Rich Web Application Technologies Individual Project

Mark: 25% of Final Mark

Deadline: End of Week 13 [After this deadline, CA's will only be accepted with a personal circumstances form]

Submission:

- You will deploy your working project to an Internet hosting service such as Heroku or Nodejitsu.
- You will submit your project source code and any supporting documentation through Webcourses as an archive.

Assignment:

You will develop a client-side web application to demonstrate the use of the technologies you have studied in this module.

The application will implement the following features:

- Modern layout and styling of your pages using Templating/HTML5/CSS3 techniques
- XHR based communications with a server once the application code and assets have been initially loaded
- You may use a server and middleware you develop yourself or you may use a third-party API and infrastructure
- A user sign-up facility (you are free to do this any way you like including the use of third-party login services such as Google or Facebook)
- User authentication before use (this is because you will need to identify users with your application logic)
- Multi-user interaction between different users logged into separate instances of your application (for example, messaging between them)

Example Applications:

- Interactive multi-player game (e.g., Checkers or Tick-Tack-Toe)
- A lecture interaction board where students can anonymously post questions or comments during a lecture and other students can vote up these up or add their own comments to them
- A Stack Overflow clone with a sub-set of the main features

Guidelines:

- You may need to implement some kind of server backend in order to allow your client to work but you are free to choose any technology you like, regardless of whether it has been covered in lectures or labs or not.
- Your backend will probably need some kind of persistence layer. But you are free to choose a method of your choice
- You must make use of JavaScript, CSS and HTML/Templating in your project but you are free to use any client-side frameworks you like and should not feel you are confined to the frameworks we have considered in class
- Comment your code appropriately
- Show correct attributions for code you use from third-party sources
- Structure your code well and make it as obvious as possible to see what it is doing and be maintainable
- Test your code on at least three different browsers to check for cross-browser compatibility

Plagiarism Warning:

By its nature, programming on the web will require you to research techniques for implementing various features of your project. You will also find the need to use code from third party sources when using external services. It is extremely important that you correctly attribute (through code comments) all of the external work you use and why you are using it. Do not be tempted to pass other's work off as your own. Plagiarism is taken very seriously and you do not want to be dealing with a case in your final year. Be warned that all suspected cases are referred to the school with no exceptions. Please don't do it. It's not worth it.

Due Dates:

There are two dates to note:

1. Project demonstration (Thursday December 10th). A schedule will be published in advance
2. Final project upload (Friday December 11th). Strictly no extensions will be entertained unless accompanied with a personal circumstances form.

Consider this is as a deadline.

You may find it better to get it done and submitted before the due date.