**COMP229 – Advanced Web Application Development**

**Assignment 4**

**ASP.NET Web Forms – Files, Email, and LINQ**

**Due:** 09 December2016 @ 11:59:59 pm

Value 10%

Data display and handling site

**Overview**: Create an ASP.NET site, **naming the project Comp229-Assign04**. Your site must include a **Home Page** (Landing Page), a **Model page,** and an **Update page (or equivalent functionality)**. You must create your site from scratch (i.e. do not use one of the built-in or downloaded templates), **and** **using the JSON file on eCentennial named Assign04.json**. Your site must be checked into **GitHub, in a repository accessible at http://github.com/{yourUserName}/Comp229-Assign04**. **Late assignments will receive a penalty of 20% per day (or part there of) late, and will not be accepted more than 24 hours late (ie. 10 December 2016 at 11:59:59pm).**

**Instructions:**

1. This ASP.NET site will comprise at least three (3) pages. These pages will display a cohesive design that reflect professionally on a brand created by you. You may derive inspiration, but not assets or design, from another website.
2. You will use a Master Page to contain the branding, and navigation, and **will display each unique page title at the top of the page using an event handler in the Master Page**.
3. Your Landing page will:
   1. identify the game and its brand.
   2. provide a list of all the models in a models collection based on the assign04.json file. These details will be obtained using [deserializtion](#Instruction6).
   3. allow for the addition of new models, updating the model collection.
   4. allow for selecting a single model for display on the Model Page.
   5. allow for saving the updated models collection to a new json file via [serialization](#Instruction6).
   6. allow for emailing of the new models json file to an email of the user’s choice. See [Instruction 7](#Instruction7).
4. Your Model Page will:
   1. display data about the individual model selected in [Instruction 3(d)](#Instruction3D).
   2. list the model’s data and display the image in its link.
   3. include an Update link to the Update page, or attain equivalent functionality in page.
   4. select all necessary model data via LINQ queries.
   5. include a delete button to remove a model (and redirect to the home page).
5. The Update Page will:
   1. be a stand-alone page or have its functionality included in the Model Page.
   2. display the model data from the Model Page in appropriate inputs.
   3. allow for changing of any data about the model.
   4. update the collection of models with the new data.
6. The website will make use of serialization/deserialization to read/write the data from the Assign04.json file. You may use built-in functions or a Nuget package such as JSON.NET.
7. The website will email the updated models file to an account of the user’s choosing. For SMTP authentication, the sending email will be [cc-comp229f2016@outlook.com](mailto:cc-comp229f2016@outlook.com), and the password will be **comp229pwd**. You must treat **comp229pwd** as a reserved string (don’t use it anywhere else).
8. All files, controls, objects, etc, must be named in a reasoned fashion with a consistent naming convention. Additionally, your project architecture should reflect the best practices discussed in class.

**SUBMITTING YOUR WORK**

Your submission should include a runnable project, with all appropriate assets. Submission will be via GitHub. **Do NOT** submit the SQL file with your project.

This assignment is weighted **10%** of your total mark for this course.

Late submissions:

* 20% deducted for each day late.
* Assignments later than one (1) day will not be accepted.

External code (e.g. from the internet or other sources) can be used for student submissions within the following parameters:

1. The code source (i.e. where you got the code and who wrote it) must be cited in your internal documentation.
2. It encompasses a maximum of 10% of your code (any more will be considered cheating).
3. You must understand any code you use and include documentation (comments) around the code that explains its function.
4. You must get written approval from me via email.