TJHSST Senior Research Project Proposal: TJHSST Website Redesign 2007-2008

Martin Elthon

October 30, 2007

1 Introduction: program versions

1.1 1st Quarter

I initially started with programming in Ruby on Rails. However, I decided to switch from that language because of it's "Black Magic" nature. So far, I have got a basic login system, and basic user management – adding and removing users. It is currently running over http. There is virtually no layout to the page itself, and serves mostly as a proof of concept. The software is currently running on a workstation which is set up with Apache 2 webserver, and MySQL 5 database server.

1.2 2nd Quarter

The features I will try to implement are logout, news management, news submission, and migrate over to https. I will also try to add user feedback, so that problems can be fixed more promptly, and user feedback will be taken into consideration. I will also try to make the site very usable and good looking. The site will probably remain relatively plain, since the emphasis will be almost entirely on functionality.

1.3 3rd Quarter

By this time, I will mostly be making minor changes, and perhaps even having it run "live" as the main administration backend. Depending on whether a final design on the new page is near approval, I may start work on a new frontend – what people see at www.tjhsst.edu. Much of what happens in the third quarter depends on whether the administration makes progress on the design for the new site layout.

2 Purpose

The goal of this project is to have a working replacement of the current TJHSST web-site rewritten in PHP. This will at least include the management side of the website, where administrators add and remove news. However, it may also include a new front-end, which is what you see when you go to http://www.tjhsst.edu currently. However, the design for this new front end is still being finalized, and will have to go through numerous layers of approval.

3 Background

There is no real research done for this project. The research done is problem specific. This means that research is only being done on how to solve problems that arise, such as how to authenticate users, but no true research is being done.

4 Procedures

I will be able to test whether my project works simply by testing all the features of the finished site. Like Intranet 2, I would have several people run a testing version, and submit bugs. A demo version will hopefully go "live" by the end of the first quarter, although that is by no means a guarantee. User input by the administration will be very helpful and crucial in determining what features are wanted, how they should behave, and how it should look. Once a basic version is working, I will seek out comments from the administration that would use it, and try to adapt to their preferences.

Computer languages I'll use:

- 1. PHP
- 2. XHTML
- 3. CSS

5 Expected Results

The result of this project will be a replacement TJHSST website. It should perform faster, be better documented, and be easier to edit than the current version. Additionally, the code will be more organized and easy to read, which is a result of careful documentation and careful coding.