



GUJARAT UNIVERSITY

BCA V SYLLABUS

CC301 Web Application Development – I (Using C#)		
COURSE TITLE		
COURSE CODE	CC-301	
COURSE CREDIT	3	
SESSION PER WEEK	4	
TOTAL TEACHING HOURS	40 HOURS	
AIM		
To provide knowledge of advance concepts of dynamic and interactive web application using ASP.NET and C#.NET as language.		
LEARNING OUTCOMES		
On the completion of the course students will:		
1. Understand server-side technology and use of webserver.		
2. Understand different web server controls available in ASP.NET.		
3. Mange security and personalization in ASP.NET website.		
4. Validate different kind of data, and design master page.		
5. Design GUI enabled interface using data controls to manage database.		
DETAIL SYLLABUS		
UNIT	TOPIC / SUB TOPIC	TEACHING HOURS
1	INTRODUCTION TO ASP.NET	10
	<ul style="list-style-type: none">❖ Introduction to .NET Platform and Web<ul style="list-style-type: none">➤ Introduction to ASP (Server-side Technology)➤ .NET Framework (FCL and CLR)➤ Overview of IIS➤ Processing of ASP.NET page (Execution model)➤ Features of .NET IDE➤ Features of ASP.NET❖ Working with ASP.NET<ul style="list-style-type: none">➤ Coding Model (Inline and Code-behind)➤ Introduction to Web-Forms and its Events➤ ASP.NET Built-in directory structure<ul style="list-style-type: none">▪ App_data▪ App_code▪ Bin	

	<ul style="list-style-type: none"> ❖ Application Configuration <ul style="list-style-type: none"> ➤ Global.asax file ➤ Web.config ❖ Common properties <ul style="list-style-type: none"> ➤ AccessKey ➤ BackColor ➤ BorderWidth ➤ BorderStyle ➤ CSSClass ➤ Enabled ➤ Font (Bold, Italic, Name, Overline, Size, Strikeout, Underline etc) ➤ ForeColor ➤ Height ➤ TabIndex ➤ Tooltip ➤ Width ➤ ID ➤ Runat ➤ Text ❖ Label <ul style="list-style-type: none"> ➤ EnableViewState ➤ AssociatedControlID ❖ TextBox <ul style="list-style-type: none"> ➤ AutoCompleteType ➤ AutoPostBack ➤ Columns ➤ MaxLength ➤ ReadOnly ➤ TextMode ❖ Literal <ul style="list-style-type: none"> ➤ Mode ❖ Panel <ul style="list-style-type: none"> ➤ Use of Panel ➤ Adding controls at runtime in panel 	
	INFORMATION PASSING AND STANDARD CONTROLS	10
2	<ul style="list-style-type: none"> ❖ Passing Information from one page to another <ul style="list-style-type: none"> ➤ Previouspage. FindControl Method ➤ QueryString ➤ Cookies ➤ Session variables ➤ Application variables ➤ HttpRequest and HttpResponse Objects ❖ Web server controls Button, Image Button, Link Button <ul style="list-style-type: none"> ➤ PostBackUrl ➤ ImageUrl (Image Button) ➤ AlternateText (Image Button) ➤ Events:OnClick, OnClientClick 	

	<ul style="list-style-type: none"> ❖ Hyperlink <ul style="list-style-type: none"> ➤ NavigateUrl ➤ Target ❖ ImageMap control (Creating Hotspots) ❖ CheckBox and RadioButton <ul style="list-style-type: none"> ➤ Properties <ul style="list-style-type: none"> ▪ AutoPostBack ▪ Text ▪ TextAlign ▪ Checked ▪ GroupName (RadioButton) ➤ Event <ul style="list-style-type: none"> ▪ OnCheckedChange ❖ CheckBoxList, RadioButtonList <ul style="list-style-type: none"> ➤ Properties <ul style="list-style-type: none"> ▪ AutoPostBack ▪ DataSource ▪ RepeatColumns ▪ RepeatDirection ▪ TextAlign ▪ Items ▪ SelectedIndex ▪ SelectedItem ▪ SelectedItems ➤ Event <ul style="list-style-type: none"> ▪ OnSelectedIndexChanged ❖ ListBox, DropDownList <ul style="list-style-type: none"> ➤ Properties <ul style="list-style-type: none"> ▪ AutoPostBack ▪ DataSource ▪ Items ▪ SelectionMode (ListBox) ➤ Event <ul style="list-style-type: none"> ▪ OnSelectedIndexChanged 	6
	Rich Controls:	
	<ul style="list-style-type: none"> ❖ Calendar <ul style="list-style-type: none"> ➤ Properties <ul style="list-style-type: none"> ▪ NextMonthText ▪ PrevMonthText ▪ SelectedDate ▪ SelectedDates ▪ SelectionMode ➤ Event <ul style="list-style-type: none"> ▪ DayRender ❖ Adrotator control (showing advertisement from XML file and Database) ❖ FileUpload control 	4
3	Master page, Navigation, Validation, Login controls	10

