Visual Programming

Course Information		Assessment	
Pre-requisites:	Computer Programming	**Theory:**	20% sessional work
Course Code:	CS-218		20% mid-semester
Semester:	4ᵗʰ		60% final examination
Effective:	17CS batch and onwards	**Practical:**	40% sessional
Theory Marks:	100		60% final lab exams
Practical Marks:	50	**Tools:**	Quiz, assignments, tests, projects
Credit Hours:	3+1		Mid-term exams
Contact Hours:	42 + 42		Final exams

Course Learning Outcomes

Upon completion of this course, students will be able to achieve following objectives:

THEORY				
	CLOs	Domain	Taxonomy Level	PLOs
CLO1	**Discuss** fundamental concepts of visual programming and demonstrate the working of visual studio.	Cognitive	Level 1: Knowledge	PLO1
CLO2	**Discuss and Explain** the controls, properties and events required to design any software application.	Cognitive	Level 2: Comprehension	PLO2
ClO3	**Use** the different elements of C# programming language as building blocks to design console based applications.	Cognitive	Level 3: Application	PLO3
PRACTICAL				
CLO4	Best practices of C# computer programming to **design** and **develop** console based application.	Cognitive	Level 3: Application	PLO4
CLO5	**Design** and **Analyze** problems, develop conceptual designs (software models of Application) that **solve** those problems, and transform those designs to Visual Programs with in Visual studio.NET.	Cognitive	Level 4: Analysis	PLO5

Table 1: Course Learning Outcomes

Course CS-218	PLOs	CLO1	CLO2	CLO3	CLO4	CLO5
	PLO1	100%				
	PLO2		100%			
	PLO3			100%		
	PLO4				100%	
	PLO5					100%
	PLO6					
	PLO7					
	PLO8					
	PLO9					
	PLO10					
	PLO11					
	PLO12					

Table 2: Quantification of PLOs via CLOs of VP

Course Contents

Review of C# Syntax, Introduction to visual programming and .NET, Introduction to Visual Studio .NET, Windows based applications: Working with WinForms and Controls, Advanced User Interface Enhancement, MDI Applications. ADO.NET: Introduction to ADO.Net Data Access Components, Accessing a Database, Querying and Updating Data by Using LINQ.

Web Applications and ASP.NET: Web Applications, ASP.NET, and HTTP, Designing the User Interface for a Graphical Application using XAML, Binding Controls to Data, Styling a User Interface, ASP.NET Configuration, Server Controls and Security Fundamentals.

CLOs	THEORY				PRACTICAL				Learning Levels	PLOs	Total Marks
	Sessional (20)		Mid Exam(20)	Final Exam(60)	Sessional(20)		Objective Test (10)	VivaVoce			
	Class Test (10)	CEP(10)			OpenEnd Lab(10)	Workbook(10)					
CLO1	05	----	10	20	_____		_____	_____	C1	1	35
CLO2	05		10	20					C2	2	35
CLO3		10		20					C3	3	30
CLO4					10		05	10	C3	4	25
CLO5						10	05	10	C4	5	25
										Total	150

Table 3: CLO Assessment Method (Distribution of _____150____ marks)

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Recommended Books

1. Deitel and Deitel, "Visual C# : How to Program", 6/e Edition, Prentice Hall / Pearson Education, 2017, ISBN 978-0-13-650154-0.
2. J.C., Bradley and A.C. Millspaugh, "Programming in visual C#", Latest Edition, McGraw-Hill.