**BCS 350: Web Database Development**

JLi Spring 2024

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**Capstone Project** **Report**

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**1. Declaration of the Integrity Statement**

I certify that this submission is my own original work.

Your name and RAM ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Complete the Self-Assessment of Capstone Project**

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| --- | --- | --- | --- |
| **Requirement Module** | **Points** | **Checklist** | **Completion of the task**  **Respond to the questions or answer**  **Yes - if your project completes the task,**  **No - if your project doesn’t complete the task,**  **Partial – describe what part doesn’t work.** |
| Which development stack do you use for your capstone project? AMPPS, XAMPP, WAMPServer, or other. | | |  |
| Database design (primary key, indexes) | 10 | What are the SQL commands that you used to create your project database and create/grant a user for your database? |  |
| Describe your database, how many tables your database has, and what data are stored in the database. |  |
| What is the primary key in each table? Any indexes? |  |
| Create the setupdb.php file that creates the application table(s) and insert initial data into the application table(s). |  |
| Listing records | 5 | List the records in your application table in a table format. |  |
| Searching for records | 10 | Use a drop-down list for user to choose a field to search and a text field for user to enter the information of that field to search for. |  |
| Adding records | 5 | Provide text fields or other HTML forms to allow user to add a record into the database. |  |
| Deleting records | 5 | Allow user to choose a record to delete or search for a record to delete. |  |
| User sign-up, password security | 15 | The form contains fields for username, email, password, and confirm\_password. |  |
| Username is checked against the database *users* table so duplicated username is not accepted. |  |
| If new user input meets the requirements, password matches confirm\_password, and username has not been used, new user is added to the *users* table. |  |
| Password is salted and hashed before stored in the *users* table. |  |
| User login,  Web authentication | 10 | A login page has a text field for username and a password field for password. A user successfully logs in if the submitted username and password match the stored record in the *users* table. |  |
| If the username or password doesn’t match the record, display an error message and provide a link to go back to the login page. |  |
| Cookies and Sessions  Log out | 10 | Session starts when a user logs in and session ends when a user logs out. Session management is provided to the main menu page and all function modules on the main menu page so that each function module can only work upon successful user login. |  |
| Data sanitization | 10 | All input data must be sanitized before being used or stored into the database. |  |
| Prepared statement and place holders must be used in the “Adding Records” module. |  |
| All output data must be sanitized before outputting in a web page. |  |
| JavaScript validation | 7 | JavaScript validation is provided to ensure all input values meet the criteria. |  |
| Check whether password matches confirm\_password using JavaScript. |  |
| PHP validation | 8 | PHP validation is provided to ensure all user input values meet criteria. |  |
| Check whether password matches confirm\_password using PHP. |  |
| Documentation | 5 | Describe the purpose of each file |  |
| Extra credits: Creative works | 10 | Describe any special design of your project. |  |

**3. References**

This project can be completed with what we learned in the course and with book examples as references. If you use any references other than the textbook, especially when you have a very different approach and copy code in bulk, you must list them here.

**4. List your source files and give a short description to each file**

**5. various photos of commands with descriptions**

Sign into mysql

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Description automatically generated

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Description automatically generated

A computer screen with white text

Description automatically generated

A screen shot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated