

Tutorial Project

The goal of this assignment is to give you some experience doing some research, learn about new emerging technologies in the field of client-side web application development, and teach others about what you learned. You will build a demonstration and a step-by-step tutorial to teach others aspects of the new technology. The tutorial should include code samples and explanations of terms and concepts.

I must approve your topic before you can begin work on this project.

Requirements:

1. Get your topic approved before working on the project.
 - a. Review the list of topics provided at the end of this document, or find your own topics of interest.
 - b. Send me an email (cpascucci@temple.edu) containing your name and a list of 3 – 4 topics in order of preference, a short description of the topic, and what you plan to do with the topic.
 - c. Wait for my response.

2. Research your topic and create a working demonstration.
 - a. The main aspect of this project is to learn about a newly emerging technology related to the class.
 - b. Once you become familiar with the topic, you need to create a working demonstration that will be used to teach others about the topic.
 - c. The demonstration must contain a reasonable amount of work and it cannot be a tutorial or example copied from another source. For example, creating a simple calculator with a few lines of code would not show enough thought and effort put into creating the demonstration. If you are unsure about the amount of work put into your demonstration, you can come see me and show me the work before completing the project. Your code should be equivalent to a 2-page paper in Microsoft Word.
 - i. You should keep notes on everything you do, so you can backtrack and build your tutorial.

3. Create a web page with your step-by-step tutorial.
 - a. Create an introduction section that will discuss the topic, history, its importance and relevance to the class, theory, and any other important elements regarding the tutorial's topic.
 - b. Create a setup section that describes the required software installation and/or setup needed to complete the demonstration discussed in the tutorial.
 - i. List the software needed and include links to the required software.
 - ii. Describe any setup needed before beginning to write the code. For example, you may need to illustrate how to start Visual Studio and create a project before the person can begin to write code for your tutorial.

- c. Create 3 – 7 sections of content that describe the steps needed to complete the demonstration.
 - i. In these sections, you need to include code snippets and links to intermediate stages of the demonstration. The intermediate stages are used as checkpoints to allow the user to see what the page demonstration should look like and how it should work at that point. These checkpoints give the viewer the chance to try out what they did to that point instead of waiting until the entire demonstration program is finished.
 - ii. Here is a good sample of a tutorial done on [JavaScript Modal Windows](#).
 - iii. See [W3 school's](#) "Try It Yourself" pages.
 - d. Create a final section summarizing the topic and tutorial.
 - e. Include a references section that lists your sources of information and some other resources that can be used to learn more about the topic.
 - f. Use CSS to make the page look attractive and professional.
4. Create a link to the tutorial on your site's home page. Also, remember to add a section to the labs.html page created in Lab 1 for this project.
 - a. Include a description of what you learned, what elements you liked/disliked, and a link to the page you created for the tutorial.
 5. Present the topic in class. Part of the grade for this project will be based on your in-class presentation. You will be given a short period of time to present your topic, so you will need to streamline your presentation to fit the allotted time.
 - a. Discuss the topic.
 - b. Present your demonstration or a shortened version of it and explain some of the aspects.
 - c. Answer questions regarding the topic.

Possible Topic Ideas:

- [jQuery Plugins](#)
- [JavaScript Plugins](#)
- JavaScript Frameworks: ReactJS, Backbone, Ember, Vue.js, Meteor.js, Node.js
- JavaScript, jQuery, and AngularJS Debuggers and IDEs.
- Security in client-side web applications