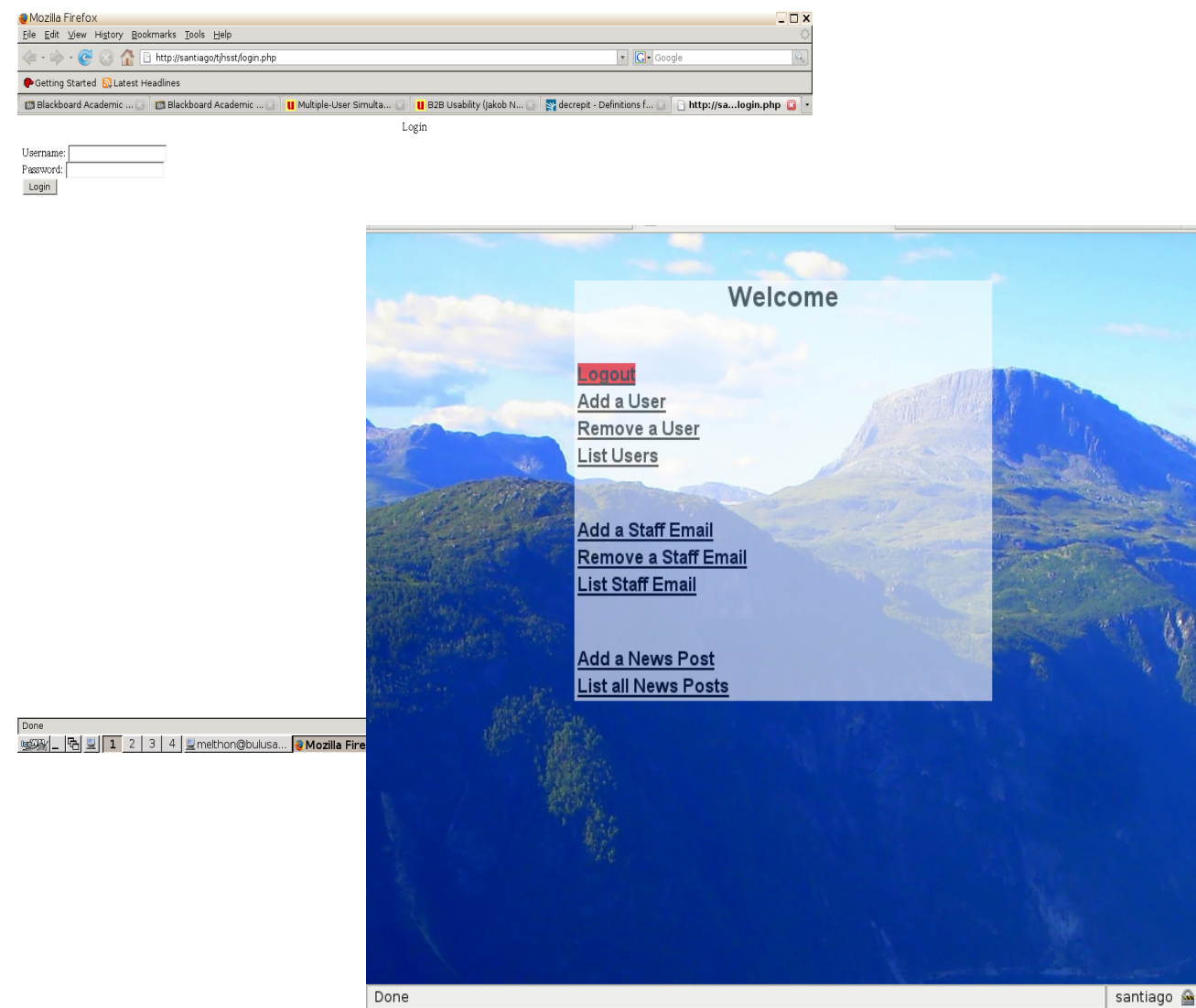


TJHSST Website Backend Redesign

By Martin Elthon

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.

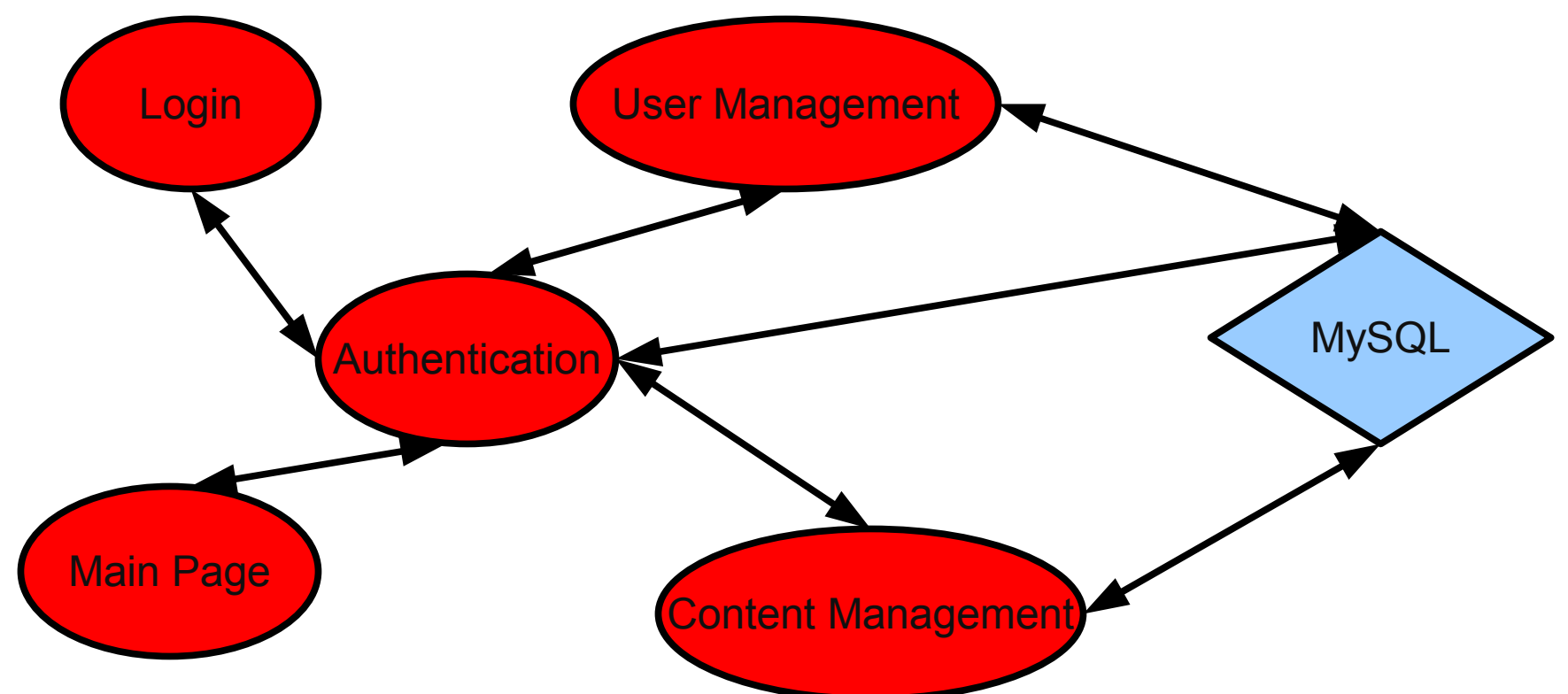


Background

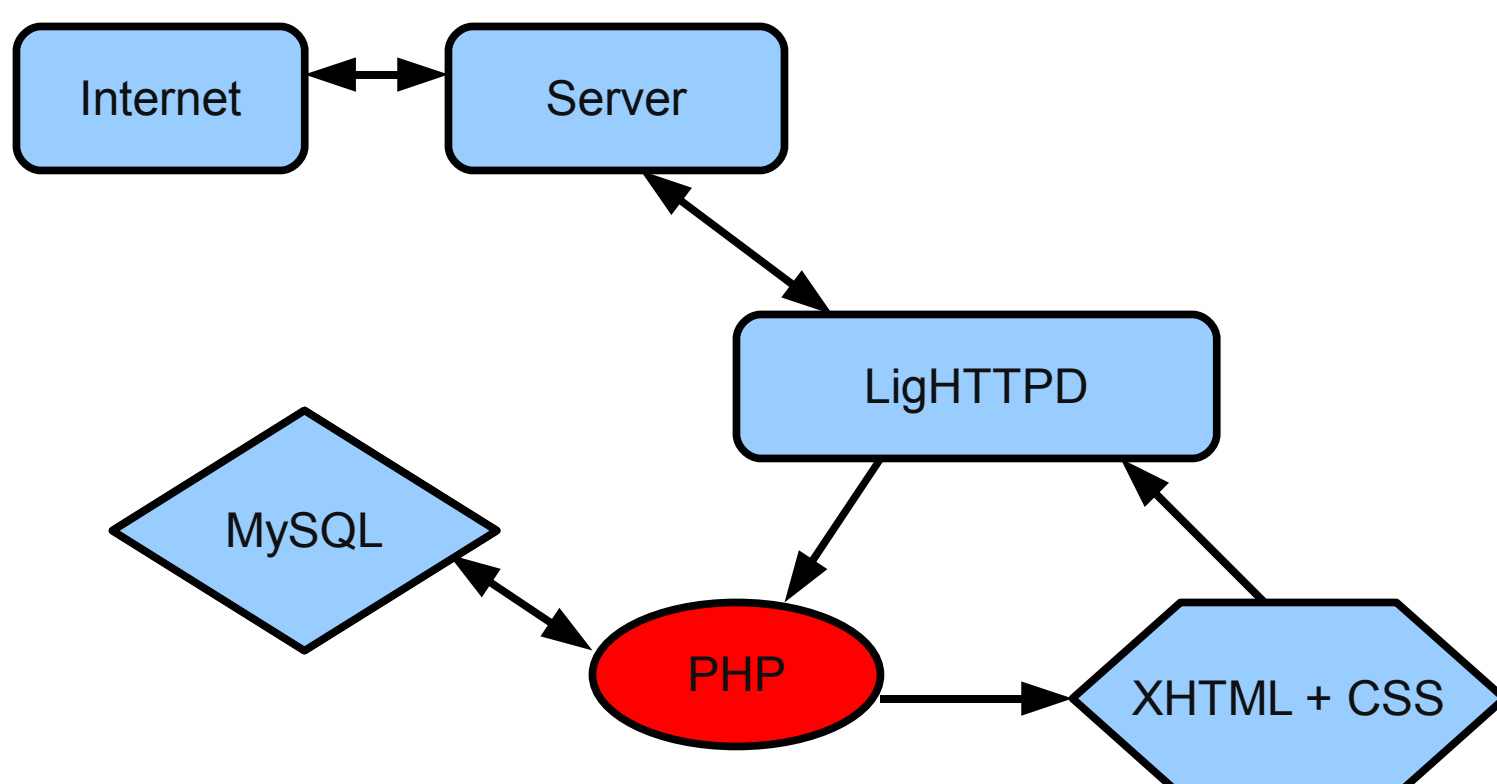
The current state of the TJHSST website is decrepit. It was written a long time ago in a language that does not exist anymore. After a collapse of the system the previous year, a fast response was necessary to bring the site back online. However, at a sharp cost—the whole of the core site is not dynamic. 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 respectively, this new site is using the latest web-development technology. Hopefully, through careful documentation and good coding practices, the nightmare of the current site can hopefully be avoided in the future.

Visual progression from the first working revision to the final revision.

Micro-level Diagram of the Web Site showing dependence



Macro-level Diagram of the Web Site



Analysis and Testing

As of right now, there is only one user of this back end. 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 results so far have shown the software used to be reliable and speedy. However, the one worry is that PHP will fall from being the standard before the site is replaced.

One major advantage of this new site is its modular nature. As shown by the above diagram, major functions are isolated and can be changed without doing any major changes to the rest of the site.