CPRG 214 – Lab 2

30 points; due on Day 7 at 8 a.m.
Complete in your Travel Expert project groups.

In this lab you will create an ASP.NET Web Forms application that allows customers to register, navigate through a few sample pages, and work with a simple database.

Introduction

Inland Marina Ltd, a company operating a marina facility at Inland Lake has asked you to build an application that will handle their leasing services. Inland Lake, one of the largest lakes in the southern US offers a year-round boating paradise.   The company is the largest marina on Inland Lake and has the capacity to house 90 boats on three docks. They also are concluding negotiations to purchase a large marina facility in San Diego. With recent increases in tourism, the current practice of taking telephone bookings from customers is becoming too much to handle. Automating the process of leasing a slip, a "parking spot" for a boat, will enable the office staff to concentrate on other duties.

In discussions with management it has been determined that the best solution would be to develop a web-enabled application that allows customers the ability to search for available slips on their docks at Inland Lake and at San Diego.   Once a customer is registered in the system, they will be allowed to lease a slip located on one of their docks.

A corporate banner as jpg file is supplied. It measures 800 x 100 px in size.

Web Application Requirements (5 Web Forms)

1. **A home page**: Welcomes the user to the site and displays a brief outline of the company. This is the start up page for the web application available to the general public. Text provided in this document. This page can be accessed from the navigation menu.
2. **An available slip by dock page:** This page can be accessed from the navigation menu.
3. **A contact us page:** Contains company locations, address and phone numbers. Text provided in this document. This page can be accessed from the navigation menu.
4. **A registration page:** Allows users to register on line. This page can be accessed from the navigation menu.
5. **A lease slip page:** User can select a slip and hold it for leasing. Users can lease one or more slips on any dock. This page is only accessed from the registration page once user has successfully registered. It cannot be accessed from the navigation menu.

Use Cases

1. As a potential customer, I should be able to navigate the website so that I can gain information about the marina.
2. As a potential marina customer, I should be able to see all slips that are not currently leased so that I can make a decision on what slip I would select.
3. As a potential customer, I should be able to register with the marina so that I can select an available slip for leasing.
4. As an existing customer, I should be able to view all my leases so that I know which slips I have rented before.

5. As a potential/existing customer, I should be able to select a dock with the services I prefer so that I can service the boat I am parking.

Technical Requirements

A database has been provided that contains Dock and Slip lookup data already entered as well as a few Customer and Lease records. There is no need to add docks or slips.

1. Use Master and Content pages.
2. Use styles (in a css file) and Bootstrap to give the web application a nice corporate look and feel. Use the corporate colors found in the corporate image supplied. Use any boat and marina images from the web you would like to use on your forms.
3. Do not allow direct access to the Lease Slip page. It is not in the navigation menu and if a user tries to enter the page url directly in the browser window, redirect them to registration page. You may add password and login name columns to the Customer table, and if you do so, make sure passwords are not stored in plain text (use some form of encryption or hashing). You also may use authentication tools provided by the Web Forms Application template.
4. Customers have to register first before leasing a slip. The database is checked to see if this customer has registered previously. If there is a match of first and last names, use that customer record to add login information.
5. The Lease Slip page has a control to display Docks (drop down list or grid view). Select a dock and another control displays all the slips associated with that dock (drop down list or grid view). Select a slip and click the Lease button. A grid view control at the bottom of the page should show current slips leased. If this is a returning customer who has leased slips before, this will display in the grid view.
6. Any method of working with the database is allowed: SQL Data Sources, Object data Sources, or Entity Framework.

7. You do NOT need to integrate Contact Page with email.

Please note that the id field in all tables is an identity field which automatically increments the id value for each insert (you do not provide the ID values).

Marking Scheme

Marking Criterion	Out Of
Good web forms design and good coding standards followed	10
Customer login and registration process works as required	5
Available slips display works as required	5
Lease slip page is accessible only by registered customers	3
Customer can view slips and lease a slip	4
Leased slips for the customer displayed correctly	3
Total:	**30**

Submit

Zip the project folder and submit to the appropriate Dropbox folder. Submit only one copy of the solution per group.

Website Content Information

Home Page Information

Welcome to Inland Marina located on the south shore Inland Lake, just a small commute from major centers in the south west.

Inland Marina was established in the 1967 shortly after Inland Lake was created as a result of the South West damn. From its humble beginnings, it has grown to be the largest marina on Inland Lake. Due to the warm climate that extends year-round, Inland Lake has become a popular tourist destination in the south west. Boat owners from California, Arizona, Nevada, and Utah are attracted to the area. Inland Marina has 90 slips ranging in size from 16 to 32 feet in length. Dock services include electrical and fresh water.

Contact Information

Inland Lake Marina
Box 123
Inland Lake, Arizona
86038

 (office ph) 928-450-2234
(leasing ph) 928-450-2235
(fax) 928-450-2236

Manager: Glenn Cooke
Slip Manager: Kimberley Carson
Contact email: info@inlandmarina.com

Image
Size = 800 X 100 pixels

Database Diagram

Customer
🔑	ID
	FirstName
	LastName
	Phone
	City

Dock
🔑	ID
	Name
	WaterService
	ElectricalService

Lease
🔑	ID
	SlipID
	CustomerID

Slip
🔑	ID
	Width
	Length
	DockID