



## CS 252 - PROJECT DEVELOPMENT / مشروع تطوير برمجيات

College/Institute	College of Business Studies
Scientific Department	Computer and Information Systems
Course Title	Project Development / مشروع تطوير برمجيات
Course Number	CS 252
Language of Instruction	English
Prerequisites	CS 205
Credits	6
Hours	7
Theoretical Hours per week	4
Practical Hours per Week	3
Category	Major Core

### COURSE DESCRIPTION

This course brings together all of the elements of web site design, user interaction scenarios, graphics, data storage, and data security. To construct a fully functional commercial web site application. The course will start by introducing some basic data structures' constructs, highly involved in web-application development. The student will learn how to connect to a data source, and how to secure any internet connection. The student will make use of some industry standard software products - for example, to generate reports and send emails; however, the student will develop the complete web-application from scratch.

### COURSE OBJECTIVES

1. Identify the different programming pieces involved in commercial web applications.
2. Connect different programming pieces to fulfill user requests.
3. Understand user interaction and system feedback.
4. Manage user authentication and privileges.
5. Integrate the database view, with the application view.
6. Produce printable reports via web application.
7. Send emails via web application.
8. Prepare project presentation.



## OUTLINE OF TOPICS AND SEQUENCE

Seq.	Topics	Week#	Theo. Hours	Pract. Hours
1	Introduce different methods to connect to a database	1	4	3
2	Introduce Data-Structures with objects	2,3	8	6
3	Introduce web-related Design Patterns	4	4	3
4	Work with secure internet connection	5	2	2
5	Analyze and develop the User Object	5, 6	6	4
6	Examination	7	2	0
7	Analyze and develop the Catalog Object	7,8	6	6
8	Analyze and develop the Search Engine Object	9	4	3
9	Analyze and develop the Cart Object	10	4	3
10	Analyze and develop the Invoice Object	11	4	3
11	Generate PDF reports	12	2	1
12	Generate e-mails	12	2	2
13	Finalize Project	13,14	8	6
<b>Total Theoretical and Practical Hours</b>			<b>56</b>	<b>42</b>

## DELIVERY METHODS

- ◆ Lectures: 4 hours per week ( i.e. 4 credit)
- ◆ Laboratories: 3 hours per week ( i.e. 2 credit)

## RECOMMENDED TEXT / OTHER LEARNING MATERIALS / AND REFERENCES

[Text] Murach's Java Servlets and JSP, 2nd Edition  
[Author] Andrea Steelman Joel Murach  
[Publisher] Mike Murach & Associates; 2nd edition (February 16, 2010)  
[ISBN13] 978-1890774448 [ISBN10] 1890774448

## EVALUATION METHODS

Students will be evaluated as follows:

Evaluation Method	Percentage
Class Participation	5%
Quizzes	5%
Midterm Exam(s)	10%
Project Milestones & Deliverables	40%
Final Exam ( Heavily Based on The Project - Theoretical + Practical )	40%
Total	100%