	<ul style="list-style-type: none"> ❖ Designing Master page ❖ Using Navigation Controls <ul style="list-style-type: none"> ➤ TreeView ➤ SiteMapPath ➤ Menu ➤ Creating sitemap file for navigation ❖ Validation controls <ul style="list-style-type: none"> ➤ Required Field Validator ➤ Range validator ➤ Regular Expression validator ➤ Compare validator ➤ Custom validator ➤ Validation summary 	5
	<ul style="list-style-type: none"> ❖ Login Controls <ul style="list-style-type: none"> ➤ Login ➤ LoginView ➤ PasswordRecovery ➤ LoginStatus ➤ LoginName ➤ CreateUserWizard ➤ ChangePassword ❖ Creating and Managing Roles ❖ Creating and Managing Access Rules ❖ Creating and Managing Profile 	5
	Authentication, Authorization and Data controls	10
4	<ul style="list-style-type: none"> ❖ Membership class <ul style="list-style-type: none"> ➤ Methods <ul style="list-style-type: none"> ▪ CreateUser ▪ DeleteUser ▪ FindUserByName and FindUserByEmail ▪ GeneratePassword ▪ GetAllUsers ▪ GetUser ❖ Role class <ul style="list-style-type: none"> ➤ Methods <ul style="list-style-type: none"> ▪ AddUsresToRole ▪ AddUserToRole ▪ CreateRole ▪ DeleteRole ▪ FindUserInRole ▪ GetUsersInRole ▪ IsUserInRole ▪ RemoveUserFromRole(s) ❖ ProfileManager class <ul style="list-style-type: none"> ➤ Methods <ul style="list-style-type: none"> ▪ DeleteInactiveProfiles ▪ DeleteProfile ▪ DeleteProfiles ▪ FindProfileByUserName 	

	<ul style="list-style-type: none"> ▪ GetAllProfiles ▪ GetNumberofProfile ❖ Data controls <ul style="list-style-type: none"> ➤ GridView ➤ DataList ➤ FormView ➤ DetailsView ➤ Repeater ❖ ADO.NET <ul style="list-style-type: none"> ➤ Connection <ul style="list-style-type: none"> ▪ Properties <ul style="list-style-type: none"> • ConnectionString • State ▪ Methods <ul style="list-style-type: none"> • Open • Close ➤ Command <ul style="list-style-type: none"> ▪ Properties <ul style="list-style-type: none"> • CommandText • Connection ▪ Methods <ul style="list-style-type: none"> • ExecuteNonQuery • ExecuteReader • ExecuteScalar ➤ DataReader <ul style="list-style-type: none"> ▪ Property <ul style="list-style-type: none"> • Items ▪ Method <ul style="list-style-type: none"> • Read ➤ DataAdapter <ul style="list-style-type: none"> ▪ Properties <ul style="list-style-type: none"> • SelectCommand • InsertCommand • UpdateCommand • DeleteCommand ▪ Methods <ul style="list-style-type: none"> • Fill • Update ➤ DataSet ➤ CommandBuilder 	
TEXT BOOK/S:		
1. Professional ASP.NET 3.5 (Sp1) In C# and VB by Bill Evjen, Scot Hanselman and David Rader (Wrox)		
REFERENCE BOOKS:		
1. ASP.NET 4 UNLEASHED by Stephen Walther (Pearson)		

WEB RESOURCES:
REQUIRED SOFTWARE/S