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CIT 381 – Final Project

Contributions:

- I completed the entirety of this project

Project Resources:

- General HTML/PHP structure derived from examples given in this class

- Matrix image used as background: http://donsbarn.com/battling-the-matrix/#/-1/

- Learned to incorporate HTML table for more eloquent result printing on http://www.w3schools.com/html/html_tables.asp

General Description:

A series of webpages all connected through one home page, indes.html. Data is pulled from the database created in homework 3, which has been fully populated with the data from the textbook in addition to other information created by myself. This web application runs the four queries specified in the project instructions, plus another four I designed myself. The other four are as follows:

1. Given a skill, list all employees with that skill and their regions.

2. Given a region code, show all the employees that work there and when they were hired.

3. Given a project id, list all the skills (of employees) available in the same region as the customer owning the project.

4. Given a employee ID, show their name and the number of assignments they have worked on (may return none, as many employees have yet to complete an assignment)

Caveats:

- I found that in my bridge tables, surrogate keys had to be created because MySQLWorkbench does not allow you to edit rows (row view becomes read only) when no primary key exists. Obviously the two keys brought in to form the bridge table would contain repeat entries and could not be marked as the primary key(s), so I made a TEMPPRIMARY in each bridge table to act as the primary key for that table. As a surrogate key, they are purely cosmetic and do not interact with the other data in any of my queries.

- I found that Cyberduck caused a lot of issues at implementing changes to modified files that had been resubmitted. In the end, I found it easiest to just save documents with new names and upload the new files when the old ones wouldn't reflect changes on the sever after having being uploaded to Cyberduck. In the future I would like to find new software to use besides Cyberduck, as it added a lot of frustration to this process.

Above & Beyond: I did several things to go beyond the requirements for this project (extra credit components?):

1. Used HTML tables to format output results in a cleaner manner

2. Added custom CSS styling, including using an image for the background, to enhance the look and feel of my web application

3. Added another two unique projects and all data associated with them to expand the scope of my database

4. Connected all pages to a central index.html, which auto-loads when ~igarrett/finalProject/ is called

5. Used drop down menus in input areas when practical to strengthen UI

6. All pages include home buttons that return user to index.html. HTML pages include erase buttons to clear/reset user input area. PHP pages include reset buttons to take user back to associated HTML or PHP page where query is specified

Relevant Links:

- Final project home page:

  http://ix.cs.uoregon.edu/~igarrett/finalProject/

- ER Diagram:

  http://ix.cs.uoregon.edu/~igarrett/finalProject/finalProjectERDiagram.pdf