SATHYABAMA UNIVERSITY

(Established under Section 3, UGC Act 1956)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

SCSX4006 C# and .Net Lab

SCSX4006 C# and .Net Lab

1) Programs using delegates and Events
2) Programs using Windows, Forms, Controls
3) Programs for creating Menus, Status bar, Tool bar
4) Data Access with ADO.NET
5) Simple Web Page creations using ASP.NET

Ex.1

Develop a c# program to find the damaged books in Book store processing using Delegates

Steps:

1 : Create a namespace named Bookstore
2 : Within the namespace create a structure Book for the bookdetails
3: Create a delegate for the process of bookstore
4: Create an array for storing the book details
5 : Create an another class within that find the total no of books and price of those books
6 : Create one more class to test whether the book is damaged or not.
7 : Print the result.

Ex. 2

Develop a C# program to find factorial of 'n' numbers using delegates

Steps:

1. Create a delegate factorial
2. Create a class 'test' and use methods read(), calc(), and show() to get the number, calculate factorial and to display the result.
3. Inside the main method class use the delegate to call the methods of the 'test' class

Ex. 3

Triggering multiple events using 'multicasting events'

Steps:

1. Create a delegate 'mydel'
2. Create the class event1 and inside that create a event handler method call1() to trigger an event
3. Create the class event2 and inside that create a event handler method call2() to trigger an event
4. Use the delegate 'mydel' to trigger the events of the classes 'event1' and 'event2'

Ex. 4

Handling key events and Mouse events

Steps:

1. Using the namespace 'System.Windows.Forms create a class winform
2. Inside the constructor create the delegates on event handling methods for
   i. keyUp ii MouseMove iii mouseUp etc
3. Using the delegates trigger the events like:
   i. displaying the letter typed when a key is Up

ii. Showing the current position of the mouse pointer
iii. Identfying the mouse click as left or right click etc

Ex. 5

To create menu and contex menu

Steps:

1. Using the namespace 'System.Windows.Forms create a class winform
2. Inside the constructor create object for MainMenu and add for example the Menu 'File ' and add its menu options like New, Open, Save etc using MenuItems class and its Add() method
3. Similary for the context menu use the class ContextMenu
4. Use the eventhandler methods to trigger the events based on the selection of the menu item

Ex. 6

To create status bar and tool bar

Steps:

1. Using the namespace 'System.Windows.Forms create a class winform
2. Inside the constructor create the tool bar and toolbar button using classes ToolBar and ToolBarButton and trigger events for cut,copy, paste etc
3. Also use the icons for cut, copy, paste etc using Image class and its method
4. For creating status bar use the classes StatusBar and StatusBarPanel and show the status of the current window as ready, wait etc

Ex.7

Exercise On Windows Forms Controls - Textbox, Command Button, Panel And Their Scrolling And Docking Features, Splitter Control To Efficiently Handle The Panel Resizing

PROCEDURE 1: Writing the c# project

Steps:

1 : Start a new Microsoft VisualStudio.Net7.0
Select File->new->Project
2 : Choose visual c# projects
3 : Give the name and path and click ok
4 : Then a project will be opened with default form1.cs form file
5: To write the code, Project -> Add class
6 : Choose c# class in templates List view. Click open
7 : Type the program

PROCEDURE 2 : Designing The Form

Steps

1 : Open the form in the design mode

2 : Design the form
3 : Add one more form, now you will add one more form to display the result separately. You will also learn to use the opacity property of the form.
4 : To add a new form
Project -> Add windows form
5 : Write Code for the first form form1
6 : Build solution and Debug it

Ex.8

Exercise On Windows Form Controls List Box, Checked Box, Combo Box

To prepare the Tour Program

PROCEDURE 1: Steps for writing the c# project

1 : select file -> new -> project
2 : specify the name and path and then press ok
3: Change the name of the form in the solution explorer
4 : Write the code

PROCEDURE 2: Steps to design the form

1 : Design the form with required field's Controls
2 : Write Codes
3 : Build the solution and debug it

Ex. : 09

Exercise On Windows Form Controls Menu, Radio Button, Check Box

Aim:

To develop an application to buy a computer system

Algorithm is as same as the previous one

Ex.10

Manipulate the SQL Commands using c#

Steps:

1 : Create the Student table in sql server and enter some data
2 : Write C# program to insert some records and delete some
3: Using DataReader object display the table
4 : Also manipulate the table using Data sets and sqlDataAdapter
5 : Show the result in Internet Explorer using ASP
PRACTICES REQUIED IN ASP simple Programs, and sqldatabase objects in c#