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Professor Reep

SWE 432: Web

17th November 2023

Self-Evaluation:

1. **Database Integration and Data Migration (60 points)**
 - a. **Database Setup (20 points):**
 - i. **Points Earned: 20**
 1. The MongoDB setup has been successfully implemented, including installation, configuration, and a connection to the web application.
 - b. **Data Model Schema Design (10 points):**
 - i. **Points Earned: 10**
 1. A MongoDB schema has been developed, accurately representing the data model for the application's needs, such as songs, DJs, playlists, and listener preferences.
 - c. **Data Migration (10 points):**
 - i. **Points Earned: 10**
 1. Complete migration of existing data to the new database structure has been achieved, ensuring that all previously hardcoded data is now stored and retrieved from the database.
 - d. **Frontend and Backend Data Sync (20 points):**
 - i. **Points Earned: 20**
 - ii. The frontend displays are successfully updated to reflect backend data accurately after CRUD operations, ensuring data consistency across the application. For instance, adding a song to a playlist immediately updates the playlist display without needing to refresh the page.
2. **Dynamic UI Components (20 points)**
 - a. **Dynamic Creation of UI Components (10 points):**
 - i. **Points Earned: 10**
 1. UI components are effectively generated dynamically from the database content, ensuring that the UI reflects current data. For example, the list of songs on a radio station's website is generated by fetching data from the database.
 - b. **Contextual Use of Static Displays (10 points):**
 - i. **Points Earned: 10**
 1. Static UI components are appropriately used, ensuring they are employed only when the options they present are not expected to change dynamically.
3. **Session Management and Continuity (20 points)**
 - a. **Data Persistence and Restoration (10 points):**
 - i. **Points Earned: 10**
 - ii. Session data is persistently maintained across page reloads, and the correct state of the user's interaction is preserved, except for in-process actions. For instance, a

scenario is described where a listener creates a list of favorite songs, and after a page reload, the list remains intact, demonstrating the session's persistence.

b. Logout and Session Clearing (10 points):

i. Points Earned: 10

1. An effective logout mechanism has been implemented, clearing the current session while preserving the user's data integrity in the database.