**🎧 Front-End UI/UX Mini Project**

**Music Playlist Organizer Website – VibeWave**

**1. Title Page**

**Project Title:** Vibe Wave – “Music Playlist Organizer Website”  
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**Course:** UI/UX Design Fundamentals  
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**2. Abstract**

VibeWave is a Gen Z–oriented music playlist organizer web app that blends modern UI aesthetics with functional interactivity. It features a landing page and a main application interface for browsing, managing, and playing music playlists. Built using HTML5, CSS3, JavaScript, and Bootstrap, the project showcases responsive design, dynamic playlist rendering, and a mini music player. Though currently limited to front-end functionality, it sets the stage for future backend integration and enhanced user personalization.

**3. Objectives**

* Create a visually engaging music playlist organizer.
* Implement responsive layout using Bootstrap 5.
* Develop interactive playback controls using JavaScript.
* Design a Gen Z–friendly dark mode interface.
* Enable playlist browsing and library management.

**4. Scope of the Project**

* Focused on front-end development only.
* Includes landing page and main application interface.
* No backend or real-time music data integration.
* Responsive across desktop, tablet, and mobile devices.

**5. Tools & Technologies Used**

| **Tool/Technology** | **Purpose** |
| --- | --- |
| HTML5 | Structure and semantic layout |
| CSS3 | Styling, gradients, and theming |
| JavaScript + jQuery | Playback logic and DOM manipulation |
| Bootstrap 5 | Responsive grid layout |
| Font Awesome | Iconography |

**6. HTML Structure Overview**

* Semantic tags: <header>, <nav>, <main>, <section>, <footer>
* Landing page with welcome message and CTA button
* Sidebar navigation in main app: Home, Browse, Library
* Playlist detail pages with back navigation

**7. CSS Styling Strategy**

* Dark mode theme with neon pink and green accents
* Gradient backgrounds and hover effects on playlist cards
* External stylesheets with organized comments
* Responsive design using Bootstrap grid

**8. Key Features**

| **Feature** | **Description** |
| --- | --- |
| Landing Page | Countdown and redirect to main app |
| Sidebar Navigation | Easy access to Home, Browse, Library |
| Playlist Cards | Gradient styling and hover effects |
| Mini Music Player | Cover art, title, artist, controls |
| Responsive Layout | Mobile-friendly design using Bootstrap |

**9. Challenges Faced & Solutions**

| **Challenge** | **Solution** |
| --- | --- |
| No backend integration | Used hardcoded playlist data |
| Limited search functionality | Placeholder search bar implemented |
| Accessibility gaps | Planned ARIA roles and semantic improvements |

**10. Outcome**

Developed a visually rich and interactive music playlist organizer prototype. The project demonstrates proficiency in responsive design, UI theming, and JavaScript-based interactivity.

**11. Future Enhancements**

* Integrate real music data via APIs (Spotify, SoundCloud)
* Add progress bar, volume control, and track time
* Implement user authentication and personalized libraries
* Improve accessibility and add dark/light mode toggle

**12. Sample Code**

*landing.js code*

*let countdown = 5;*

*const countdownSpan = document.getElementById('countdown');*

*const interval = setInterval(() => {*

*countdown--;*

*countdownSpan.textContent = countdown;*

*if(countdown <= 0){*

*clearInterval(interval);*

*window.location.href = 'vibewave.html';*

*}*

*}, 1000);*

*document.getElementById('enterBtn').addEventListener('click', () => {*

*window.location.href = 'vibewave.html';*

*});*

*script.js code*

*let playlists=[*

*{*

*title:'Chill Vibes',*

*cover:'https://images.unsplash.com/photo-1506157786151-b8491531f063?auto=format&fit=crop&w=400&q=60',*

*songs:[*

*{title:'Soft Flow',artist:'DJ Calm',src:'https://www.soundhelix.com/examples/mp3/SoundHelix-Song-1.mp3'},*

*{title:'Easy Vibes',artist:'DJ Smooth',src:'https://www.soundhelix.com/examples/mp3/SoundHelix-Song-3.mp3'}*

*]*

*},*

*{*

*title:'Workout Pump',*

*cover:'https://images.unsplash.com/photo-1500530855697-b586d89ba3ee?auto=format&fit=crop&w=400&q=60',*

