

Final Project #3– Syracuse University Tour

Version 1.1

due Last day of Class

Purpose:

In this Project you will develop a website tour of Syracuse University. The website provides the following services:

1. A current events calendar to announce sports, films, concerts, and other public events.
2. A photo tour showing a sequence of photos and descriptions of many major SU landmarks, e.g., major buildings, the Dome, libraries, etc. The tour includes directions from the Quad center and from the previous tour location.
3. A clickable campus map that links, by clicking, to the tour locations. The user should be able to select a starting tour site and click on some others to select a list of site she wants to tour. Your application then provides directions from each site in the selected list to the next site in the list.
4. A view of Google Maps¹ that shows the viewer's current location relative to Quad center. You will implement this by consuming Google's map API.
5. A service to send an SMS message containing directions from the user's current location to Quad center using Amazon's SNS service² and Google Maps.
6. A page of annotated links to Syracuse University resources.

The Tour provides a home page with boxed areas for each of the following:

1. Brief history of Syracuse University.
2. Three annotated image highlights of the campus that are loaded randomly from an array of annotated images (as is done on our website home page) populated from a directory of campus images.
3. Description of Syracuse and the Upstate region with three annotated images loaded randomly from an array of annotated images populated from a directory of local area images.

Finally, the Tour provides an administration interface that enables:

1. File upload and deletion facilities through a Web API that is hosted on your site server and communicates with remote desktop clients, also developed as part of this project.
2. This service requires authentication as a member of an administrator role, defined by your site.

Requirements:

The requirements of the Syracuse University Tour (SUT) project are to build a web site with the following features:

1. **shall** provide Home Page, Tour, Directions, and messaging as described in the Purpose section.
2. **shall** build a WebApi service that provides an Administrator interface as described above. You are also required to build a simple desktop application that consumes the service and supports addition and deletion of annotated photos.
3. **shall** use server side software built with ASP.Net MVC and ASP.NET WebApi.
4. **shall** use SQL Server to manage User login information and Tour images and descriptions³. You may store other information in either XML format or via the SQL Server database, but use XML for at least one form of storage.
5. **shall** use, and demonstrate that you use, LINQtoXML and either LINQtoSQL or Entity Framework.
6. **shall** use, and demonstrate that you use, at least four of the following:
 - a. HTML5 features
 - b. Partial Views
 - c. Ajax

¹ <https://developers.google.com/maps/>

² <http://aws.amazon.com/sns/>

³ You are not required to store code and documents in SQL Server, although that is possible using blobs, but should store addressing information there. That includes dependency relationships if you choose to implement them.

- d. Client and Server validation
- e. Roles
- f. Entity Framework

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.