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Submitted to:

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Section:

• BSE-5B

Topic:

• Diagrams Report for Project Title "AI-Powered Music Recommendation System".

Fully Dressed Use-Case

Use Case Name: Create & Manage Playlists

Item	Description
Use Case ID	UC4
Use Case ID	004
Use Case Name	Create & Manage Playlists
Actor	User
Secondary Actors	None
Preconditions	User must be logged in.System must display a playlist creation interface.
Postconditions	The playlist is successfully created, edited, or deleted.Changes are reflected in the user's profile.
Normal Flow	 User selects the option to create a playlist. The system prompts the user to enter a playlist name. User adds songs to the playlist. User can edit or remove songs from the playlist. User saves the playlist. The system confirms the playlist creation. User can edit the playlist later (rename, add/remove songs).
Alternative Flow	A1: Editing an Existing Playlist 1. User selects an existing playlist to edit. 2. System displays playlist details. 3. User makes changes (rename, add, or remove songs). 4. System updates the playlist. A2: Deleting a Playlist 1. User selects an option to delete a playlist. 2. System prompts for confirmation. 3. Upon confirmation, system deletes the playlist.
Exception Flow	 E1: System error during playlist creation If there is a system error while creating or saving a playlist, the system displays an error message and allows the user to retry. E2: Playlist name already exists If the user attempts to create a playlist with a duplicate name, the system prompts them to choose another name.
Priority	High
Frequency of Use	Frequent
Assumptions	The user is familiar with the playlist feature.The system allows editing and managing playlists without needing admin privileges.
Special Requirements	The system should support large playlists (up to 500 songs).Fast and responsive user interface for managing playlists.
<u></u>	None

System Sequence Diagram Use Case Name: Create & Manage Playlists AI-Powered Music Recommendation System Music Database Database Select "Create Playlist" Display playlist creation interface Enter playlist name and add songs Retrieve song details Return song details Save playlist Store playlist details Confirm playlist saved Display success message Editing an existing playlist Select existing playlist Retrieve playlist details Return playlist details Display playlist details Edit playlist (rename/add/remove songs) Update playlist details Confirm update Display success message AI-Powered Music Recommendation System Music Database Database

Communication Diagram

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