Design (Creating a Blueprint of the Project) – Web Music Player

1. Wireframe (Website Layout Design)

✔ Design the Homepage:

Create a clean and modern UI for a music player.

Include a music controls section (play, pause, next, previous).

Display current song details (title, artist, album cover).

Add a playlist section where users can select songs.

Optional: Implement a dark/light mode toggle for better UI experience.

✔ Include Key Functional Sections:

Search Bar → To find songs within a playlist.

Volume & Progress Bar → To control playback and track progress.

Music Visualization (Optional) → Display visual effects based on audio beats.

✔ Ensure Responsive Design:

The player should work smoothly on desktops, tablets, and mobile devices.

Use flexbox or grid layouts for better structuring.

2. Define the Data Handling Approach

✔ Database Structure (If Needed):

Since this is a frontend project using HTML, CSS, and JavaScript, a backend database is not required.

All song details will be stored in a JavaScript array or JSON file.

✔ Audio Source Handling:

Use local audio files or fetch music from an external API (like Spotify API or SoundCloud API).

3. Choose Technologies

✔ Frontend:

HTML → Structure of the webpage (buttons, controls, playlists).

CSS → Styling for the music player (dark theme, animations, layout).

JavaScript → Controls the play, pause, seek, volume adjustments, and API integration.

✔ Audio Handling in JavaScript:

Use the HTML5 <audio> API for playing and controlling music.

✔ Optional API Integration:

Spotify Web API for real-time music streaming.

Last.fm API for fetching song details and recommendations.

4. Project Management with GitHub

✔ Use GitHub Projects for tracking progress:

Create tasks for UI design, audio integration, and testing.

Assign tasks (if working in a team).

Use GitHub Issues to report and fix bugs.