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RPI Leagues

Team 2 Project Proposal

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Executive Summary

The main purpose of this project is to create an alternative to the current system IMLeagues which organizes and catalogs the results of intramural sports leagues as well as document teams and players for intramural sports across different schools. The current system (IMLeagues) makes it difficult to organize all the events and our goal with this project is to create an improved alternative to “IMLeagues”, which could potentially benefit intramural teams in planning and creating events and more.

Summary, Stakeholders, Value Added

The task of organizing and cataloging the results of intramural sports leagues is a difficult one. Beneath all the fun and games, there's a lot of data to work with. Each school has teams composed of many players each with their own sets of stats. These teams play against one another producing games composed of plays, points scored, and ultimately a victor.

Thus, our project is an online platform that will catalogue and document all this information. The main component will be an interface that allows users to view, sort, and filter data collected from intramural sports leagues. Additionally, we shall implement a feature that allows users designated with certain administrative privileges to modify and add data that's hosted on the site.

The current system used by many intramural college sports teams is called IMLeagues. While IMLeagues,is functional, many complain that it has a difficult to use and un-intuitive interface. Additionally, to generate revenue necessary for the upkeep and maintenance of the site, IMLeagues runs lots of ads on its site, limiting the content users can see at once and further frustrating its clients.

Our project is aimed to be a more lightweight yet still functional replacement for IMLeagues that will provide the college athletic community, our key stakeholders, with a better solution to the task of recording, scheduling, and organizing their games and data.

Sports teams would benefit from the ability to coordinate matches and view the results of those matches on a centralized, official location. Sports admins could benefit from the same and also the ability to view statistics about specific teams and players to make informed decisions about matches.

Technology Used

The fundamental backbone of our webapp will be built on the XAMPP stack, making use of the latest versions of Apache Webserver, MariaDB/MySQL, and PHP. For the front end and basic interface, we'll make use of core web technologies such as HTML, CSS, and Javascript. We also plan to make use of bootstrap to make it easier to style our web pages and add some flare to our design.

Detailed Requirements List

1) Functional Requirements
    a) Site must be cross browser compatible and be functional with the latest versions of the most widely used browsers (Chrome, Firefox, and Safari).
    b) Compatible with PHP 5.3, MySQL 5.x and, Apache 2.2.
    c) Site must have valid HTML5 and CSS3 markup compatible for the most recent standards.
    d) Site most utilize syntactically correct scripting on both the client side (Javascript) and server side (PHP).
    e) Must utilize a relational database for optimal data storage and retrieval.
    f) Site must implement a credential based login system
    g) Site must be secure, only granting administrative rights to users with proper authentication.

