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Title:- Assignment 1a

**Project Name:- Mood-Based Music and Art Recommendation Platform**

**1. Brief Information About the Project (1a)**

The **Mood-Based Music and Art Recommendation Platform** is a web-based application that provides personalized music and art suggestions based on a user’s mood. It allows users to select how they’re feeling (e.g., happy, sad, energetic, relaxed) or their current activity (e.g., workout, study, party, chill), and instantly receive music and visual content that aligns with their mood. Additionally, the platform tailors recommendations according to the time of day and season, ensuring that the content is contextually relevant. Whether it’s a motivational playlist for a workout or relaxing visuals for a study session, the platform helps users find the right music and art to match their emotional and situational needs.

**2. Set the Goals & Deliverables (1a)**

**Goals:**

* **Personalized Experience**: Provide users with music and art suggestions that align not only with their mood but also with their current activity, such as workout, study, relax, or party.
* **Context-Aware Recommendations**: Make sure the recommendations change dynamically depending on the time of day (e.g., morning chill, evening relaxation) and the season (e.g., winter vibes, summer fun).
* **Interactive Features**: Users can instantly change their mood and get fresh recommendations for music and art that fit their new selection.
* **Seamless Experience**: Ensure smooth integrations with APIs like YouTube for music and platforms like Unsplash or Pixabay for art, offering users a fluid experience.
* **Responsive Design**: The platform should be accessible and visually appealing across all devices, from desktop computers to mobile phones.

**Deliverables:**

* **Fully Functional Website**: A live site that lets users select their mood or activity and receive tailored music and art recommendations.
* **Mood and Activity-Based System**: A recommendation system based on mood (e.g., happy, sad) or activity (e.g., workout, study).
* **API Integrations**: Successful implementation of music and art APIs (YouTube for music and Unsplash/Pixabay for art).
* **Interactive Elements**: Real-time mood or activity-changing functionality with instant updates for music and art recommendations.
* **Responsive Design**: A mobile-optimized platform with an intuitive user interface.

**3. Finalize the Modules of the Project (1a)**

The project will be divided into several modules:

1. **User Interface (UI) and Design**:
   * **Mood & Activity Selector**: Users can select how they’re feeling (e.g., happy, relaxed) or what they’re doing (e.g., working out, studying).
   * **Time of Day & Seasonal Recommendations**: Content should change dynamically depending on the time of day and season.
   * **Responsive Design**: The platform should look great and work well across mobile and desktop devices.
2. **Music Recommendation Module**:
   * Using the **YouTube API** or **MP3 files**, provide music recommendations based on the user's selected mood or activity. For YouTube, embed videos directly, and for MP3 files, play music directly on the platform.
   * Ensure music starts automatically when selected by the user.
3. **Art Recommendation Module**:
   * Integrate with **art APIs** like Unsplash or Pixabay to fetch mood-appropriate visual content (images or videos).
   * Display either one image or a slideshow of art that matches the user’s mood or activity.
4. **Time and Seasonal Context Module**:
   * Adapt recommendations based on the time of day (e.g., morning relaxation music, evening chill).
   * Provide seasonal-themed recommendations (e.g., cozy winter vibes, energetic summer tunes).
5. **User Interaction & Personalization**:
   * Allow users to change their mood or activity at any time and see updated recommendations instantly.
   * Provide a "like" or "dislike" feature for users to give feedback on recommendations, which can help personalize their experience further.
6. **Backend and API Integration**:
   * **YouTube API** to fetch music videos.
   * Art APIs to fetch images and visuals based on the user’s selected mood or activity.

**4. Define the Audience (1a)**

This platform is designed for:

* **Music and Art Lovers**: People who enjoy discovering music and visual content that matches their mood or activity.
* **Young Adults and Professionals**: Primarily targeting individuals aged 18-35 who appreciate personalized digital experiences.
* **People with Active Lifestyles**: Whether it’s someone looking for workout music, focus tracks for studying, or relaxing art for unwinding, this platform offers something for everyone.
* **Tech-Savvy Users**: Those who enjoy interactive and personalized online experiences.
* **Emotionally Minded Individuals**: Those who use music and art as a way to connect with their emotions or to enhance their mood based on what they’re doing at the moment (e.g., studying, partying, relaxing).
* **Wellness Enthusiasts**: People looking to incorporate music and art into their wellness routines, whether for motivation, focus, relaxation, or mood management.

