

Task-3

1.1 REST Web Service (with Jersey)

Goal

Learn to use REST Web Services.

Prerequisites

Learn what a REST web services are. Review lecture materials and suggested there learning materials.

Task

This assignment contains a programming part as well as couple of slides explaining background behind your implementation (service(s) functionality, API, explanation of required features implementation, etc.). The main idea of the task is to build a REST Web Service with corresponding REST API. Implementation should include a set of requirements.

- think about functionality that your service will provide;
- design a corresponding API (taking into account mentioned requirements for implementation);

path	method	parameters	response	failures	Description with example
/...					

- implement REST Web Service for designed API and implementation requirements;
- in addition to the mentioned information that should be included into the presentation, include also notes about bottlenecks (that you probably faced during the task implementation) and your findings to resolve them.

Implementation requirements

You are not limited with your implementation, but your service should at least fit the following list of basic requirements:

- at least 2 upperlevel resources;
- at least 2 nested resources;
- GET, POST, PUT, DELETE http methods should be used;
- use mainly JSON format for content;
- use variables in the path;
- support query parameters in a request;
- use the Status Codes in the responses;
- use own exception handler;
- implement HATEOAS.

1.2 *Returning the task*

Provide the result of the task as an archive of the following files:

- *presentation slides* (do not forget to list your group members)
- *project source code*
- *WAR file*

Send the Task-3 result as an archive ***TIES4560-Task-3.zip*** to lecturer (oleksiy.khriyenko@jyu.fi)

Deadline: **30.09.2025 (before 23:59)**