*songs:[*

*{title:'Run Faster',artist:'DJ Energy',src:'https://www.soundhelix.com/examples/mp3/SoundHelix-Song-2.mp3'}*

*]*

*}*

*];*

*let currentPlaylist=null;*

*let currentSongIndex=0;*

*let shuffle=false, repeat=false;*

*const audio=document.getElementById('audioPlayer');*

*function renderPlaylists(containerId){*

*const container=$(`#${containerId}`);*

*container.empty();*

*playlists.forEach((pl,i)=>{*

*container.append(`*

*<div class="col-md-4 mb-3">*

*<div class="playlist-card p-3" data-index="${i}">*

*<img src="${pl.cover}" style="width:100%; border-radius:12px; margin-bottom:8px;">*

*<h5>${pl.title}</h5>*

*<p>${pl.songs.length} songs</p>*

*</div>*

*</div>*

*`);*

*});*

*}*

*renderPlaylists('playlistContainer');*

*$('#navHome').on('click',()=>{*

*hideAllSections();*

*$('#homeSection').show();*

*});*

*$('#navBrowse').on('click',()=>{*

*hideAllSections();*

*$('#browseSection').show();*

*renderPlaylists('browsePlaylistContainer');*

*});*

*$('#navLibrary').on('click',()=>{*

*hideAllSections();*

*$('#librarySection').show();*

*renderPlaylists('libraryPlaylistContainer');*

*});*

*function hideAllSections(){*

*$('#homeSection, #browseSection, #librarySection, #playlistDetailSection').hide();*

*}*

*$(document).on('click','.playlist-card',function(){*

*let idx=$(this).data('index');*

*currentPlaylist=playlists[idx];*

*currentSongIndex=0;*

*hideAllSections();*

*$('#playlistDetailSection').show();*

*$('#playlistTitle').text(currentPlaylist.title);*

*renderSongs();*

*playSong(currentSongIndex);*

*});*

*function renderSongs(){*

*$('#songList').empty();*

*currentPlaylist.songs.forEach((s,i)=>{*

*$('#songList').append(`<li class="list-group-item d-flex justify-content-between align-items-center">${s.title} - ${s.artist} <button class="btn btn-sm btn-outline-light playSongBtn" data-index="${i}"><i class="fas fa-play"></i></button></li>`);*

*});*

*}*

*function playSong(idx){*

*if(!currentPlaylist || currentPlaylist.songs.length===0) return;*

*currentSongIndex=idx;*

*let s=currentPlaylist.songs[idx];*

*audio.src=s.src;*

*audio.play();*

*$('#miniPlayer').fadeIn();*

*$('#miniTitle').text(s.title);*

*$('#miniArtist').text(s.artist);*

*$('#miniCover').attr('src',currentPlaylist.cover);*

*}*

*$('#miniPlay').on('click',()=>{ if(audio.paused) audio.play(); else audio.pause(); });*

*$('#miniNext').on('click',()=>{*

*if(shuffle){ playSong(Math.floor(Math.random()\*currentPlaylist.songs.length));}*

*else { currentSongIndex++; if(currentSongIndex>=currentPlaylist.songs.length){ if(repeat) currentSongIndex=0; else return;} playSong(currentSongIndex);}*

*});*

*$('#miniPrev').on('click',()=>{ currentSongIndex--; if(currentSongIndex<0){ if(repeat) currentSongIndex=currentPlaylist.songs.length-1; else currentSongIndex=0;} playSong(currentSongIndex); });*

*$('#shuffleBtn').on('click',()=>{ shuffle=!shuffle; $('#shuffleBtn').toggleClass('btn-success',shuffle); });*

*$('#repeatBtn').on('click',()=>{ repeat=!repeat; $('#repeatBtn').toggleClass('btn-success',repeat); });*

*$(document).on('click','.playSongBtn',function(){ playSong($(this).data('index')); });*

*$('#backHomeBtn').on('click',()=>{ hideAllSections(); $('#homeSection').show(); });*

**13. Screenshots of Final Output** A screenshot of a computer

AI-generated content may be incorrect.A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

**14. Conclusion**

The VibeWave project enhanced our understanding of modern UI/UX principles, responsive design, and interactive web development. It lays the groundwork for a scalable music platform with potential for real-world deployment.