

"In the name of Allah, the Most Gracious, the Most Merciful"



International Islamic University Chittagong (IIUC)

Department of Computer and Communication Engineering (CCE)

‘Lab Manual’

Course Code: CCE-1206

Course Title: Web Programming Sessional

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PART II: LAB SESSIONS		
Sessions	Topic	Page No
LAB# 1	Basic Introduction	1-5
	Installation of Coding Environment.	
	Introduction to Web Programming: Course Description, Exploring Web Browsers and Search Engines.	
	Familiarise with web portals, e-commerce sites, blogs etc.	
LAB# 2, 3 and 4	HTML	6-21
	HTML: The Building Blocks of HTML and Essential Tags	
	HTML: List & Tables	
	HTML: Form, Multimedia, Frames & iFrames	
LAB# 5, 6 and 7	CSS	22-38
	Introduction to CSS	
	CSS Positioning	
	CSS Flexbox and Grid	

LAB# 8, 9 and 10		Java Script
		Introduction to JavaScript.
		JavaScript Operators, Loops, Function and object.
L-10	S-1	DOM Interaction and Manipulation in JS [Part-1]
	S-2	DOM Interaction and Manipulation in JS [Part-2]
LAB# 11 and 12		PHP, Web Server and MySQL
L-11	S-1	PHP and Web Server: Installation and Configuration.
	S-2	Introduction to PHP: Syntax, Variables, Function, Loops and Control Structures.
L-12	S-1	Introduction to Databases with PHP: DB Connection, Data Query, PHP Session, Cookies & Redirection.
	S-2	PHP: Form (Login, Registration, Feedback) to collect data and store it in database.

COURSE DESCRIPTION:

ISCED Code: 0613	Course Code: CCE-1206	Course Title: Web Programming Sessional
Credit Hours: 1.5	Contact Hours: 3 CH per Week	Prerequisite Course: CCE-1106
Course Assessments	CIE: Continuous Internal Evaluation	40 – 60 Marks
	SEE: Semester End Examination	60 – 40 Marks

Contents	CLOs	Lecture	Practical
HTML: Basics, Elements, Attributes, Headings, Paragraphs, Formatting, Links, Head, Images, Tables, Lists, Blocks, Layout, Forms, multimedia tags.	CLO – 1 & 2	4	8
CSS: Introduction, Syntax, Selectors - Id & Class, Styling Backgrounds, Text, Fonts, Links, Box Model- Border, Outline, Margin, Padding, Grouping/Nesting, Dimension, Display, Positioning, Floating, Align, Navigation Bar, Image Gallery.		3	6
JavaScript: Introduction, Output, Statements, Comments, Variables, Data Types, Objects, Functions, Operators, Comparisons, Conditions, Loop, Errors, DOM Introduction and manipulation, Number, String, Date, Array, Window, Screen, Navigator, Popup Alert.		4	8
PHP: Syntax, Variables, String, Operators, If...Else, Switch, Arrays, While Loops, For Loops, Functions, Date, Include, File Upload, Cookies, Forms, \$_GET and \$_POST methods.		4	8
Total		15	30

INTRODUCTION TO THE COURSE:

Internet and Web become an integral part of human life. It exists in every possible dimension which makes this art essential to learn. This course studies both theoretical and practical approach to Web Engineering. It provides a highly-interactive introduction to Web Programming using client-side technologies (HTML, CSS and JavaScript) and server-side technologies (PHP) to create web pages and web applications. A list of problems is also provided at the end of each lab session. Please go through this lab manual sequentially and follow the *general guidelines* carefully.

OBJECTIVE(S) OF THIS COURSE:

- ✓ To understand the concept of Web Application Development and its Architecture.
- ✓ To understand the Essentials of Web Application Development.
- ✓ To understand and practice web page designing techniques.
- ✓ To understand and practice embedded dynamic scripting on client-side Internet Programming.
- ✓ To understand the differences between client side & server-side technologies to develop Web Application.

