

## BCA 407: GUI using .Net Framework

### Teaching Scheme

Lectures: 3 hrs/Week

Tutorials: 1 hr/Week

Credits: 4

### Examination Scheme

Class Test – 12 Marks

Teachers Assessment – 6 Marks

Attendance – 12 Marks

End Semester Exam – 70 Marks

**Prerequisite:** HTML and CSS.

### Course Objectives:

1. Learn about MS.NET framework developed by Microsoft.
2. You will be able to using XML in C#.NET specifically ADO.NET and SQL server.
3. Be able to understand use of C# basics, Objects and Types, Inheritance .
4. To develop, implement and creating Applications with C#.
5. To develop, implement, and demonstrate Component Services, Threading, Remoting Windows services, web.
6. To understand and be able to explain Security in the .NET framework and Deployment the .NET.
7. To develop Assemblies and Deployment in .NET, Mobile Application Development.

### Detailed Syllabus:

Head  
Unit 1  
Department of Computer Applications  
Faculty of Computer Applications  
Bharatiya University, Bareilly  
Head of Computer Applications

Introduction of .Net, The Origin of .Net Technology (OLE technology)

COM technologies, .NET technologies), The architecture of .Net Framework, Common Language Runtime (CLR), Common Type System (CTS), Common Language Specification (CLS), Microsoft Intermediate Language (MSIL), Just-In -Time Compilation, Framework Base Classes.

### Unit-2

**Introduction of Programming Language C#:** Introduction of C#, Characteristics of C#, Differences between C# and C++, Differences between C# and JAVA, C# program introduction: The Main method specification, Namespace, Variables: Declaring implicit and explicit variables, Data-types, Boxing and Un-boxing.

### Unit-3

**Controlling program execution:** IF statements, CASE (switch) statements, Operators, Looping, Storing multiple values with arrays. Inheritance, Method Overloading and method overriding, Polymorphism, Operator Overloading, Abstract Class, Inner Class, Interface, Delegates, Partial Classes, Errors and its types, Exception Handling.

### Unit-4

**GUI -Controls and There Event Handling:** Text Box, Rich Text Box, Masked Text-box, Label, Link Label, Radio Button ,Check Box, List Box ,Combo Box ,Checked List Box .Date Time Picker Control, Calendar Control, Tool Tip, Shock Web Flash Object.

**Navigation Control and Its Event Handling:** Context Menu Strip, Tool Strip, Status Strip, Tool Strip Container.

### Unit-5

**Containers and its Event Handling:** Flow Layout Panel, Group Box, Panel, Split Container, Tab Control, Table Layout Panel.

**Dialog Boxes and its Event Handling:** Message Dialog Boxes, Color Dialog, Folder Browser Dialog, Font Dialog, Open File Dialog, Save File Dialog.

### Unit-6

**Data Controls:** Data Source, Data Set, and Data Grid View displaying Record in the Grid View Controls. ADO.Net: Connected and Disconnected Architecture, Displaying Record from the Database, Inserting Record into Database, Creating Login using Database, Deleting Record from the Database, Fetching Record from the Database, Update Record in the Database, Creating Setup of .Net Application using Set up Wizard.

### Suggested Readings:

1. Beginning Visual C# 2008, John Wiley, Wrox, May 2008.
2. Microsoft .Net for Programmers, Fergal Grimes, SPI, 2002.
3. Programming with C#, E. Balagurusamy, TMH, 1st Edition.

### Course Outcomes:

After completing the course, students will be able to:

1. Learn to develop applications using C# and VB.NET.
2. Learn to apply these languages to develop server-side applications which make use of ADO.NET, ASP.NET, Web Services etc.
3. Understand use of C# basics, Objects and Types, Inheritance
4. Develop, implement and creating Applications with C#.
5. Develop, implement, and demonstrate Component Services, Threading, Remoting, Windows services, web
6. Understand and be able to explain Security in the .NET framework and Deployment in the .NET.

Head

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