## Term Project Requirements – An MVC Web Site

CS296N, Web Development 2: ASP.NET

Your web site should meet the following requirements:

- Be interactive. This means that it doesn't just consist of static HTML pages with links to
  other pages. There should be one or more web pages that display content that is
  generated by software running on the server. And the content should be generated in
  response to input from the user. An example would be a web page with a to-do list that
  gives you a different set of tasks depending on the day selected by the user. (But, please
  don't do a to-do, or task management app).
- 2. Include some kind of interactive "rich" media. This could be as simple as images the user can click on, and/or various images that are displayed in response to user input. It could involve video or sound or jQuery animations, or some other media besides text.
- 3. Be data-driven. This means that the content of one or more of your web pages contains content derived from information stored in a database. In addition:
  - The content should be determined programmatically.
  - Users should be able to enter data that will be stored in the database.
  - Some of the data entered by users should be visible to other users.
  - Users should be able to do some kind of searching of the database.

An example would be a classified advertising site where users could enter items for sale and other users would be able to see those items and search for items by category.

- 4. Be moderately complex- not too simple, but not too hard to build. Here are some criteria:
  - The database should have 3 to 6 tables.
  - The total number of fields in the database should be between 8 and 30.
  - There should be between 8 and 12 web pages.
  - The web site should have some kind of navigation that appears on each page.
- 5. Require authentication and authorization. This means there will be a way for users to register and log in. There should be at least three levels of authorization:
  - Guest- these users don't need to log in, but will only be able to access a limited number of pages and/or features.
  - Registered user- these users can access anything except the pages/features that are only for administrators.
  - Administrator- these users can access everything.

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6. Security Testing

Security testing: Use Zap to test your app. Do these tests on localhost

- Be sure to test your app with yourself logged into the app in a non-admin role.
- Mitigate any high-priority security risks.
- Provide a document containing screen shots and notes on mitigation.
- 7. Deploy to a web server

Publish your web app to the internet. You can host your app on Azure or another host like SmarterASP.NET.

- 8. Load testing: Use jMeter to load test your app. Test your web app running on the internet, not localhost.
  - The script should include login and search.
  - Provide a document containing screen shots of the results
  - Provide your testing script

## Notes:

- 1. The term project may be the same as last term's project, but modified to meet the new requirements.
- 2. Good coding practices, such as using unit tests, are expected in the term project.