GUJARAT UNIVERSITY
BCA V SYLLABUS

COURSE TITLE	CC304 Web Application Development – I (Practical)
COURSE CODE	CC-304
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. Be able to develop dynamic and interactive web pages using C# language.
2. Understand use of different .NET web controls.
3. Know How to manage 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**
	1. Design .aspx page, having 4 Textboxes (First name, Last name, Email and Mobile). Place a button on the page. On the click even of the button user will be redirected on another page, having same 4 Textboxes having AutoComplete capability. On another page user do not have type First name, Last name, Email, and Mobile number but it will be AutoComplete by pressing one or two keys in each textbox. (Demo of AutoCompleteType property).	

	2. Design two different css class in the web page having different formatting features like border size, border style, border color, font color, background color etc. Place two buttons and a label on the .aspx page. On the click event of the first button one css class will be applied to the label and on the click event of the second button apply second css class to the label. (Changing appearance of the label at run time using CSSClass property). 3. Design a class file having two methods to do sum and multiplication, which takes two arguments. Design a web page having two textboxes to take integer number from the user. Place two buttons to invoke sum and multiplication method. Print the resultant value in the label control placed on the web page. (Use of App_code directory). 4. Create .dll class library file having 2 classes and each class has at least two methods. Add the .dll file into the ASP.NET website. Design a web page to invoke the methods of .dll files. Use appropriate textboxes, label and button controls. (Use of Bin directory). 5. Create a page which will show number of visitors of a page in label (using global.asax). 6. Design a webpage which has textbox and a button. User will enter his/her name in the textbox. On the click event of the button name of the user and current date time will be displayed on the titlebar of the web page. (Using Literal control). 7. Create an application Hit counter, which count the total number of users visited the page. (Using global.asax). 8. Take to linkbuttons showing 'New Member' and 'Existing Member'. When user clicks on the 'New Member' link button panel1 becomes visible, having user name, password, confirm password and email as inputs. When user clicks on 'Existing Member' link button then only panel2 becomes visible having user name and password as inputs). Set proper property of the textbox to mask the password. 9. Design .aspx web page which prints "Gujarat University" for 5 times, each in a new row with increasing font size by 1 each time. (Use loop in c# using code render block). 10. Create web page which will ask the employee personal detail, education detail, work experience	

	detail with use of different panel for each part. Allow user to click on submit button and display a message "Data is successfully submitted" in a new label by adding it at runtime in a panel. 11. Create web page which will ask payment detail of customer purchase, this detail either in Cash or Credit/Debit card or by Cheque. According to the payment mode panel control will display and accept payment detail and display all that detail in next page using label control. 12. Write a program to set the following properties of Label control using internal css class. • Background-color as green, • Border style as solid • Border color as blue • Border width as 2px • Text as "Hello!" When user moves mouse over the label, its background color should change it to yellow. Add one more web form which contains button. When user clicks on it change its fore color as pink using external css.	
2	**INFORMATION PASSING AND STANDARD CONTROLS**	**10**
	1. Write a program containing the following controls: • A DropDownList • A Button • A Label The DropDownList is used to list items available in a store. When the user clicks on an item in the DropDownList, the cost of the selected item is displayed in the label control. The Form title must be ASP.NET. A button must be in the center of a form. Add the following more controls: • Two labels • A TextBox • A Button One of the labels is displayed adjacent to the textbox, displaying the message "Enter the quantity:" When the user enters the quantity in the textbox and clicks the button, the total cost is evaluated and displayed in another label.	

2. Create a RadioButtonList that displays the names of some colors in two columns. Add a button to the Web Form which when clicked changes the color of the Form to the color selected from the list.
3. Create a web page having checkboxlist control shows different products. Web page should have a button and a label. On the click event of the button shows the message "Thank You for placing the order of following items" and then list of all products selected by the user in the checkboxlist server control. Each selected product should be displayed in the new line.
4. Write a simple Web application which keeps track of the number of times a user has visited the page from the same machine. The application keeps track of this information by storing this counter value in a persistent cookie at the client's machine.
5. Display name of country in dropdown list when page is loaded. Allow the user to select the country and display the name of states of that country selected by user in another dropdown list. (Also perform through datareader)
6. Write code to upload only image files (.bmp, .jpg, .gif) and less than 1 kb in folder "Image-Folder". Also display uploaded image files on the same web page using datalist control.
7. Accept Item No, Item Name, Item Price, Item Quantity. Store information in cookie. Display stored information in next page.
8. Take single image having 3 rectangle shapes horizontally having text "Home", "Product" and "Services" written in the boxes. When user clicks on the first rectangle Home.aspx page should be opened. Similarly, when user clicks on the Product rectangle the product.aspx and Service rectangle then service.aspx should be opened. Use ImageMap control.
9. Using AdRotator control, display 3 images of car and when user click on it, open website of it. Load the advertisement details from the XML file as well as database.
10. Using calendar control, allow user to select date from that. Display students whose birthday falls on that date (use database).

