February 21, 2011

From: Nicholas Poorman

To: Dr. Alex Pantaleev

Subject: Status Report - Advanced Studies in Web Development

Alex,

Below is my status report for my advanced studies in web development.

My objective: To design a website that will allow users to comment on frames of videos.

Recently I began looking into what HTML5 had to offer. A search on google lead me to the popular website: http://diveintohtml5.org/. I had a general understating of how the video player worked in the browser after reading the chapter titled "Video On The Web --Video in a Flash (Without That Other Thing)". From there I picked up a book on Javascript called "Javascript: The Definitive Guide". This book highlighted many of the problems that exist in the way different browsers have implemented the Javascript standards. The Javascript book was necessary because many of the new features in HTML5 are controlled by Javascript, ie. the video player.

My findings on the video player have opened many doors of possibilities for this website. For starters the look and feel of the player can be customized simply with Javascript and CSS. I began by creating a simple index page that would display a video. To test this I used the trailer for "Big Buck Bunny" as the video was available on another website in the various formats that were needed by my browser (Google Chrome).   I ran into a problem with the way Firefox implemented their HTML5 video player controls. At this point I decided to design this experimental website solely for Google Chrome. The page I used to test this can be found at: http://cs.oswego.edu/~poorman/streamcritic/test1/test1.html. Next I added some Javascript so that when a user clicked on the video it would pause. (This will be useful later, but doesn't exactly work because when you click the play button it double counts the click.) Also I added in some Javascript and CSS to create a box. This box will be used later to tag a frame of the video.

It was at this point I decided I had better create a layout for the site before I did too much hacking with the CSS. To do this I opened up Adobe Photoshop and a few hours later I had a few different layout designs. The various designs can be found here: http://cs.oswego.edu/~poorman/streamcritic/layouts/.

Next week I will be implementing the ability to click on a video and get the location of the click. After that a simple database that stores the click location, comment, username, password, video, etc. and the implementation of the layout in CSS. Then the code to "live-update" the bottom part of the site which will display the comments with their tags as the video is played.

Sincerely,

Nicholas Poorman