

A Basketball Pool Program for the Practicum

Problem Statement

The NCAA holds their annual basketball tournament in March. Many people enjoy holding betting office pools where each person can make their choices of who will win each game and advance to the championship. Marketing folks refer to the interest as March Madness. In order to sign up people and track picks, progress, and winners, a web based program is a logical automation technology.

Requirements

This document is NOT a full requirements document for the system. That will be developed by the student practicum team for approval by the instructor as part of the project. There will be high level or general directions stated here followed by constraints or design directions in the next section. The instructor will work with the team to formulate a full requirements document.

Feature Ideas

These are the initial ideas on how the system should work. These concepts will be refined into a final feature set as part of the requirements phase.

1. The system will allow the administrator to login and to input all 64 teams into a 4 region ladder, aka brackets, including their position and ranking for their region (1 to 16). The standard pairings can be assumed for input, i.e. 1 plays 16, 2 plays 15, etc in a standard bracket. In this way, a simple input screen which inputs teams by region and ranking can be used without a complex bracket GUI.
2. Multiple users must be handled. Each user makes his/her 'picks' which is stored and cannot be changed once the play starts.
3. Points are assigned by the system for each round of play - round 1 - 1pt, round 2 - 2pts, round 3 - 4 pts, round 4 - 8 pts, round 5 - 16 pts, final - 32 pts.
4. The administrator user inputs the scores after each round of play showing thus who won each game.
5. The display should be generated showing the status of each stage, i.e. who advanced in each bracket.
6. At any time, a list can be generated to show who is winning the pool, i.e. who has the most points based on his/her picks.

The final feature set will be determined as part of the requirements process. The amount of work to be committed will depend on the experience of the project team and the allotted time available in the semester. The instructor will serve as customer/user.

Design Constraints

The following are design constraints or suggestions

1. The base technology used should be PHP5 code on an Apache platform. The DBMS used should be MySQL.
2. The web framework should use a MVC pattern to separate layout, business logic, and data model. A web framework such as Code Igniter can be used to speed development.
3. All color/style should be coded in CSS files. The look of the website should thus be controlled from a CSS file. Changing of this file should be the primary way to change the look of the website.
4. Templates can be used for the overall page layouts. This changing of this template (and a CSS file) should be able to change the entire layout of the page. Use of the CSS method to control layout (the “div method”) is strongly encouraged over the use of HTML tables to control layout.
5. Pre-built Javascript code can be used to implement client based features.
6. Previous teams have had some issues with some of the page designs, so the user (me) will help with understanding what screens are needed and how they need to look.