IT 4403 Advanced Mobile and Web Applications Study Guide
Module 4: Reading JSON using JavaScript
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Overview and learning outcomes

In order to share data, systems and components of systems need to use commonly understandable language and data definitions, usually in some kind of standard. In this module, we will see data transfer and exchange format typically used in modern web applications in a distributed and service-oriented environment, particularly JSON.

After completing this module, you will:

1. Describe JSON format
2. Explain common JSON document structure terms
3. Compare XML and JSON
4. Read JSON data using JavaScript/jQuery

This module is related to course level learning outcome 3.

Task list

1. Finish reading core learning materials. Have some hands-on practices of the examples presented in readings.
2. Review the lecture notes and some examples given by the instructor. Try it yourself to rewrite the examples compare your code to the examples provided.
3. Research and discuss:
    a. What are the advantages and disadvantages of JSON? Compare it to XML in different usage scenarios.
4. Lab 3: no submission; practice until you feel comfortable and confident to begin the project. Reference answers will be posted at the end of the week.
5. With an additional week
    a. Read the individual project overview and milestone #1.
    b. Complete Quiz 1 (see the student work module).

Learning Materials

1. Core learning resources
    a. http://www.w3schools.com/js/js_json.asp
    b. http://www.w3schools.com/json/: from "HOME" to "HowTo" (you may read the rest but we are covering them in other modules).
    c. http://kindservice.net/a-json-tutorial-getting-started-with-json-using-javascript-and-jquery/
2. Lecture notes: json.pdf
3. Examples: json-examples.zip
4. Tutorials and labs: lab3 json.pdf
5. Additional resources and readings
    a. http://www.json.org
    b. JSON vs. XML
        i. https://www.udemy.com/blog/json-vs-xml/
        ii. http://www.infoq.com/news/2006/12/json-vs-xml-debate