German Jordanian University الجامعة الألمانية الأردنية

CS355 Web Technologies

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Lecture 1

Course Objectives

- Recognize, learn and implement best practices used by web designers
- Write a standard HTML document involving a different element types, including hyperlinks, images, lists, tables, and forms
- Use Cascading Style Sheets CSS to implement a variety of presentation effects in HTML and XML documents, including explicit positioning of elements.

Course Objectives

- Write a client-side function that uses a regular expression to validate form entry.
- Develop event-driven programs that use HTML intrinsic event attributes, Document Object Model DOM event listeners, and DOM-generated events.

Course Objectives

- Describe how a web server responds to an HTTP request for a dynamic resource
- Explain parameter passing from client to server, including the generation of query strings from forms and server-side processing
- Describe sessions conceptually and explain how the concept can be implemented using cookies and URL rewriting

Course Objectives

- Explain common security threats
- Develop a web application that employs the Model View Controller MVC architecture
- Write client-server applications that communicate via XML documents
- Describe WSDL and SOAP protocols
- Write a client web service that accesses a commercial web service

Course Contents

- Introduction to Internet
- Concepts of HTTP, URL, Web Browsers, Web Servers, and HTML
- Scripting language characteristics
- Cascading Style Sheets CSS
- Introduction to Java Script
- Introduction to XML

Course Contents

- PHP
- Introduction to Servlets
- Cookies and Sessions
- JDBC (Java Database Connectivity)

Course Contents

- JSP Application Design
- Document Object Model (DOM) API
- Server-side program execution life cycle
- Security issues
- Model-View-Controller (MVC) architecture

Course Contents

- Client-server communication via XML documents
- Web service client/server generation using higher-level tools
- Low-level web service technologies

Text Books

- Learning Web Design, Fourth Edition. Robbins, Jennifer Niederst, 2021.

- Programming the world wide web. Sebesta, Robert W., 2002.

Grading Policy

Grading Component	Points	Due Date
Midterm	30%	TBA
Lab	15%	Quizzes & assignments
	15%	Course Project
Final	40%	TBA