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CS 499 4-1 Journal

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I have not changed my plan as a software engineering student. The computer science program has equipped me with relevant skills essential for pursuing a career as a proficient software engineer, with a focus on full-stack development. Job opportunities in the field have solidified my long-standing goal. Interactions with experts and online resources have further refined my knowledge. I have gathered project materials, received feedback on Software Design and Engineering, and made enhancements for Algorithms and Data Structure, with pending work for the latter.

Regarding Category Three on Databases, they function as structured data repositories ensuring accessible, secure, and integral data management through tables and columns. Database Management Systems (DBMS) facilitate data interaction, allowing users to manipulate data. Databases vary in types like SQL, NoSQL, and NewSQL, being crucial for handling extensive data across applications. Past coursework covered data manipulation tasks. In my current project, user control features prominently through an authentication page matching user detail with database records. The project employs SQLite and Python for effective data management and querying.

**Status Checkpoints for All Categories**

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| --- | --- | --- | --- |
| Checkpoint | Software Design and Engineering | Algorithms and Data Structures | Databases |
| Name of Artifact Used | I utilized Software Design and Engineering to develop both the GUI and the functionality of the code. | Algorithms and Data Structures were created to assist in generating data based on user input for interacting with models to predict parameter values. | The database was primarily utilized for storing user information. The user authentication data can be created, read, updated, and deleted. |
| Status of Initial Enhancement | The primary user interface has been created and integrated with the functional code. | The algorithms required for the application have been created and integrated with the GUI to enable user interaction. | The database code management has been created to handle user authentication for accessing the application. |
| Submission Status | I have been focusing on coding the application. I will upload the content after receiving feedback and fixing any errors, particularly related to the GUI navigation. | I have been primarily focused on coding the application. Once I receive feedback, I will upload the content and address any errors, particularly those related to the generated answers. | I have been focusing on developing the code for the application. After receiving feedback and fixing any errors, I will upload the content, paying particular attention to the storage mechanisms and retrieving user information. |
| Status of Final Enhancement | I need to integrate user authentication into the app so that the authentication page appears first when the desktop icon is clicked. | The final improvement aims to check if the created data structure has reliable parameters. | The authentication page is complete and is now waiting for the final app GUI size adjustment to match the window size. |
| Uploaded to ePortfolio | No content has been uploaded yet | No content has been uploaded yet | No content has been uploaded yet |
| Status of Finalized ePortfolio | The ePortfolio has been designed and is ready for content upload. | The ePortfolio has been designed and is ready for content upload. | The ePortfolio has been designed and is ready for content upload. |