ExplainShell for Chrome

Progress Report

Submitted to

Thomas M. Keating

Assistant Teaching Professor

School of Computer Science

Carnegie Mellon University

Prepared by

Justin Gallagher

Ted Li

Jacob Zimmerman

Howard Chen

School of Computer Science

Carnegie Mellon University

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Justin Gallagher, Ted Li, Jacob Zimmerman, Howard Chen

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1 Overview

1.1 Purpose

This report intends to inform the client of our current progress in building ExplainShell for Chrome. Specifically, we will cover additional information that we have found relevant to our project, the goals we have accomplished, what we still need to complete, required changes to our original procedure, and our plan for finishing the project at the deadline. We will conclude with a discussion of what exactly we expect to produce when finished.

1.2 Project

ExplainShell for Chrome is intended to help the user understand Unix shell commands found online. With the aid of our Chrome extension, users will be able to click on commands and be directed to the relevant `explainshell.com` page. Our application eliminates the need to copy and paste the command into `explainshell.com` and places a friendly reminder of ExplainShell's utility in the reader's view. Combined, these two aspects eliminate the largest barriers to people using `explainshell.com` freely, thus promoting its use.

As a complement to this utility, each click that users generate by following links to `explainshell.com` from our Chrome extension will be sent off anonymously to our ExplainShell Trends site, which will compile a database of clicks which we will be able to query for statistics such as most recently clicked commands, top referring sites and pages, most popular commands, and more. Through this site, ExplainShell for Chrome users *and others* will be able to learn about new, helpful shell commands.

Thus, this system will both help bring attention to commands that users don't understand as well as introduce them to new content generated by their peers. It solves issues related to malicious code execution (because potential victims will be more wary about running unknown commands), Unix shell education, and community involvement.

2 Literature Review

We have found a number of reference materials useful along the development process, mostly relating to the actual implementation of Chrome extensions and web apps in Node.js. Of the sites we've visited, those that we document here have been the most crucial to our current progress.

2.1 TODO - Chrome extension reference

2.2 Setting Up a Node.js Stack with Express & MongoDB

3 Progress

3.1 General Assessment

3.2 Status

3.3 Projections

4 Recommendations

5 Discussion