Course Learning Outcomes (CLOs):

CLOs	Course Learning Outcomes (CLOs): Upon the successful completion of the course, students will be able to	Bloom's Taxonomy Domain/Level	Program Learning Outcomes (PLOs)
CLO-1	Understand functionality of Web programming and its applications.	Cognitive (Understand)	PLO – 1
CLO-2	Design and develop interactive, client-side, server-side executable web applications.	Cognitive (Evaluation) Psychomotor	PLO – 4

ASSESSMENT METHODS:**Teaching Learning Strategy:****Face-to-Face Learning**

- Lecture
- Experiment

Self-directed Learning

- Preparation for Lab Reports
- Preparation for Lab Test & Quiz
- Engagement in Project / Assignment

Student Assessment Methods:**Formative Assessment**

- Continuous Assessment (Experiment Conduction, Lab Report and Lab Viva)

Summative Assessment

- Final Quiz / Final Lab Examination
- Lab Test / Lab Performance / Project Show

CLOs with Weighting of Assessments:

CLOs	Assessment Method		(%)
	Attendance		10%
CLO-1 and CLO-2	Continuous Assessment	Experiment Conduction	10%
		Lab Report	20%
		Lab Viva	10%
	Final Lab Quiz / Final Lab Examination		30%
	Final Lab Performance / Test & Viva		20%

Rubrics followed to Evaluate the Lab Courses:**Attendance:**

Attendance	Awarding marks
90% and above	10
85% to less than 90%	9
80% to less than 85%	8
75% to less than 80%	7
70% to less than 75%	6
65% to less than 70%	5
60% to less than 65%	4
less than 60%	0

Continuous Assessment (Experiment Conduction, Lab Viva and Lab Report):

Parameter	Allocated Marks	Low	Medium	High
Experiment Conduction	10	The student has not performed anything during laboratory periods	The student has given satisfactory performance during laboratory periods	The student has given excellent performance or has completed all the tasks given during laboratory periods.
		0 Mark	1 – 5 Marks	6 – 10 Marks
Lab Viva	10	Low	Medium	High
		The student was not able to answer anything during viva-voce.	The student was able to answer a few questions during viva-voce	The student was able to answer all the questions during viva voce.
		0 Mark	1 – 5 Marks	6 – 10 Marks
Lab Performance	10	The student was not able to perform the job, given during the semester laboratory examination.	The student was partially able to perform the job during the semester laboratory examination.	The student was able to perform the job accurately during the semester laboratory examination.
		0 Mark	1 – 5 Marks	6 – 10 Marks

Lab Report Rubric:

	Parameter	Fail (0)	Poor (2)	Fair (4)	Good (7)	Excellent (10)
Lab Report	Report format and quality (5)	No submission / No effort exhibited and No attention to detail evident	Directions were not followed and report contains many errors.	Report is somewhat organized with some spelling or grammatical errors.	Report is well organized and cohesive but contains minor errors in format or procedures.	Lab report submitted as directed, and on time. Directions were followed. Report is well organized and cohesive and contains no mechanical errors. Presentation seems polished.
	Experiment Background , Results & Data Analysis (10)	No submission / No effort exhibited.	Introduction and background are insufficient or missing entirely. Data is missing, inaccurate, or not analysed effectively.	Presents an introduction and background information, but it lacks clarity and relevance to the experiment. Presents data with several inaccuracies or significant organizational problems. Data analysis is limited or contains major errors.	Provides a sufficient introduction and background information but lacks some depth or clarity. Presents mostly accurate data with some organizational issues. Analyses data adequately but with minor errors or inconsistencies.	Clearly articulates the purpose, significance, and relevant background information of the experiment. Presents accurate, well-organized, and comprehensive data. Analyses data effectively using appropriate methods.
	Discussion & Conclusion (5)	No submission / No effort exhibited	Does not effectively connect results to	Attempts to connect results to objectives but with	Connects the results to the objectives but lacks	Demonstrates a clear understanding of the results and connects

			objectives, and conclusions are absent or inaccurate.	significant gaps or inaccuracies. Conclusions are vague or unsupported.	depth or thorough analysis. Conclusions are drawn but lack insight or depth.	them to the experiment's objectives. Offers insightful interpretations and conclusions supported by evidence.
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GRADING POLICY:

