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Algorithms for Sports Elimination

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Level 3 Project — February 27, 2013

Abstract

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Acknowledgements

We would like to thank our project supervisor, Dr. David Manlove, for his extensive guidance, knowledge, and support throughout the project. We would also like to thank all of the participants of our user evaluation during the evaluation stage of our project.

Education Use Consent

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Introduction

This section discusses the design of the web-based version of the application. The design of the application was constructed with only the most important functional and non-functional requirements in mind. The web-based version was classed as the least important part of the project, with preliminary effort directed solely towards the desktop application.

System architecture

The web application is a standard multi-tier architecture with the presentation, logic, and data separated from each other.

The presentation tier is the client/browser who has Hyper Text Mark-up Language (HTML) and Cascading Style Sheets (CSS) for the static presentation of content. In addition there is JavaScript supported by JQuery JQueryUI for the dynamic user interface elements.

The logic tier runs on a web server called Lighttpd (pronounced lighty) that is supported by PHP: Hypertext Preprocessor (PHP). The logic tier has two data sources, a MySQL database containing the latest data and a Java jar for looking back at older data.

User interface

The user interface of the web application was intended on being as close to the desktop interface as viable within the constraints of a web browser and within the realms of what is typical layout of a web page.

DIAGRAM HERE

The web application has a single page containing the six available divisions. Each division is a table and only one is available for viewing. The reasoning behind this is to keep as much information 'about the fold' (above the lower page boundary on a browser's window).

There are links at the top of each page that will allow the user to traverse the entire date range for the season allowing them to view the scoreboard and elimination status at any point in time.

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Contributions

6.1 Gordon Reid

- Team leader
- Ford-Fulkerson algorithm
- Second user interface iteration
- Second parser iteration (in use)
- Post-second user interface iteration file opening.
- Web application user interface
- Web application back-end

6.2 Ryan Wells

6.3 Kristopher Stewart

6.4 David Selkirk

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Appendix A

Installation and Running of Application

A.0.1 Desktop Application

A.0.2 Web Application

Bibliography