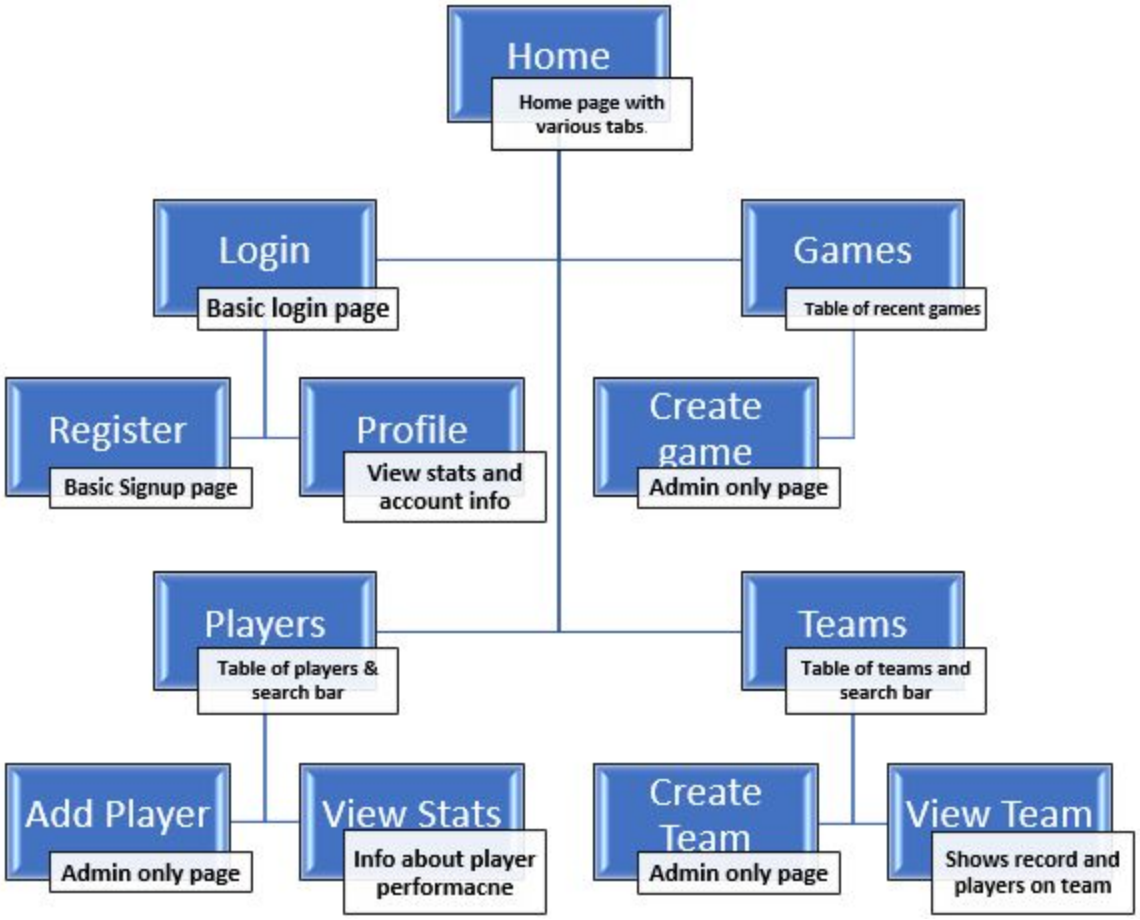
2) Non Functional Requirements
    a) System availability, 100% uptime would be fantastic
        In other words, the server must be resilient (i.e. fail-safe)
    b) System must be non-exploitable
    c) Site must display correctly on mobile devices.
    d) Site must be modular in design for easy maintainability.
    e) Site must have a clean and intuitive user interface that addresses the seven tenets of UI design (to be discussed in class later)

Estimated Project Schedule

	Wes	Dan	Mark	Jenny	Adam	Everyone
9/18						First Draft proposal Submitted
10/5						Revised proposal submitted
10/22						Website wireframe & design finalized
10/26	Front end component of view X page completed	Front end component of main page completed		Front end component of “Add X” page completed		
10/29		Database teams, players, and matches tables setup and populated with test data				
11/2	Built in back end functionality to pull data from database.			Build in back end functionality to add data to database		
11/5		Front end design for admin login page finished	Database admin tables setup and populated with test data			
11/12	Adjust view page to display admin privileges	Finish login page backend to successfully validate credentials	Adjust main page to display admin privileges	Adjust add page to display admin privileges and authorize data entry		
11/15 to 11/19						Integration testing
11/26						Final tweaks and fixes
11/29						Practice demoing site
11/30						Final presentation

