



QUEZON CITY UNIVERSITY

COLLEGE OF COMPUTER STUDIES

INFORMATION TECHNOLOGY



IPT102 – INTEGRATIVE PROGRAMMING AND TECHNOLOGIES

WEEK 10 LABORATORY ACTIVITY

NAME: CAHILIG, EFREN DAVE

SCORE

PERCENTAGE

NAME: PARONI, JOHN KYLE S.

YEAR/SECTION: 1ST YEAR/ SBIT-3R

DATE: 10/31/25

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Laboratory Activity: Integrating Model — View — Controller (MVC) using Layout & CSS ([VB.NET](#))

The screenshot shows a web browser window with the URL `localhost:44378/Books`. The title bar includes the Microsoft Edge logo, a refresh button, and the URL. Below the title bar, there are status icons for battery, signal, and network, followed by the text "He patented a devic..." and "AMICIRC". The main content area has a dark header with the text "Book Catalog" and navigation links for "Home" and "Books". Below the header is a section titled "Books" with a "Create New" button. A table displays two book entries:

Title	Author	Year Published
The Pragmatic Programmer	Andrew Hunt	1999
Clean Code	Robert C. Martin	2008

At the bottom of the page, there is a footer with the text "© 2025 - Book Catalog" and a link "[~/Views/Shared/_Layout.vbhtml](#)".

The screenshot shows a web browser window with the URL `localhost:44378/Books/Create`. The title bar includes the Microsoft Edge logo, a refresh button, and the URL. Below the title bar, there are status icons for battery, signal, and network, followed by the text "He patented a devic..." and "AMICIRC". The main content area has a dark header with the text "Book Catalog" and navigation links for "Home" and "Books". Below the header is a section titled "Create New Book". The form fields are filled with the following values:

Title	HARRY POTTER
Author	J. K. Rowling
YearPublished	1997

Below the form are two buttons: "Create" (blue) and "Back to List" (grey). At the bottom of the page, there is a footer with the text "© 2025 - Book Catalog".

The screenshot shows a web browser window with the URL `localhost:44378/Books`. The title bar includes the Microsoft Edge logo, a refresh button, and the URL. Below the title bar, there are status icons for battery, signal, and network, followed by the text "He patented a devic..." and "AMICIRC". The main content area has a dark header with the text "Book Catalog" and navigation links for "Home" and "Books". Below the header is a section titled "Books" with a "Create New" button. A table displays three book entries, including the newly added one:

Title	Author	Year Published
The Pragmatic Programmer	Andrew Hunt	1999
Clean Code	Robert C. Martin	2008
HARRY POTTER	J. K. Rowling	1997

At the bottom of the page, there is a footer with the text "© 2025 - Book Catalog".



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SOURCE CODE

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <meta charset="utf-8" />
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>@ViewBag.Title - Book Catalog</title>
7      <Styles.Render("~/Content/css")>
8      <Scripts.Render("~/bundles/modernizr")>
9  </head>
10 <body>
11     <nav class="navbar navbar-expand-sm navbar-toggleable-sm navbar-dark bg-dark">
12         <div class="container">
13             <ul class="navbar-nav flex-grow-1">
14                 <li><Html.ActionLink("Book Catalog", "Index", "Home", New With { .area = "" }, New With { .class = "navbar-brand" })</li>
15                 <li type="button" class="navbar-toggler" data-bs-toggle="collapse" data-bs-target=".navbar-collapse" title="Toggle navigation" aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">
16                     <span class="navbar-toggler-icon"></span>
17                 </li>
18             </ul>
19         </div>
20     </nav>
21     <div class="container body-content">
22         <div>
23             <hr />
24             <hr />
25             <p><img alt="copy icon" style="vertical-align: middle;"/> @DateTime.Now.Year - Book Catalog</p>
26             <hr />
27             <a href="#"><img alt="link icon" style="vertical-align: middle;"/> /Views/Shared/_Layout.vbhtml</a>
28         </div>
29     </div>
30     <Scripts.Render("~/bundles/jquery")>
31     <Scripts.Render("~/bundles/bootstrap")>
32     <RenderSection("scripts", required:=False) %>
33 </body>
34 </html>
```

HOME CONTROLLER

