



Jordan University of Science and Technology
Faculty of Computer & Information Technology
Software Engineering Department

SE432 Software Engineering For Web Applications
Summer Semester 2019-2020

Course Catalog
3 Credit Hours. Detailed study of engineering methods and technologies for building highly interactive web sites for e-commerce and other web-based applications. Presents engineering principles for building web sites that exhibit high reliability, usability, security, availability, scalability, and maintainability. Teaches methods such as client-server programming, componentbased software development, middleware, and reusable components

Text Book	
Title	Professional Java for Web Applications
Author(s)	Nicholas S. Williams
Edition	10th Edition
Short Name	Ref #1
Other Information	

Instructor	
Name	Dr. Ahmed Shatnawi
Office Location	M2 L2
Office Hours	Sun : 10:00 - 11:30 Mon : 10:00 - 11:30 Tue : 10:00 - 11:30 Wed : 10:00 - 11:30
Email	ahmedshatnawi@just.edu.jo

Class Schedule & Room
Section 1: Lecture Time: Sun, Mon, Tue, Wed : 08:30 - 10:00 Room: منصة الكترونية

Prerequisites		
Line Number	Course Name	Prerequisite Type
1743410	Cls341 Web Applications Development	Prerequisite / Study
1763710	SE371 Client/Server Programming	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Introduction to Web essentials	
Week 2	Hyper Text Transfer Protocol	
Week 3	Introduction to Client/Server Principles	
Week 3	Web servers and Java server side programming	
Weeks 5, 6, 7	Java Servlets	
Weeks 7, 8	Java Server Pages (JSP)	
Week 9	J2EE Architecture (MVC Architectural Pattern)	
Week 10	Web Security	
Week 11	Service oriented architecture (SOA)	
Week 12	Introduction to web services	
Week 13	SOAP Web Services	
Week 13	RESTful Web Services	
Week 14	Technologies and frameworks	

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Understand the essentials of the web and the underlying protocols and the client server architecture. [1SM1p]	5%	
Demonstrate full understanding of the HTTP protocol and request/response architecture. [1EA1p]	15%	
Understand the role of web servers and Java server-side programs, JSP, JavaBean, Servlet, etc [1EP3p]	40%	
Demonstrate the ability to design and build a scalable web application that makes use of modern technologies and approaches [1EA4p]	20%	
Demonstrate the ability to apply architectural and design patterns in building scalable web applications including MVC, SOA, SOAP, RESTful, etc. [1EP7p]	10%	
Identify and discuss the security risks of Web applications and Web Services [1EP6p]	10%	

Relationship to Program Student Outcomes (Out of 100%)																															
A	B	C	D	E	F	G	H	I	J	K	SM1p	SM2p	SM3p	EA1p	EA2p	EA3p	EA4p	D1p	D2p	D3p	D4p	D5p	D6p	ET1p	ET2p	ET3p	ET4p	ET5p	ET6p	EP1p	
											5			15			20														

Evaluation	
Assessment Tool	Weight
First Exam	20%
Assignments	30%
Final Exam	50%

Policy	
HW	1. Late work will not be accepted. 2. All work has to be done independently within the team 3. Use your e-learning account to submit a softcopy of your work with your Name, Section#, and ID
Exams	1. Exam's format is generally (but NOT always) divided into three parts: Basic Concepts, Program Analysis, and Programming. 2. Makeup exam should not be given unless there is a valid excuse accepted by the university policies.
Attendance	1. If you miss a class, it is your responsibility to find out about any announcements, quizzes, or assignments you may have missed. 2. University policies will be applied regarding attendance (check your student book). 3. Your attendance/absence is updated weekly into your student account.

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