**5. Pain Points & the Ideal Experience (On the basis of existing systems)**

**Pain Points in Existing Systems:**

* **Lack of Personalization**: Many music and art recommendation platforms offer generic suggestions that don’t take the user’s mood, activity, or time of day into account. For example, platforms like Spotify or YouTube recommend based on past preferences, but there’s little focus on the emotional or situational context.
* **Disjointed Experience**: In some existing platforms, the experience of finding the right music and art is disjointed. For example, a user might need to search for music on one platform (like YouTube) and art on another (like Unsplash), leading to a fragmented user journey.
* **Time and Seasonal Awareness**: Few platforms dynamically adapt to the time of day or season. For instance, you may hear energetic music in the evening when you're winding down, which can be distracting instead of relaxing.
* **Lack of Integration**: There’s also the issue of limited integration across different media. If a user wants both music and art that fit their mood, they need to go to multiple platforms. This is inconvenient and reduces the overall user experience.

**Ideal Experience:**

* **Personalized, Mood-Based Recommendations**: The platform should intuitively recommend music and art that is finely tuned to the user’s current mood or activity (e.g., workout, relax, party). By allowing for mood customization and activity-based suggestions, it provides a more tailored experience compared to generic recommendation systems.
* **Seamless Integration**: Users can access both music and art in a single platform. Whether it’s relaxing music for studying or motivational art for a workout, everything the user needs is available in one place, creating a smooth, unified experience.
* **Real-Time Mood Switching**: Users should be able to dynamically change their mood or activity and get real-time updates for both music and art recommendations without needing to refresh or leave the page.
* **Context-Aware Recommendations**: The platform will automatically adjust recommendations based on time of day (morning calm music, evening relaxation tunes) and season (e.g., cozy winter music or vibrant summer art). This ensures that the suggestions always feel appropriate and are aligned with the user’s current context.

**6. Set the Visual Direction**

**Key Design Elements:**

1. **Color Palette:**
   * Soft colors like pastel blues and greys for relaxing moods.
   * Bright colors like yellows and greens for happy or motivated moods.
   * Warm tones for winter and cozy vibes.
   * Cool tones for summer or calm music.
2. **Typography:**
   * Use clean, easy-to-read fonts like **Roboto** or **Lato**.
   * Bold fonts for titles and headings to make them stand out.
   * Simple and minimal text to focus on music and art.
3. **Imagery:**
   * Mood-related art (e.g., nature for relaxing, abstract for motivation).
   * Seasonal imagery (snowflakes for winter, flowers for spring).
   * High-quality images from **Pixabay** or **Unsplash**.
4. **Layout:**
   * Simple and intuitive layout for easy navigation.
   * Music player placed at the bottom with essential controls.
   * Mood and time filters that are easy to access.
5. **Animations & Transitions:**
   * Smooth transitions when switching between moods or songs.
   * Subtle hover effects on buttons and images to make the interface interactive.
6. **Responsive Design:**
   * Ensure the platform works well on all devices (desktop, tablet, mobile).
   * Design should adapt based on screen size.
7. **Minimalist Aesthetic:**
   * Clean design with minimal text and clutter.
   * Focus on music and artwork to create a calm, immersive experience.
8. **Map out the Project structure. (1a)**

**Project Folder Structure:**

/mood-music-art-platform

│

├── /assets # Store all images, music, and media files

│ ├── /images # Mood images from Unsplash or Pixabay

│ ├── /music # MP3 files or YouTube music links

│ ├── /icons # Icons for buttons and navigation

│ └── /videos # Any video files (optional)

│

├── /css # Folder for styling the website

│ ├── styles.css # Main stylesheet for the design (colors, layout, fonts)

│ └── responsive.css # For mobile-friendly design (responsive layout)

│

├── /js # JavaScript files for website functionality

│ ├── main.js # Core script for changing moods, playing music, etc.

│ ├── playlist.js # Script to manage YouTube music or playlist

│ ├── mood.js # Script to handle mood and season changes

│ └── user.js # Script for login, guest access, etc.

