

Problem Statement for Stat Tracker

Stat Tracker aims to be a web based application that will enable easy access to statistics of sporting events that have been accumulated over time.

High Level Problem Summary

Primary Criteria:

- Stat Tracker will aim to be usable by May 18th, 2012.
- Stat Tracker will have very little market impact.
- Stat Tracker will aim to have correct statistics from most professional sports, and the user will be able to select various events to indicate which statistics they wish to look at.
- Stat Tracker will aim to be coded to allow ease of access and implementation for various new sports/sporting events and athletes.

Scope:

A user interface will allow a user to select which sport they wish to see statistics for. These statistics can range from stats for a particular game, a particular season or a particular player. Ideally, these statistics will be live updating so that a user can look at the stat tracker for a particular game and receive live score updates.

Detailed Problem Statement

Function

Stat Tracker must be able to accumulate specific statistics and display them in some way to a user. Key features include: a way of accumulating statistics, a way of displaying user-indicated statistics and a way to update the statistics.

Key Business Features:

- An easy way to view statistics for various sports and athletes.
- A way to view live and accurate score updates.
- Stat Tracker would aim to be a free service to any internet user.

Key Enabling Features:

- Administrators would have access to the database of statistics.
- Administrators would also require access to the API's of the various sporting companies that would be providing us with statistics.
- If advertisements would be used, the administrator would also need access to the advertisers.

Key Concurrency Issues:

- For live score updates, it would be necessary for a user to be able to view statistics, and then the updated statistics without any additional actions.
- The Stat Tracker program must continually communicate with the API and databases to update scores and statistics.

Form**Key Attributes:**

- Performance & Capacity – The system must be able to at least keep the score of one major sport, and add statistics over time for players.
- Reliability & Availability – The system must not crash, and must be available to anyone. In addition, the statistics must be correct.
- Usability – The program must be usable and have some sort of UI, even if it is a very basic one.
- Security – Only the administrators must be able to edit data on the web page.
- Modifiability, maintainability, & customizability – The system should be able to accommodate more than one sport, and changes to statistics.
- Testability – The system should be able to be tested under live conditions, ideally getting correct statistics from live sporting events.
- Safety - No one should get hurt during coding.

Hardware & Software constraints:

Stat Tracker will rely on API's from other companies, and we will need to constantly be getting that information. In addition, we should try to have the program be compatible on all browsers, with a bare minimum of one commonly used browser.

Key Interfaces:

Stat Tracker will be obtaining data from ESPN or another sports statistics company. In addition we will be communicating with a database of players and teams.

Required Standards:

Stat Tracker should be usable on most browsers, as it is a web-based application. In addition, the statistics acquired should be legally used, and not violate any license laws.

Domain:

Stat Tracker is a third-party web app that delivers statistics to a user. The user can specify various scopes and types of statistics that they wish to view.

Economy

Business Context:

The cost of producing Stat Tracker will be simply the time put into the project by the developers. If the project were to be released for live use, the cost would be increased to cover upkeep – which would be minimal and coverable by advertisements.

Customer Organization Constraints:

The constraints on the user would be those with internet access, and those that can understand the various languages it is designed for.

Development Organization Constraints:

The people who develop this project must have access to the internet, and must be familiar with web based systems. In addition, there is no budget and the programmers must be willing to work on the project for compensation other than money.

Key Risks and Uncertainty:

The main issue that will affect the economic success of Stat Tracker would be advertisements. If the program were to be released to the general public, then advertisements would have to cover the cost of maintainability and server costs.

Time

Historical Context:

The aim of Stat Tracker is not to replace any current systems in place, as that seems to be fairly unlikely. Rather, Stat Tracker is designed to be a simple way to look at basic stats for certain sports and events.

Current Context:

Stat Tracker would be relevant while any major sporting events are occurring.

Future Context:

Ideally, Stat Tracker could be used to incorporate live streaming video, of multiple forms of sporting events. If all worked well, multiple streams of a user's choosing would be displayed at any given time.

Key Stakeholders

<u>Name</u>	<u>Position</u>	<u>Signature</u>
Alex Jacoby	Programmer	_____
Luke Mader	Programmer	_____
Sriram Mohan	Project Manager	_____

Revision History

3/28/2012	Version 0.1	Project Statement Draft	Alex Jacoby and Luke Mader
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