CSE 482 INTERNET AND WEB TECHNOLOGY

The course develops an in-depth knowledge of the concepts, principles and implementation techniques related to the Internet and web technology. Details about the Internet, Intranet, Extranet, and e-commerce will be covered. Topics include Web server management, threats, security of client and server, network security like firewall, SSL, etc., authentication and authorization, legislation, privacy and IP act, electronic payment, e-business, search engine, Internet protocols like TCP/IP, SGML, XML. Design and development of Web applications using Java Applets, ASP, Java Script, CGI and other Web tools is discussed.

Course Teacher Information:

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Office Room: SAC XXXX

Office Hours: [11:10~12:10] [Sunday and Tuesday]

Class Schedule:

CSE482/ETE334	SAM3	ST 08:00 AM - 9:30 AM	NAC992
CSE482L/ETE334L	SAM3		

Marks Distribution:

Evaluation Type	Marks
Attendance	5%
Quiz	15%
Assignments	5%
Project and Presentation	15%
Midterm	20%

Final	40%
Total	100%

Text Book:

- [1]. Web Technology: Theory and Practice by M. Srinivasan, O'rally publication [2]. Data Communication and Networking, Behrouz A. Forouzan, McGraw-Hill Publication

Lecture Plan

Lecture	Contents		
1	Introduction to Internet		
2	Intranet, Intranet and Extranet, How The Internet Works, Connecting to the Internet.		
3	Internet Protocols, Domain Name System (DNS)		
4	IEEE LAN Standards, WAN Standards, Transmission Media, Transmission Types		
5	Quiz#01 and review class		
6	The Reference Model, Frames & Packets, Networking Protocols &The OSI Model, Mapping the OSI/RM, Choosing & Combining Protocols.		
7	Internet Architecture, Routing, Port Numbers, Internet Addressing, Subnet Masks, IPV4 and IPV6		
8	Server Implementation, Content Servers, Performance Servers, Database Servers, Mirrored Servers, Popular Server Products		
9	Databases, Introduction to Database Gateways for Web Servers, Common Gateway Interface (CGI), Server Application Programming Interfaces (SAPIs),		
10	Quiz#02 and review class		
11	Server Side Scripting Technologies: Javascript, ASP, PHP, HTML, Java & Java Servlets, JSP, ColdFusion; Database Connectivity: ODBC, JDBC,		
12	Midterm		

Evolution of the World Wide Web, Web Browser Software, Using Browsers to	
Access Web Pages, Customizing your Browser, Images & Web Browsers,	
Wireless Web Protocols.	
Web architecture, Deployment issues	
Search Engines, Directories, Ranking Systems	
Getting a Website Listed, Search Indexes, Search Techniques, Search Tools.	
Quiz#03 and review class	
Electronic Mail, Other Internet Clients: FTP, Newsgroups, Telnet	
What is Security?, The Cracker Process, Types of Attacks, Defending Your Network, Firewalls, Defending Your Computer, Defending Your Transmitted Data.	
Threats, security of client and server, network security like firewall, SSL	
Project and Presentation	
Electronic payment and payment gateway, API	
Authentication and authorization, legislation, privacy and IP act	
e-Commerce perspective in Bangladesh	
Final	

N.B.*/ Google class room has been create for ease of communication. Please registrar yourself. All lecture notes [*.pptx file], Course material, Assignment submission will be available in google class room. Students may open a facebook closed group named [CSE482_N_ETE334_NSUSECTIONXX] for their internal communication.*/