



IT 4403 ADVANCED MOBILE AND WEB APPLICATIONS STUDY GUIDE

MODULE 10: DATA INTERACTIONS

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OVERVIEW AND LEARNING OUTCOMES

In this module, we are going to practice some SPA UI techniques and patterns on interacting with data. After completing this module, you will:

- Compare three basic UI patterns and techniques (side-by-side, overlay, inline expansion) to display item details (details-on-demand).
- Implement the three details-on-demand patterns using CSS and AJAX techniques.
- Apply patterns and techniques for displaying additional items such as paging and scrolling.

This module is related to course level learning outcomes 3 and 5.

TASK LIST

1. Finish required readings.
2. Review the lecture notes.
3. Review the examples given by the instructor. Try it yourself to rewrite the examples compare your code to the examples provided.
4. Complete the lab: no submission; practice until you feel comfortable and confident to completing milestone #4.
5. This module concludes milestone 3 (module 8 and 9). With an additional week, you should also:
 - a. Complete quiz 4
 - b. Complete individual project milestone 4

LEARNING MATERIALS

1. Core learning materials:
 - a. UI patterns for displaying item details
 - i. <http://patternry.com/p=inline-expand/>
 - ii. <http://patternry.com/p=overlay/>
 - iii. <http://www.creativeblog.com/ux/ui-design-pattern-tips-sticky-fixed-navigation-101413270> (it can be used for navigation as well as displaying details)
 - b. UI patterns for display more items
 - i. <http://patternry.com/p=search-pagination/>
 - ii. <http://patternry.com/p=endless-scrolling/>
 - iii. <http://ui-patterns.com/patterns/Carousel>
 - c. Coding techniques
 - i. Sticky side panel: <https://css-tricks.com/scrollfollow-sidebar/>
 - ii. Overlay: <http://tympanus.net/codrops/2013/11/07/css-overlay-techniques/>
 - iii. Div expansion: <http://rijamedia.com/blog/2011/01/simple-jquery-hideshow-elements-with-toggle-and-slidetoggle/>
 - iv. Continuous scrolling: <https://www.youtube.com/watch?v=mnyFAHV0GHw>
2. Live examples: live example demo is at <http://it4203.azurewebsites.net/demo/data-interact>
3. Lab 9 guide: please follow the tutorials in 1C coding techniques. Then study the live examples provided by the instructor. Apply the techniques to Google Books.