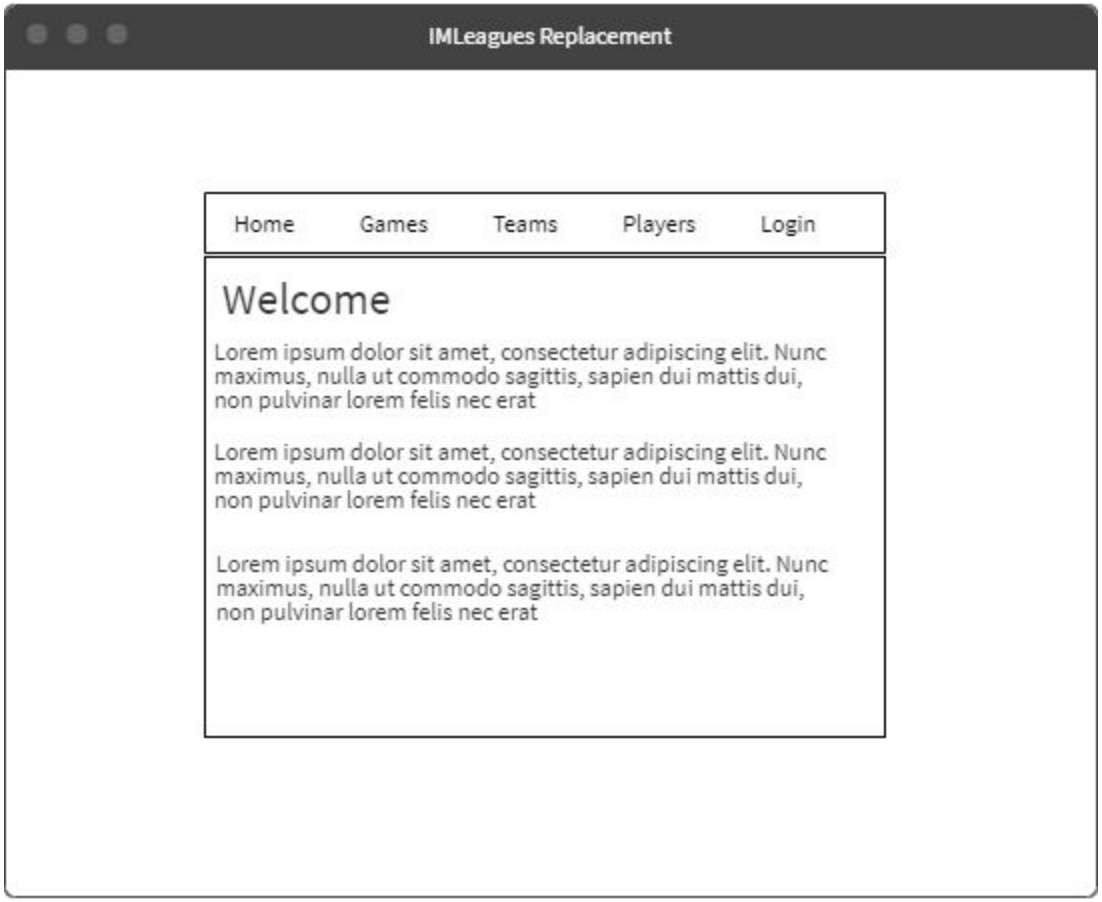
Demo Site Map

Note that while the map may imply one can only go deeper into the site, our UI will feature navigation buttons that let users travel back or “home.” This map only exists to show how our pages will mostly be connected.



