

1 Description

The purpose of this assignment is to familiarize yourself with the PHP server side programming language. At the end of this assignment, you should be able to evaluate whether you wish to use Rails or PHP as your primary development language for your semester project. The more you explore with PHP during this assignment, the better you'll be able to make a fair evaluation.

Your job is to build the portion of your final project that allows users to log in (needed for session creation), and perform statistical functions on existing data. This part of the assignment will assume the database has already been populated with information from a game; you must determine which game the user wants data from and present it to the user. This should include the usage of the Google Chart API for at least one data value.

Note that since you will be using a MySQL database, it will be shared with all your team members, but each of you will build your own PHP assignment. You should be all helping to populate the MySQL database and not depending on the first person to work on the assignment to do all that work for you.

The following statistics need to be supported by your system. Each statistic should have a separate value for each team.

- Rushing yards/Game
- Passing yards/Game
- Total yards/Game
- First downs
- Points
- Turnovers

The statistics that you present to the user should not exist in the database, but should be calculated from the data that does exist there. For instance, to compute the rushing yards per game, there shouldn't be an entry in the database with this value, you'll have to look through the database for all rushes in that game and total the number of yards for each team. A similar process should be followed for each of the statistics above.

Work together in your group to define the database that will hold the data for your in-game functionality so that you don't have to redesign the database while working on that piece of functionality. It should be just as easy to enter data into the database as get stuff back out.

2 Grading

The assignment will count toward 25% of your assignment grade. It will be graded as follows:

100 points for entire site

30 points for database design

18 points for being able to generate all statistics

3 points for rushing yards per game

3 points for passing yards per game

3 points for total yards per game

3 points for first downs per game

3 points for points per game

3 points for turnovers per game

12 points for being able to generate other player data

3 points for yards per player

3 points for tackles per player

3 points for completion percentage per player

3 points for penalty yards per team

60 points for generating each statistic

10 points for each statistic as follows

5 points for SQL to get information

2 points for error checking

3 points for converting data from database to XHTML

10 points for using the Google Chart API

7 points for generating correct URL

3 points for making data more understandable through graph