# ASP.NET Web Forms Lab Manual

## Practical No. 5

## Title: ListBox and Image Controls

### Objective:

To demonstrate the use of the ListBox control to select an item and display a corresponding Image using the Image control in ASP.NET Web Forms.

### Software Requirements:

|  |  |
| --- | --- |
| Software | Version |
| Microsoft Visual Studio | 2019 or later |
| .NET Framework | 4.5 or above |
| Web Browser | Chrome / Edge / Firefox |
| Operating System | Windows 10/11 |

### Web Controls Used:

- ListBox

- Image

- Label

- Button (Optional)

### Step-by-Step Instructions:

1. Open Visual Studio and create a new ASP.NET Web Forms Application project.
2. Add a new Web Form (e.g., ListBoxImageDemo.aspx).
3. Design the UI using a ListBox to list image names and an Image control to show the selected image.
4. In the code-behind file (.aspx.cs), write logic to display the image based on the selected item.
5. Add sample image files (e.g., apple.jpg, banana.jpg) to the Images folder in the project.
6. Run the application and test by selecting an item from the ListBox.

### ASP.NET Frontend Code (Default.aspx):

<%@ Page Language="C#" AutoEventWireup="true" CodeFile="ListBoxImageDemo.aspx.cs" Inherits="ListBoxImageDemo" %>  
  
<!DOCTYPE html>  
<html xmlns="http://www.w3.org/1999/xhtml">  
<head runat="server">  
 <title>ListBox and Image Control Demo</title>  
</head>  
<body>  
 <form id="form1" runat="server">  
 <div style="text-align:center">  
 <h2>Fruit Image Viewer</h2>  
   
 <asp:ListBox ID="lstFruits" runat="server" AutoPostBack="True" OnSelectedIndexChanged="lstFruits\_SelectedIndexChanged">  
 <asp:ListItem Text="Apple" Value="apple.jpg" />  
 <asp:ListItem Text="Banana" Value="banana.jpg" />  
 <asp:ListItem Text="Mango" Value="mango.jpg" />  
 <asp:ListItem Text="Orange" Value="orange.jpg" />  
 </asp:ListBox>  
  
 <br /><br />  
  
 <asp:Image ID="imgFruit" runat="server" Width="200px" Height="200px" />  
  
 <br /><br />  
 <asp:Label ID="lblMessage" runat="server" Font-Bold="true" />  
 </div>  
 </form>  
</body>  
</html>

### Code-Behind (Default.aspx.cs):

using System;  
  
public partial class ListBoxImageDemo : System.Web.UI.Page  
{  
 protected void Page\_Load(object sender, EventArgs e)  
 {  
 if (!IsPostBack)  
 {  
 lblMessage.Text = "Select a fruit to view its image.";  
 }  
 }  
  
 protected void lstFruits\_SelectedIndexChanged(object sender, EventArgs e)  
 {  
 string selectedImage = lstFruits.SelectedValue;  
 imgFruit.ImageUrl = "~/Images/" + selectedImage;  
 lblMessage.Text = "You selected: " + lstFruits.SelectedItem.Text;  
 }  
}

### Run Instructions:

1. Right-click on the .aspx page and select Set as Start Page.
2. Press F5 to run the project.
3. The browser will open with the ListBox.
4. Select a fruit from the ListBox to display its image.

### Expected Output:

A dropdown list containing fruit names. On selection, the corresponding image is displayed below. A label shows the selected fruit name.

### Conclusion:

This practical demonstrated how to use the ListBox control for item selection, dynamically update an Image control, and handle selection events using SelectedIndexChanged in ASP.NET.

### Viva Questions with Answers:

* Q: What is the purpose of the ListBox control?

A: It allows users to select one or more items from a list.

* Q: How does AutoPostBack="True" affect the control?

A: It causes the page to automatically post back to the server when the selection changes.

* Q: How do you capture the selected item in a ListBox?

A: Using SelectedItem.Text or SelectedValue.

* Q: What is the use of the Image control?

A: It displays an image on the web page using the ImageUrl property.

* Q: Where should image files be stored in a Web Forms project?

A: Usually in a folder like Images/ within the project.