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CIS 247 – HTML5/Mobile Applications

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Assignment 2

**Transmedia Publisher HTML5 eBook Reader Prototype**

Purpose

I am the web developer as well as a founding partner for Transmedia Publisher, which intends to be an innovative book publishing company that will offer both traditional and e-book formats. Our business model is such that we empower independent bookstores to be competitive in the 21st century book market. Transmedia Publisher intends to offer an eBook application that is capable of delivering an ebook with dynamic content along with the capability of being dynamically updated.

Project Scope

My project scope will be to complete a prototype for an e-book reader that demonstrates the feasibility of an HTML5 eBook reader capable of pulling source content from a web-based asset. Being a prototype, this application will have only the essential features to allow it to do its job and will not feature any advanced technology that would otherwise be required, i.e. server security settings, a corresponding e-commerce delivery system, etc. The intention of this application would be to eventually compile it as a downloadable application using PhoneGap for mobile devices as well as an eventual desktop application for Windows, Mac OS X, and Linux. The compiler for the desktop versions is to be determined.

In addition to HTML5, the application will use other front-end technology with a strong emphasis on a jQuery user interface that gives the application the look and feel of an e-book along with AJAX to pull the book content from the web server. There are several pre-existing jQuery plugins that can give an application an e-book feel, but I personally chose turn.js (<http://www.turnjs.com>) for my prototype. The reason why is because of all the plugins I evaluated, turn.js simply has the best user interface around and is very comparable to existing UI’s such as Amazon’s Kindle and iOS’s iBooks. While a full commercial licence would eventually be required if Transmedia was to use turn.js in a commercial production, a non-commercial version with a BSD licenses is available on GitHub (<https://github.com/blasten/turn.js>), which will permit me to develop a prototype without any necessary overhead cost.

The application will be developed and tested on a combination of my desktop and laptop computers, which is a Mac Mini Server with Apache and MySQL installed, and a MacBook with MAMP respectively. I will also establish a subdomain on my website for testing. Because I must demonstrate the feasibility of fetching HTML from a source web server, I will use Transmedia ‘s development website for this purpose (<http://development.tm-publisher.com>). Transmedia’s development site runs on Drupal, and all I would need to do is to establish a custom content type in order to store the data. Drupal has the ability to authenticate login information from mobile applications and work with available e-commerce plugins to grant users access to specific content, which will come in handy when those restrictions will be needed. However, those features will not be needed for the prototype.

Site Requirements

Client-Side: An HTML5 framework capable of reading the content pulled from Transmedia Publisher’s development website. This will invilve all front-end technology including but not limited to HTML5, CSS2/3, jQuery, turn.js, and any necessary customization of the existing code.

Server-side: A custom content type created on Transmedia Publisher’s development site, which is run on Drupal 7. There will be one demonstration book in HTML format that will be able to demonstrate the capability of hyperlinks to external web resources, video/audio content, images, and variations of HTML markup.

Timeline

Week 1: Project description submitted for evaluation.

Week 2-3: Work on the project analysis (this step).

Week 4: Submit system specifications documentation, commence development of application.

Week 5: Continue developing application. A suitable e-book demonstration should be set up on Transmedia’s development site by this time.

Week 6: Submit working prototype of application. At this point in juncture, application must be able to prove ability to display content from Transmedia’s development site via AJAX.

Week 7: Continue developing application. If all requirements are met by this point, advanced features above and beyond the scope of this project should be worked on.

Week 8: Application due for grading and presentation on Saturday, August 25th at 11:00 AM.