficient to see the endpoints functionality.

Grading:

No	Task	Grade
1	Developing the web application 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.