```
HomeController.vb  _Layout.vbhtml  BooksController.vb  Index.vbhtml  Site.css  Web.config  Create.vbhtml  BookRepository.vb  Book.vb
1  Public Class HomeController
2      Inherits System.Web.Mvc.Controller
3
4      Function Index() As ActionResult
5          Return View()
6      End Function
7
8      Function About() As ActionResult
9          ViewData("Message") = "Your application description page."
10
11         Return View()
12     End Function
13
14     Function Contact() As ActionResult
15         ViewData("Message") = "Your contact page."
16
17         Return View()
18     End Function
19
20 End Class
```

BOOK CONTROLLER

```
HomeController.vb  _Layout.vbhtml  BooksController.vb  Index.vbhtml  Site.css  Web.config  Create.vbhtml  BookRepository.vb  Book.vb
1  Imports System.Web.Mvc
2  Imports BookCatalogVB.Models
3
4  Namespace Controllers
5      Public Class BooksController
6          Inherits Controller
7
8          ' GET: Books
9          Function Index() As ActionResult
10             Dim books = BookRepository.GetAll()
11             Return View(books)
12         End Function
13
14         ' GET: Books/Create
15         Function Create() As ActionResult
16             Return View()
17         End Function
18
19         ' POST: Books/Create
20         <HttpPost>
21         <ValidateAntiForgeryToken>
22         Function Create(book As Book) As ActionResult
23             If ModelState.IsValid Then
24                 BookRepository.Add(book)
25                 Return RedirectToAction("Index")
26             End If
27             Return View(book)
28         End Function
29     End Class
30 End Namespace
```



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MODEL BOOKS

```
BookCatalogVB
1 Namespace Models
2     Public Class Book
3         Public Property Id As Integer
4         Public Property Title As String
5         Public Property Author As String
6         Public Property YearPublished As Integer
7     End Class
8 End Namespace
9
```

CREATE VIEWS

```
oneController.vb      _Layout.vbhtml      BooksController.vb      Index.vbhtml      Site.css      Web.config      Create.vbhtml      X BookRepository.vb      Book.vb
1 @ModelType BookCatalogV.Models.Book
2
3 ViewData["Title"] = "Create New Book"
4 End Code
5
6 <h2>Create New Book</h2>
7
8 <Using Html.BeginForm()
9     @Html.AntiForgeryToken()
10    <div class="form-horizontal">
11        @Html.ValidationSummary(True, "", New With {.class = "text-danger"})
12        <div class="form-group">
13            @Html.LabelForFunction(model) model.Title, htmlAttributes:=New With {.class = "control-label col-md-2"})
14            <div class="col-md-10">
15                @Html.EditorForFunction(model) model.Title, New With {.htmlAttributes = New With {.class = "form-control"}})
16                @Html.ValidationMessageForFunction(model) model.Title, "", New With {.class = "text-danger"})
17            </div>
18        </div>
19
20        <div class="form-group">
21            @Html.LabelForFunction(model) model.Author, htmlAttributes:=New With {.class = "control-label col-md-2"})
22            <div class="col-md-10">
23                @Html.EditorForFunction(model) model.Author, New With {.htmlAttributes = New With {.class = "form-control"}})
24                @Html.ValidationMessageForFunction(model) model.Author, "", New With {.class = "text-danger"})
25            </div>
26        </div>
27
28        <div class="form-group">
29            @Html.LabelForFunction(model) model.YearPublished, htmlAttributes:=New With {.class = "control-label col-md-2"})
30            <div class="col-md-10">
31                @Html.EditorForFunction(model) model.YearPublished, New With {.htmlAttributes = New With {.class = "form-control", .type = "number", .min = "1900", .max = DateTime.Now.Year}})
32                @Html.ValidationMessageForFunction(model) model.YearPublished, "", New With {.class = "text-danger"})
33            </div>
34        </div>
35
36        <div class="form-group">
37            <div class="col-md-offset-2 col-md-10">
38                <input type="submit" value="Create" class="btn btn-primary" />
39                @Html.ActionLink("Back to List", "Index", Nothing, New With {.class = "btn btn-default"})
40            </div>
41        </div>
42    </div>
43 </div>
44 End Using
45
46 @Section Scripts
47     @Scripts.Render("~/bundles/jqueryval")
```