3	1. Design a site for "Gujarat University". Design master page having header, sidebar, footer and content section. Put copywrite warning in the footer and university name in the header. In the sidebar put Treeview control, filled from sitemap. Create following hierarchy in the sitemap and provide links to various pages. 2. Design a web site which allows user to register, login, changer password and forgot password features. Create a page which can be opened only by authenticated users, also create a page which can be opened on by the that user who belongs to 'Admin' role. On the home page display Welcome message base on the type of user. For example, for anonymous user show "Welcome Visitor", for User show "Welcome <UserName>" and for any user belongs to admin role, show "Welcome Administrator". 3. Design a web form and perform the following validations: • Null value is not allowed. • The birth date should appear between "1/1/1980" and "1/1/2000". • Email should be valid id. • Contact number exactly of 10 digits 4. Create one registration page and perform the following validations. • To validate email_id • To compare new password and retype password • The rollno should contain first 3 characters BCA. Example BCA01, BCA02 • Restrict the user to enter only date in textbox and it must not accept date greater than current date. • Age should be between 18 to 35 • Name field is compulsory • Mobile number must be of 10 digits only • Give demo of validation summary 5. Design a website having login and registration page. In the registration form modify "CreateUserWizard" control to take personal details of the user live FirstName, LastName, Favourite color and photo (Using FileUpload Control) etc. Divide CreateUserWizard having 3 steps (LoginDetails, Personal Info and Complete). Store the personal details in the profile. Design a profile.aspx page which can be accessible by only authenticated user. After login when user opens profile page then, user can see his/her photo, and first name and last name in the label with his/her favourite color as background color. 6. Design a website having master page. Create sitemap file with suitable assumption and use it in TreeView and Menu control for navigation purpose. Also show demo of SiteMapPath Control.	**10**

	7. Design a website in which use all login controls. Also create Role and apply role-based access rule, anonymous user-based access rules. Also demonstrate profile implementation. 8. Design a website which based on user role, user will be redirected to specific page. Create at least 2 roles, and web pages for each role. Both pages must use different master pages. (For example, user belongs 'Admin' role will automatically redirected to 'Admin.aspx' which uses 'Admin.master' master page, and user belongs to 'Customer' role, automatically gets redirected (after login) to customer.aspx page which uses master page customer.master).	

	Authentication, Authorization and Data controls	**10**
4	1. Create a database with two tables as StudentInfo, which contain rollno, name and year of a student and StudentScore which contain marks of three subjects for each student. Display name of all the students in a DropDownList and according to user's choice, particular student's score record should display in a FormView/DetailView control. 2. Develop a web application to reserve online in a hotel. The user should enter date of arrival, number of days, room type, number of persons etc. He would be able to confirm booking and allowed to pay advance on confirmation. 3. Create an application to display all records from an Employee table with proper formatting. (Use Repeater Control). 4. Create a product table having field (ProductCode, Name, Price, Description, CategoryName, ProductURL etc.). Design a web page which shows hyperlink for each unique category. When user click on specific hyperlink pass that category to another page called ProductList.aspx. This page list all the product which belongs to the category selected by the user on the previous page. The page has small image of the product and price only. When user clicks on small product image then user will be redirected to ProductDetails.aspx page. Which shows all the details of the product with larger image. 5. Create a product table having field (ProductCode, Name, Price, Description, CategoryName, ProductURL etc.). Design a webpage so the Admin can enter the new product details. Use file upload control for the ProductURL field which also upload the product picture to some specific folder called 'ProductImages'. After successful insertion redirect user to the 'ProductList' page where all product details displayed in the GridView with small product image. 6. Create two tables Doctor and Patient. Display details of doctor in first grid view. When user selects doctor from the first grid view, display the details of all patients of that doctor in second grid view. 7. Write C#.NET code for following using membership and role and other ACL classes: • Registration page • Login Form • Page to add user in the specific role • List all user details in the GridView 8. Design a webpage which allow user to perform Select, Insert, Update and Delete record operation to the database table using ADO.NET code. 9. Design a webform to enter new Employee details includes EmpCode, Name, Address, DeptCode, StateCode and	

	CityCode. EmpCode should be automatically generated like E001, E002, … E010 and so on. When user press insert button. Use DropDownList for to View State, City and Department from the respective tables, and fetch codes based on user selection. On the click of the insert button store these details in the Employee table. 10. Create four tables as given: • Customer (**CustomerCode**, Name, Address) • Product (**ProductCode**, ProductName, Price, Qty) • SalesMaster (**InvoiceNumber**, CustomerCode, DateofInvoice) • SalesDetails (**InvoiceNumber, ProductCode**, Qty, UnitPrice) Design a webpage to generate Invoice details in which Customer name, Product name, and Line total (Unit price * Quantity) is shown using FormView and GridView.	

TEXT BOOK:

1. **Professional ASP.NET 3.5 (Sp1) In C# and VB by Bill Evjen, Scot Hanselman and David Rader (Wrox)**

REFERENCE BOOKS:

2. **ASP.NET 4 unleased by Stephen Walter (PEARSON)**