Riley Games Server Side Documentation: Update 6/10/14

CSS library:

* Pure CSS: purecss.io
* style.css is the general styles file for this project

Form validation:

* <http://jqueryvalidation.org/>

Charts:

* <http://canvasjs.com/>

Tables:

* game, playsession, problem, users, userLog
* game: contains name and location for games (quizzes use this info too) and a link to a screenshot for the games page
* playSession: each time a user plays a game to the end and takes both quizzes, a play session is logged. A score for both quizzes is stored, and two bit strings where each bit represents whether a patient got a question right. As of 6/29/14, the playsession table also contains the A1c number the patient enters upon logging in. The userLog redundantly stores this number as well.
* problem: Up to 4 answer choices, with the ability to only use two. The gameID of the game the question is attached to is stored
* users table includes both nurses (admin permission) and patients: users have a unique username and ID. Passwords are hashed with salt, the salt and hashed password are stored. Admin permissions are determined by the admin bit.
* userLog keeps track of log in sessions: Stored upon logout. Timestamps of the login and logout time are stored.

Common code:

* loginAuth.php: login authentication for all pages
* adminAuth.php: additional authentication for admin/nurse pages
* common.php: makes the connection to server for every page that needs it
* pageHeader.php: the header for all admin pages included at top
* patientHeader.php: the header for all patient pages

Login stuff:

* the login authentication files are “required” at the top of every page that requires a user to be logged in to see
* ALL files that make connections to the database can include “common.php” at the top for an easy way to make the connection
* login.html
  + form for login
* login.php
  + activated by login.html
  + takes entered password and hashes it with the salt from the server to compare it with the hashed password stored on the server
  + nurse account directed to nurseHome.php
  + patient accounts directed to patientViewGames.php
  + unsets all unnecessary variables
  + session variables stored: username, admin bit, birthYear, loginTime
* logout.php
  + logs user out
  + inserts record of logout into userLog table using session variables stored earlier
  + userRecords table was an experiment of combining the playSession and userLog table, never got it to work and there is commented out code for that in this file
  + destroy session info

Nurse stuff:

* Only users with admin == 1 allowed to access these pages
* Nurses can access patient pages (pre and post quizzes) if they want to test
* nurseHome.php
  + home page for nurses
  + links to edit quizzes, add/delete users, edit users
* editQuiz.php
  + displays a quiz in text areas for editing
  + all of the input fields are contained in one form, printed in a for loop
  + names for these inputs are done in the style of “name” + (for loop counter)
  + button for adding a question
  + delete button works, but is not secure and needs to be fixed
* saveQuiz.php
  + activated when form in editQuiz.php is submitted
  + redirect back to editQuiz.php
* addQuestion.php
  + simple form for adding a question
  + activates saveQuestion.php upon submission
  + saveQuestion.php also redirects to editQuiz.php with the question that was just added on the page now
* deleteQuestion.php
  + activated by deleteQuestion.js, which is activated by the “delete question” button in editQuiz.php
  + uses get method and feels a little hacky, but works
  + if these files are drastically changed or gone, it’s because I fixed it and didn’t update the documentation
* viewUsers.php
  + page full of forms
  + each form is a user, with info displayed
  + can click edit/view to change patient info
* editPatient.php/editNurse.php
  + shows user info that can be changed
  + password reset is kind of bad. Any admin account can change any other account’s password
  + should show a log of patient play sessions, if any
* submitUser.php
  + activated by form in editPatient.php/editNurse.php
  + redirects to viewUsers.php after save
* addPatient.php/addNurse.php
  + this page is not in the same style as the rest; it has both the form and the form submission code in the same file
  + allows addition of a patient, setting of the password and other info
  + makes sure the username does not already exist
  + makes new entry in user table with admin bit set to 0
* stats.php
  + abandoned page
* newStats.php
  + displays graphs of data from quizzes and A1c numbers
  + Pre and Post averages
    - All patients, one game
    - One patient, one game
  + Averages of each question in a quiz
    - All patients, one game
    - One patient, one game
  + A1c numbers
    - Just displays a chart
    - In the future, it should display info by patient over time, and do an average of the A1c numbers of all patients by visit

Patient pages:

* patientViewGames.php
  + shows all games, button to play them
  + directs to the pre-quiz
* quiz.php
  + for pre quiz
  + big form with giant radio buttons for users to input answers
  + upon submit, submitQuiz.php: score totaled and saved as a session variable along with the gameID
* postQuiz.php
  + post quiz only
  + same type of form as quiz.php
  + upon submit, submitPostQuiz.php: post score is totaled and then a new record is inserted into playSession table with both scores inserted
  + redirection to games page so patient can choose another game

To do list:

1. ~~password reset in both login.php and editPatient.php~~ 5/16/14
2. make deleting a question secure over the POST method instead of GET (maybe not necessary)
3. ~~add addNurse.php~~ 5/13/14
4. finish stats.php
5. ~~redirect patients back to the post quiz after finishing a play of a game~~ 5/19/14
6. ~~add new play session with both pre and post scores AFTER patient plays game and finished post quiz~~ 5/19/14
7. Gray out radio buttons in editQuiz.php when there is nothing in the text area
8. ~~Don’t allow questions with less than 2 answers be submitted (it allows it right now, I guess it’s storing SOMETHING in the table entry because there is no sql error and the first two foils are NOT NULL)~~ 5/24/14
9. ~~Add user log (log in and out)~~ 5/19/14
10. ~~Form validation: limit characters on~~ ~~username (10) and pass (20) and questions (500)~~ 5/24/14
11. ~~Don’t kill the page for incorrect form input or anything like duplicate username~~ 5/24/14
12. Get graphs to work in newStats.php