│

├── /index.html # Home page where the user selects mood, plays music, and sees art

├── /login.html # Login page for users who want to register

├── /guest.html # Guest page where users can explore without logging in

└── /about.html # About page explaining how the platform works

**What Each Folder/File Does:**

1. **/assets:**
   * **/images**: Stores all the pictures you will use for moods and seasons (from **Unsplash** or **Pixabay**).
   * **/music**: Holds MP3 files or links to YouTube music.
   * **/icons**: Contains small icons for buttons and navigation.
   * **/videos**: Optional folder for video clips.
2. **/css:**
   * **styles.css**: This is the main file for website design (layout, colors, fonts, etc.).
   * **responsive.css**: This file makes sure your website looks good on phones, tablets, and computers.
3. **/js:**
   * **main.js**: This controls the main features of the site, like changing moods, playing music, etc.
   * **playlist.js**: Helps manage the music playlist (YouTube or MP3 files).
   * **mood.js**: Controls the mood selection and adapts the platform accordingly.
   * **user.js**: Manages login and guest user functions.
4. **HTML Files:**
   * **index.html**: The home page where users select a mood, play music, and view art.
   * **login.html**: Page for users to sign in or create an account.
   * **guest.html**: Allows users to access the platform without logging in.
   * **about.html**: Explains how the platform works and its features.
5. **Plan the content for each page. (1a-HTML)**

**1. Home Page**

The Home Page is the first point of interaction for users. It sets the tone for the entire platform and invites them to start exploring music and art recommendations.

**Content:**

* **Title:** "Mood-Based Music & Art Recommendation Platform"
* **Intro Text:** A brief description of how the platform works—recommending music and art based on the user's mood, time of day, and season.
* **Mood Selection:** A dropdown menu or buttons for users to choose their current mood, such as *Happy*, *Relaxed*, *Motivated*, etc.
* **Mood-Based Music Recommendations:**
  + Display music suggestions that match the selected mood.
  + Integrate YouTube API to play relevant tracks, such as *Happy* playlists or *Relaxing* music.
* **Mood-Based Art Recommendations:**
  + Fetch art from platforms like **Unsplash** or **Pixabay** based on the mood and display them alongside the music.
  + Art can be displayed as a single image or a slideshow.
* **Seasonal/Time-Based Recommendations:**
  + Display music and art based on the time of day or season. For example:
    - *Morning:* Uplifting music with bright, motivational artwork.
    - *Evening:* Soothing music with relaxing visuals.
* **Guest Login Option:** Allow users to explore the platform without logging in, but also give them the option to create an account for a personalized experience.
* **Navigation Bar:** Easy navigation links to other pages (Login, About, etc.).

**2. Login Page**

The **Login Page** is for users who want a more personalized experience. They can log in or sign up here.

**Content:**

* **Title:** "Login"
* **Login Form:**
  + Fields for username, email, and password.
  + Buttons for "Log in" (existing users) and "Sign up" (new users).
* Navigation Links: Include options to go back to the Home Page or switch to the Guest Page if they don’t want to log in.

**3. Guest Page**

The Guest Page lets users explore the platform without needing an account.

**Content:**

* **Title:** "Explore as a Guest"
* **Intro Text:** A short description explaining that users can browse the platform and enjoy music/art recommendations without signing up.
* **Mood Selection:** Similar to the Home Page, let users choose a mood and explore recommendations.
* **Music & Art Display:** Show mood-based music and artwork recommendations without requiring a login.
* **Call to Action:** Encourage users to create an account for a personalized experience.
* **Navigation Links:** Return to the Home Page and Login Pag**e**.

**4. About Page**

The About Page explains the platform’s purpose and features.

**Content:**

* **Title:** "About Us"
* **Intro:** A paragraph describing how the platform helps users find music and art based on their mood, time of day, and seasonal preferences.
* **Features:**
  + Mood-based music and art recommendations.
  + Personalized suggestions based on time of day or season.
  + Easy and intuitive interface for both guest users and logged-in members.
* **Contact Info:** Include a way for users to reach out, such as an email or social media link.

**General Features Across All Pages:**

* **Navigation Bar:** Simple and intuitive navigation at the top of every page, with links to the Home Page, Login Page, Guest Access, and About Page.
* **Footer:** Include copyright and any legal information, along with links like privacy policy or terms of service.
* **Mobile-Responsive Design:** Ensure all pages are mobile-friendly, adapting to different screen sizes for a smooth experience across devices.

**Key Features Across All Pages:**

* **User Mood Selection:** Allow users to select their mood (Happy, Relaxed, Motivated, etc.) to personalize their experience.
* **Dynamic Music & Art Suggestions:** Provide music and art recommendations based on mood, time of day, and seasonal changes.
* **Guest Access:** Users can explore without logging in, with the option to log in for a more personalized experience.
* **User Login/Sign Up:** Logged-in users can save their preferences for future visits.
* **Visual and Audio Integration:** Seamlessly combine visual art from APIs (like Unsplash or Pixabay) with music recommendations to create a holistic mood-based experience.