Numerical grade Marks%	Letter Grade (LG)	Grade Point (GP/unit)	Remarks/ Status
80-100	A+ (A plus)	4.00	Excellent
75 to less than 80	A (A regular)	3.75	Very good
70 to less than 75	A- (A minus)	3.50	
65 to less than 70	B+ (B plus)	3.25	Good
60 to less than 65	B (B regular)	3.00	
55 to less than 60	B- (B minus)	2.75	Satisfactory
50 to less than 55	C+ (C plus)	2.50	
45 to less than 50	C (C regular)	2.25	Not Satisfactory
40 to less than 45	D (D regular)	2.00	
less than 40	F	0.00	Fail

GENERAL GUIDELINES:

Dear Students,

Welcome to Web Programming Lab.

- For the practical works of Web Programming Course, you have to complete CCE-1206 lab (3 CH each) activities throughout the course. This lab manual will guide you to prepare for making and submission of lab reports. Further, it helps you to understand practically about the knowledge of Web Programming. You can use this lab manual as the base reference during your lab.
- You have to submit lab report of previous lab into corresponding next lab during when your instructor shall take necessary lab performance for each lab works. For your reference, "**how to write a complete CCE-1206 lab report?**" is being prepared as sample lab report in this manual. For the rest of your labs, please follow the reporting style as provided.

- Your lab report to be submitted should include at least the following topics.
 1. **Cover Page**
 2. **Experiment No**
 3. **Experiment Name**
 4. **Objectives**
 5. **Problem Statement/Theory**
 6. **Coding (Source Code)**
 7. **Output (compilation, debugging & testing)**
 8. **Discussion & Conclusion.**
- You should attempt all ***Experiments*** given in the list ***lab wise***.
- You may seek assistance in doing the lab Experiments from the concerned lab instructor. Since the assignments have credits, the lab instructor is obviously not expected to tell you how to solve these, but you may ask questions concerning the Web Programming or a technical problem.
- For each program you should add comments above each function in the code, including the main function.
- The comment block above the main code should describe the purpose of the program. Proper comments are to be provide where and when necessary, in the coding.
- The code should be interactive, general and properly documented with realInput/Output data.
- If two or more submissions from different students appear to be of the same origin (i.e., are variants of essentially the same program), none of them will be counted.
- You are strongly advised not to copy somebody else's work.
- It is your responsibility to create a separate directory to store all the programs,so that nobody else can read or copy.
- As soon as you have finished a lab Experiment, contact your lab instructor in order to get the Experiment evaluated and also get the signature from him/her on the lab performance book/sheet.

1. HOW TO WRITE A COMPLETE LAB REPORT?

Page VIII to IX shows a sample of a complete lab report.



الجامعة الإسلامية العالمية شيتاغونغ
International Islamic University Chittagong

Department of Computer and Communication Engineering (CCE)

LAB REPORT

Course Title : Web Programming Sessional

Course Code : CCE-1206

Session Topic:

Submitted By

Name :

ID No :

Semester :

Section :

Date of Experiment:

Date of Submission:

Submitted To

Engr. Mohammad Nadib Hasan

Lecturer, Dept. of CCE, IIUC.

Remarks



Your lab report to be submitted should include at least the following topics.

- 1. Cover Page**
- 2. Experiment No**
- 3. Experiment Name**
- 4. Objectives**
- 5. Problem Statement/Theory**
- 6. Coding (Source Code)**
- 7. Output (compilation, debugging & testing) and**
- 8. Discussion & Conclusion.**