

TJHSST Senior Research Project: TJHSST Website Redesign 2007-2008

Martin Elthon

April 1, 2008

1 Abstract

The purpose of this project is a redesign of the TJHSST website backend. Through the use of PHP and MySQL databases, this project will result in a redesigned administrative interface for the TJHSST website. The current state of the TJHSST website is in a state of disrepair, and web pages have to be edited manually. To resolve this, and help with the general overhaul of the current site, this project will form the foundation of the future web site. The current state is in a deteriorating condition, with system failures becoming more and more common.

2 Background

By the very nature of this project, there is not a tremendous amount of research that can be done. The research that has been done has focused on Intranet 2, which is about as close to this project as it can get. Additionally, the code for Intranet 2 can be viewed and the coders of it can be interviewed. I have found, however, that little research is needed, since this is a result-based project.

3 Introduction

The current state of the TJHSST website is decrepit. It was written a long time ago in a language that does not exist anymore. After a collapse of the system the previous year, a "hackish" job was done to bring the site back online. However, at a sharp cost—the whole of the core site is not dynamic. This means that the administration has to manually edit the page. Late last year, a team was formed to redo the current site, and this project is a large part of that effort. This project's goal is to provide a new management interface for the administration to manage news posts, and the various dynamic content that the TJHSST site provides. Written using PHP, XHTML, and CSS, using LightTPD and MySQL 5 for the web and database server, this new site is using the latest web-development technology to create a lasting site. Hopefully, through careful documentation and good coding practices, the nightmare of the current site can hopefully be avoided in the future.

4 Preliminary Testing

As of right now, there is only one user of this backend. He is the main user of the current TJHSST backend, and can therefore provide useful suggestions as to what features need to be implemented. Basic testing has been done with all the features, such as testing authentication when a user is not authenticated. Meanwhile during these tests, the database was monitored for changes, to see whether a function actually made a change. The almost all of the features have been implemented. Secure login and authentication, account management, staff email management, news management, and spell checking for news submission. The system is flawless and has had no errors after the most recent fixes. The front end has been started, and I have handed it off to other students to finish.

5 Analysis

The results so far have shown the software used to be reliable and speedy. Since the site is under a significant amount of work every day, it is hard to say the true reliability of the software itself. I have never had the system crash or become unusable.