**9. Add ideas for content, images & layout.  (1-a-CSS)**

**1. Engaging Content Ideas**

**Homepage:**

* **Dynamic Headline:**  
  Upon loading, the homepage headline could change to create an engaging experience. It could start with "Discover Your Mood" and transition to something like "Find Music and Art That Matches Your Mood," accompanied by an animation that introduces a sense of movement to the page, such as a smooth typing effect.
* **Mood-Based Backgrounds:**  
  When users select a mood (e.g., Happy, Relaxed), the background color or theme of the site can shift to match that mood. A “Happy” selection could introduce bright, vibrant colors, while a “Relaxed” mood could bring in softer, calming hues.

**Music and Art Display:**

* **Floating Music & Art Cards:**  
  After users select their mood, music tracks and artwork could appear with smooth animations, creating the impression that the content is coming to life. This interaction would provide a more engaging and visually appealing experience.
* **Interactive YouTube Thumbnails:**  
  Music tracks can be displayed as YouTube thumbnails. Upon clicking, they could expand into a small player within the website, allowing users to listen without navigating away from the site.

**2. Image and Art Presentation**

**Mood-Based Art:**

* **Seamless Image Transitions:**  
  When users choose a specific mood, the artwork could seamlessly transition onto the screen with smooth animations. This adds an interactive feel, as the images adjust to the user’s selected mood.
* **Dynamic Art with Music Sync:**  
  To create a more immersive experience, the artwork can be designed to subtly move in sync with the music. For example, relaxing music could trigger gentle, slow-moving visuals, while energetic tracks could result in more vibrant, dynamic artwork.

**3. Layout and Design**

**Fluid and Interactive Layout:**

* **Parallax Effect:**  
  Implementing a parallax effect could give the website a dynamic, layered feel. As users scroll, the background moves at a different speed than the content, providing a sense of depth and making the site visually interesting.
* **Responsive Grid:**  
  The content layout could be flexible, adjusting based on the user’s selection. As the mood changes, the music and artwork displayed can rearrange to provide a dynamic, customized experience for each user.

**4. Enhancing User Experience with CSS**

**Engaging Animations:**

* **Mood-Specific Animations:**  
  The animations that accompany each mood could be customized to align with the user’s selection. For example, when selecting “Happy,” the page could display lively and energetic animations like bubbles or confetti, whereas “Relaxed” might feature calming waves or smooth transitions.
* **Hover Effects:**  
  Hover effects on elements such as music tracks or artwork could make the site feel more interactive. For instance, hovering over a music card could slightly enlarge it or change its color, giving users immediate visual feedback.

**5. Mood-Based Color Scheme**

**Dynamic Color Changes:**

* When a user selects a mood, the entire color scheme of the site could adapt accordingly.
  + For instance, selecting “Happy” could trigger bright, vibrant colors like yellows and oranges, while “Relaxed” might bring in calming blues and greens.
  + Additionally, the site could adapt based on the time of day, with a fresh, light color palette in the morning and warmer, softer tones in the evening.

**6. Interactive Features**

**Syncing Music and Art:**

* **YouTube Playlist Integration:**  
  Once a user selects a mood, the platform could automatically generate a music playlist based on that mood, sourced from YouTube. This ensures that users experience music that complements their chosen vibe, without having to search for it manually.
* **Interactive Music and Art Experience:**  
  The selected mood not only influences the music but also adjusts the displayed artwork. For example, the visuals could subtly change based on the tempo or rhythm of the music, enhancing the sense of immersion.

**7. Final Thoughts**

The overarching goal of this project is to create an interactive and immersive experience where users can find music and art that resonates with their emotional state or activity. The site will not only provide music based on mood but also offer artwork that complements the user's selected atmosphere. Through seamless transitions, dynamic color schemes, and mood-specific elements, users will feel as though the entire website is responding to their needs.

This project will also feature a personalized user experience, where the content (both music and art) evolves with user choices, creating a dynamic environment that aligns with their emotions, time of day, and even seasonal changes. The goal is to offer a platform where users can easily explore a variety of moods through music and art, creating a unique and tailored experience each time they visit.