C Sharp Assignment 5

Preconditions

1. You should work on your local machine.
2. You may use Visual Studio 2010, 2012 or 2013.
3. You may use SQL Server 2008 to 2014 (Main or Express edition).

Requirements

Objective

Create a web application and services to facilitate publication of news, to be operated by a newspaper.

Functional Specifications

Create a web application:

a. Users could register themselves. Users should be able to log in.
b. Users could perform CRUD operations on a news database
    i. News list / view / add / edit / delete

Create a news feed web service with two types of feeds:

a. RSS syndication web feed
    i. URL format : http://localhost/news/rss?category=sports
    ii. This feed responds in the form of a standard RSS xml file. Maximum 5 latest news are output.
    iii. This feed would be consumed using an RSS reader (out of scope).
b. RESTful web feed
    i. URL format : http://localhost/news/rest/category/sports
    ii. JSON output response. Maximum 5 latest news are output.
    iii. The response could be tested using any browser (out of scope).

Technical Specifications

The following list of technical specifications should be adhered to:

a. For the web application
    i. Create a database with any required tables to keep news and category details, to be shared by the service.
    ii. Create an ASP.NET MVC 4 or 5 application.
    iii. Apply input validations and constraints wherever necessary to create a stable application.
b. For the web service
    i. Create an IIS hosted WCF web service.
c. For both application and service, use entity framework for database access.
d. The application and services should not be dependent on each other in any way.
e. Even if you are not able to complete all the tasks, try to achieve a working application and service.

Deliverables

Application Demo

Record the demonstration of the web application using Wink. Do not upload the video. Save it to your local

machine.

Database script

Create a single SQL script file to create the database, its schema, any stored procedure and any test data you may use.

Readme

Create a txt file with the following information

    a. Steps to create and initialize the database
    b. Steps to prepare the source code to build properly along with the dependencies
    c. Any assumptions made and missing requirements that are not covered in the requirements
    d. Any feedback you may wish to give about improving the assignment.

Design diagrams

Create a doc file containing the following information and diagrams

    a. List of technologies and design patterns used
    b. An overall activity diagram
    c. A sequence diagram for the CRUD to RSS feed process

To be evaluated

1. The quality of the output (functionality)
2. Code quality and completeness
3. Technologies applied
4. Extra validations and assumptions which are not described
5. Add missing requirements to the implementation, according to your experience.

Delivery / What to submit

Please, read and follow this section carefully. <u>Any delivery that does not follow this section will score much less or simply won't be evaluated.</u>

Delivery for this assignment should consist of an archive named **<your_name> - CSharpAssignment.zip** containing the following

    a. Source code/project
    b. Wink recording, download version 2 from Wink, render the video to swf format
    c. Readme.txt containing the instructions to configure and run the application, notes and feedback
    d. Design.doc with needed diagrams

Structure of the resulting zip file should be of the following format

    <your_name> - CSharpAssignment.zip
    <your_name> - CSharpAssignment.zip \Readme.txt
    <your_name> - CSharpAssignment.zip \Design.doc
    <your_name> - CSharpAssignment.zip \Wink\   <<< this folder should contain the wink recording
    <your_name> - CSharpAssignment.zip \Source\   <<< this folder should contain the complete source code for the project(s)