

Requirements for D2 deliverable

Deadline for providing URL- Your mentoring session
Deadline for implementation - Friday Week 5 at 5.00pm

SENG3011

1. Part 1 - Swagger documentation and a working API endpoint (show your mentor during the mentoring session).

Teams should have implemented the following functions:

- I. Deployment as a REST Web service with a clearly documented API
- II. Ability to make requests to the API
- III. Generating an output file (possibly with errors)

You must document your API in swagger, host online and post the URL in your Confluence document.

API doesn't need to be complete, but Swagger specification needs to be hosted online and API should be callable (through Swagger "Try it") even though it may return incomplete results. If there are multiple API endpoints, or parameter combinations, if they all do not work, it is recommended to provide example API call that works in Swagger documentation. You may return a hard-coded or incomplete response.

We are allowing other systems like Postman and stoplight.io to be used in place of Swagger for teams who have other preferences, as long as you make it easy for other teams to invoke your API.

2. Part 2- API Documentation, Implementation and Report (by Friday Week 5 at 5.00pm).

I. API design details

Describe final architecture of your API, justify the choice of implementation, challenges addressed and shortcomings, in your Design Details report in your Confluence document. You may update management information if necessary.

II. API Testing

In Testing Documentation report, describe the testing processes used in the development of API, referring to the data and scripts included in Phase_1 folder. This should describe your testing environment and/or tools used, and limitations (e.g. things that are not tested). Describe your testing process i.e. how your team conducts testing using the test data (e.g. in which order) and an overview of test cases, testing data and testing results. Describe the output of testing and what actions you took to improve the test results.

At D2 your Phase_1/TestScripts folder should contain:

- Test input files
- Test configuration files (if any)
- Result files (if any)
- Software or scripts used during testing (if any)

III. API Documentation

Your API documentation will be evaluated based on following criteria:

- Ability to run API calls (e.g. with “Try it out” if using Swagger).
- Input documentation-Clear explanation of required input variables including their type, format, what they represent and if applicable, acceptable values, and example of use.
- Output Documentation- Example output response and description of the semantics of output (even though it is described in the spec, the students should not be making assumptions, that everything is the same between teams)

IV. API Implementation

Your API implementation will be tested and evaluated according to following criteria:

- Output Correctness
- Log File Exists
- Ease of the API use

Note: There can be two types of logs for your API- You can return a json snippet with your API response to the end user, which includes the details such as team name, accessed time, data source. Also you can keep a log file in back-end that contain details such as which API end point was accessed at what time, how long it took to address the request, resource utilization etc. that are useful for API monitoring and performance improvement.

Marking Criteria

Part 1	Swagger documentation and working API endpoint (5%)
Part 2	Swagger API Documentation (20%)
	API Implementation (35%)
	API Design (20%)
	API Testing (10%)
	Above and Beyond (10%)

For each criteria, the following marks are given:

A for outstanding work, this is above expectations

B for very good work, this is for fulfilling all expectations

C for good work, mostly correct but some expectations have not been met

D for average work

E for work that is below standard

F Fail