Final Project #1– Remote Programming Assistant   due last day of Class
Version 1.0

Purpose:
You are a consultant, often traveling to customer sites to discuss projects you are working on for them. You need to be able to download Visual Studio Projects from your remote web server, demonstrate program operation[1], make customer suggested changes at their site, and upload the modified project to your server. You also need to track bugs, record notes for future modifications, schedule future meetings through a web calendar, and write draft project specifications, all at customer sites and uploaded to your server. You want to do all of this through an attractive web site that will impress your customers.

Requirements:
The requirements for this web site are to provide:
1. Login access that forces a link to any page to verify that you are a valid user, by checking the current session to see if you are currently logged in, otherwise redirecting you to a login page. You may use the Asp.Net provided login facility.
2. Multi-file download and upload facility that manages transport of any Visual Studio project between the server and your local machine. Please use the Asp.Net Web API to support this requirement.
3. A bug-tracker page to display, edit, add, and delete bug notes[2]. Each bug is allotted one line of a List View, but when double clicked will redirect to a Details View that supports editing. The form will show at least status, Bug Description, and Bug Resolution.
4. A notes facility that supports the display, editing, addition, and deletion of business notes. You are encouraged to use code shared with the bug-tracker, but must support a different layout for both the List and editable Details Views[3]. Use XML storage for both bug-tracker and notes.
5. A meeting scheduler that uses a calendar control, and supports two levels of scheduling: recording and editing scheduled events that only your login allows, and requested events that are recorded through login accounts you make available to your customers and secretary. Scheduled events and requested events should appear differently on the calendar (color coding is acceptable). You should be able to convert a requested event to a scheduled event, from your login, using only a mouse click or two. Each event must support the addition of background text that is accessible by double clicking on the event. Anyone accessing the calendar can access this information, e.g., you, your customers, and your secretary. Please support all the data handling and role models for the calendar using a SQL server relational database. The Asp.Net built-in facilities for roles are recommended.
6. A form used to record a draft project specification, using an XML file to save each draft. The form should provide the following:
    a. Title
    b. Customer name and address
    c. Topic
    d. Date
    e. Itemized list view with full editing capability. Each item is one requirement.
    f. Free form text block at the end for notes.
7. You site should provide a home page, accessible without login, consisting of one or more pages describing your consulting business, and providing for registration. This is advertising for your business and should be attractive, interesting, and informative. All other pages should be accessible only after logging in.
8. The site is to be constructed using Asp.Net MVC application(s).

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[1] You may assume that you will download to your laptop which has all the appropriate Visual Studio stuff installed.

[2] Provide a status field with background color and text to indicate: not started, pending, and complete.

[3] For the List view you are required to support different column names and perhaps a different number of columns with different types. For the Details View you need support a different form.

9. Use, and demonstrate that you use, LINQtoXML and LINQtoSQL or Entity Framework
10. Use, and demonstrate that you use, at least four of the following:
    a. HTML5 features
    b. Partial Views
    c. Ajax
    d. Client and Server validation
    e. Roles
    f. Entity Framework
11. For Business Notes, Specification Items, Bug Descriptions and Bug Resolutions you are required to provide an area large enough to easily record and edit several paragraphs of text. If you use a one line EditBox you do not meet this requirement.

Because this project is fairly ambitious you may work with one other person, if you wish.

Grades for the project, which counts for 67 percent of your grade, will be based on meeting requirements and also on the visual appeal of your design.

Please Note:
Part of your grade is based on designing a pleasing website to meet these requirements. I will not specify the details of that design. **You** must decide the visual aspects and details for each page.