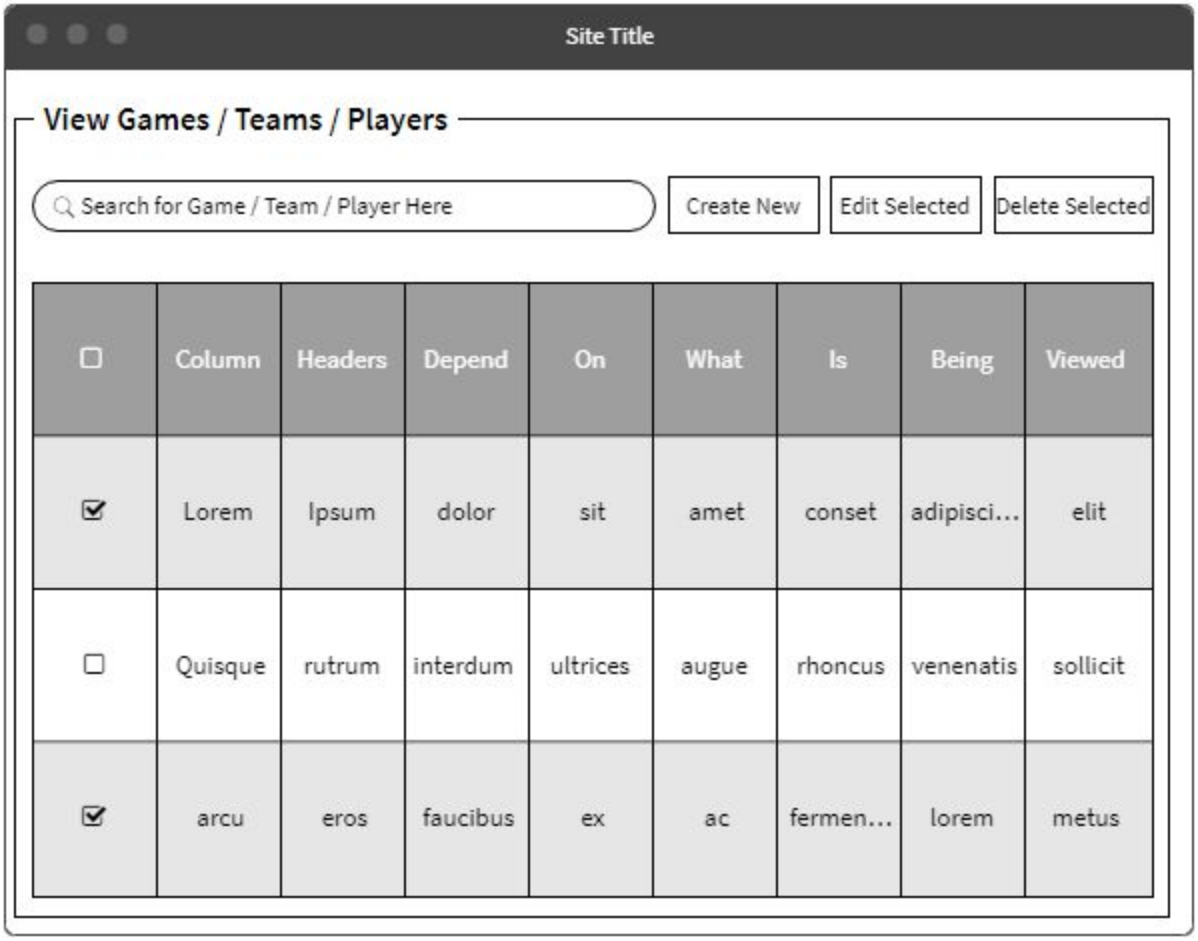
Main page wireframe

The main page of our site that contains a welcome page and the navigation bar that lets a user navigate to the various displays of information. Also contains the login screen.



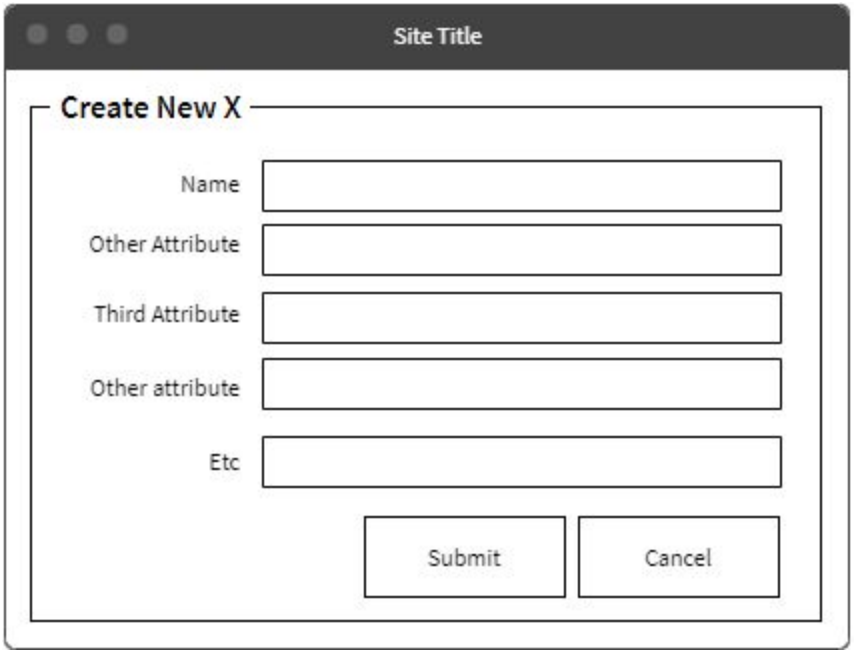
View X wireframe

Upon clicking a tab from the main screen the user will be directed to a view similar to this one. The column headers and button text will all depend on which view the user asked for (teams, players, matches). There will be buttons near the search bar only accessible to administrators that let them edit the attributes of each entry.



Add / Create X wireframe

Upon clicking create or edit on an entry in one of the displays demoed above, the user will see a display similar to this one. There will be some headers with a list of attributes the user can then fill in. If the user is editing, the fields will already be populated with the previous information that can then be changed.



Future Plans

If our project is finished successfully by the end of the this course, there's no reason why we can't continue to add functionality and push it out to reach more users. Our project's main inspiration came from the fact that the current system to managing sports teams is a poorly designed application.

According to our current design, the project could be used by various club sports teams here on campus to help organize their matches and stats. If the site gains traction, we could expand it to reach more users, but that would require migrating our databases to a more professional platform and signing up for a legitimate hosting service.