Task-5

1.1 *Task-5.1* - Application deployment to a Cloud

Goal

Learn to use Cloud based services (particularly PaaS).

Prerequisites

Learn what a Cloud Computing is. Review lecture content and suggested there other learning materials.

Task

This assignment contains a practical part as well as couple of slides explaining deployment process (URLs of deployed solutions, used deployment option, any troubles or difficulties during deployment process as well as found solution, and (optionally) JMeter based performance comparison).

The main idea of the task is to deploy your solutions from the previous tasks into cloud(s):

- Task-1: Web client to remote SOAP web service (this should be done by each group member for own implementation of the Task-1);
- Task-2: Jetty based Web service (including deployment of own SOAP web service implementation);
- Task-4: REST web service.

You are free to deploy your applications to any cloud you prefer. You may try to use several clouds to deploy different tasks as well. Just do not forget to describe "step-by-step" deployment process in your presentation, mention the issues/difficulties that you have faced, as well as solution you have find out.

Optional: With ***JMeter*** you can emulate many requests to your service and hence create a high load on your server. Try to come up with a reasonable way to measure the performance. Use this technique to measure the performance of your REST web service running locally vs. the one on the cloud, or deploy it to different clouds and compare the performance.

1.2 *Task-5.2* - Individual Assignment

Goal

Learn more about existing Cloud solution offerings.

Task

Chose one service (it could be any category, e.g. compute, storage, database, networking, development, machine learning, statistics, security, etc.) from one of the clouds, find similar services from two other clouds and study corresponding documentations and relevant materials (tutorials or any other online sources). Prepare kind of own tutorial (ppt presentation) about these services (the purpose, way to use, billing options, etc.) including possible differences in context of the chosen cloud providers. Be ready to present your tutorial during the Demo Session to other course participants. Live demos are also welcome…

1.3 *Returning the task*

Provide the result of the Task-5 in two archives:

- *Archive including **presentation** with respect to the deployment: **TIES4560-Task-5_1.zip***
- *Archive including **individual assignment: TIES4560-Task-5_2_individual(<your name>).zip***

Send the links to archives to lecturer (oleksiy . khriyenko @ jyu . fi)

Deadline for Task-5_1: **14.10.2025**

Deadline for Task-5_2: **14.10.2025**