



IT 4403 ADVANCED MOBILE AND WEB APPLICATIONS STUDY GUIDE

MODULE 3: JQUERY BASICS

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OVERVIEW AND LEARNING OUTCOMES

Students should be familiar with JavaScript already in this class. In this module, we will learn some basics of a popular JavaScript library, jQuery. jQuery is a more convenient and productive JavaScript library that simplifies HTML DOM manipulation, event handling, effects, and AJAX interactions for rapid web development. jQuery is designed to change the way we write JavaScript.

Learning outcomes:

1. Know jQuery basics:
 - a. Its role, purpose, and features
 - b. Basic syntax, methods/functions, including selector, event, functions with work with HTML DOM and CSS, and simple effects.
 - c. Compare jQuery and JavaScript syntax
2. Create basic applications using jQuery (and achieve the same results as using traditional JavaScript):
 - a. Generating simple dynamic HTML content and changing styles.
 - b. Performing basic form processing, particularly user input using textboxes and buttons.
 - c. Performing basic client-side input validation.

This module is related to course level learning outcomes 3.

TASK LIST

1. Complete the core learning materials. Have some hands-on practices of the examples presented in readings.
2. Review the lecture notes and some comparison examples given by the instructor. Try it yourself to rewrite the original JS examples using jQuery and compare your code to the jQuery examples provided.
3. Research and discuss (optional; please discuss them in the discussion board if needed):
 - a. What are the main advantages and disadvantages of jQuery compared to traditional JS?
4. Complete lab 2 and exercises.
5. Complete the following quizzes and make sure you understand all questions and answers. No submission but you are welcome to discuss if needed.
 - a. http://www.w3schools.com/jquery/jquery_quiz.asp
6. Continue to get your web hosting ready: you don't need a web server to complete these jQuery exercises at this time. But continue to get ready with a public hosting for the upcoming work.

LEARNING MATERIALS

1. Core learning resources
 - a. First impression: you may just watch these two tutorials first to get the first impression of jQuery. You are welcome to follow it with hands-on coding if you can.
 - i. <https://www.youtube.com/watch?v=hMxGhHNOkCU> or
 - ii. <http://channel9.msdn.com/Series/Javascript-Fundamentals-Development-for-Absolute-Beginners/Getting-Started-with-jQuery-14>
 - b. <http://www.w3schools.com/jquery/>: this is a very good first tutorial to the basics. Complete (from left menu) jQuery Tutorial, jQuery Effects, and jQuery HTML (three sections). It gives you some live examples and you can play with them. It will not take long if you complete the tutorial above. Make sure

you also do the exercises in each section. Also check out more examples here:

http://www.w3schools.com/jquery/jquery_examples.asp

- c. <http://www.codecademy.com/tracks/jquery>: this tutorial offers great interactivity and step by step learning. It will take you about 3 hours for the non-pro content.
2. Lecture notes with some comparison examples: jquery-examples.zip
3. Tutorials and labs: lab2 jquery.pdf
4. Key references:
 - a. <http://api.jquery.com>
 - b. <http://jqapi.com>
5. Additional resources and references for your future learning
 - a. <http://learn.jquery.com>
 - b. <http://try.jquery.com>
 - c. <http://www.jquery-tutorial.net>
 - d. <http://jqfundamentals.com/chapter/jquery-basics>
 - e. <http://learn.jquery.com/about-jquery/additional-support/>
 - f. <http://www.codeproject.com/Articles/346904/Common-Pitfalls-of-jQuery>
 - g. <http://coding.smashingmagazine.com/2008/09/16/jquery-examples-and-best-practices/>