Front-End UI/UX Mini Project

Project Submission Template

1. Title Page

- **Project Title**: *e.g., "Band Page"*

- **Submitted By**:

· Anson Mathew Allan (2462043), anson.mathew@btech.christuniversity.in

· Ruthvik Daniel Rajan (2462138), ruthvik.daniel@btech.christuniversity.in

· Udit R Singh (2462165), udit.r@btech.christuniversity.in

· Neeraj P (2462836), neeraj.p@btech.christuniversity.in

- **Course**: *e.g., UI/UX Design Fundamentals*

- **Instructor Name**: *Narendra G*

- **Institution**: *e.g., Christ University*

- **Date of Submission**: *DD/MM/YYYY*

2. Abstract

This project involved the design and development of a responsive fan website dedicated to the band Nirvana. The website showcases the band's history, discography, and member information. The primary goal was to create a retro, nostalgic, and responsive front-end layout using only HTML and CSS. The focus of the project was to apply UI principles and ensure a user-friendly experience across various devices. The final outcome is a static website that effectively presents information about the band.

3. Objectives

- Design a user-friendly interface with a retro, pixel-art inspired aesthetic.

- Develop a fully responsive layout using only HTML and CSS to adapt to desktop, tablet, and mobile screens.

- Implement structured HTML5 semantic elements for clear content organization.

- Apply CSS styling to manage branding, layout, and visual hierarchy.

- Ensure accessibility and readability with high-contrast color choices and appropriate typography.

4. Scope of the Project

Explain what the project includes and any boundaries:

- Focused on front-end design only.

- No JavaScript or server-side integration.

- Intended for desktop, tablet, and mobile viewports.

- Used only pure code (no libraries).

5. Tools & Technologies Used

Tool/Technology	Purpose
HTML5	Markup and content structure
CSS3	Styling and layout management
VS Code	Code editor
Chrome DevTools	Testing and debugging

6. HTML Structure Overview

- A <meta name="viewport"> tag for responsiveness.

- A navigation bar using a <nav> element with anchor links.

- A main content area with a header (<h1>) and various sections.

- Content is semantically tagged, using <div> cards for albums with <h3> for title, <p> for year, and <ul> for tracklist.

7. CSS Styling Strategy

- Used external CSS file (style.css) ·   Organized with comments

  and sections

- Techniques used:

- Flexbox and Grid for layout for navigation
- Media Queries for responsiveness and font adjustments.
- CSS Variables for theme customization.
- Pixelated font for enhanced retro theme.
- Mobile-first design approach.

8. Key Features

Feature	Description
Responsive Design	Adapts seamlessly to all devices.
Smooth & Consistent Navigation	A fixed top navigation bar allows for easy movement between the pages.
Project Cards	Flex-based layout with hover effects
Album & Member Cards	use a flex-based grid of cards to display albums, and members.
Accessible Fonts & Colors	The website features a distinct, unified aesthetic with a dark, retro color scheme and pixelated fonts.

9. Challenges Faced & Solutions

Challenge	Solution
Low Contrast Colors	Adjusted the CSS variables for text and accent colors to use higher contrast values, improving readability and accessibility.
Poor Touch Target Size	Increased the padding and font size for navigation links on smaller screens using a media query to create larger, more user-friendly touch targets.

Long Album Titles	Truncated long album titles with ellipsis and white-space: nowrap for improved card layout.

10. Outcome

- The project successfully delivered a functional and aesthetically consistent fan website for Nirvana, built using only HTML and CSS.

- The site provides a clean and responsive user interface that showcases the band's information effectively.

- The project provided a deep understanding of core front-end development principles, particularly responsive design and CSS layout techniques.

11. Future Enhancements

- Add a "Live" section that dynamically loads content about past concerts or tour dates.

- Integrate JavaScript to add interactive features like a light/dark theme toggler.

- Add more CSS animations and transitions for a more dynamic user experience.

- Implement a full-screen image gallery for each album and band member.

- Add links to various platforms like Spotify, and Apple music.

12. Sample Code

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>NIRVANA- Info</title>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link href="https://fonts.googleapis.com/css2?family=Press+Start+2P&family=VT323&display=swap" rel="stylesheet">
    <style>
        :root {
            --bg-color: #1a0826;
            --text-color: #d1e2e6;
            --accent-color: #ff69b4;
            --border-color: #4c2c5c;
            --font-main: 'VT323', monospace;
            --font-title: 'Press Start 2P', cursive;
        }

        * {
            box-sizing: border-box;
            margin: 0;
            padding: 0;
        }

        body {
            background-color: var(--bg-color);
            color: var(--text-color);
            font-family: var(--font-main);
            min-height: 100vh;
            display: flex;
            justify-content: center;
        }

        .main-app {
            width: 100%;
            max-width: 900px;
```

```css
        background-color: var(--bg-color);
    }

    .navbar {
        background-color: var(--border-color);
        padding: 10px;
        display: flex;
        justify-content: space-around;
        border-bottom: 2px solid var(--accent-color);
    }
    .navbar a {
        color: var(--text-color);
        text-decoration: none;
        font-family: var(--font-title);
        font-size: 1rem;
        padding: 5px 10px;
    }
    .navbar a:hover {
        color: var(--accent-color);
    }

    .page-content {
        padding: 20px;
    }

    .page-header h1 {
        font-family: var(--font-title);
        color: var(--accent-color);
        font-size: 2rem;
        text-align: center;
        margin-bottom: 20px;
    }

    .tour-dates ul {
        list-style-type: none;
        padding-left: 0;
    }
```

```css
    .page-header h1 {
        font-family: var(--font-title);
        color: var(--accent-color);
        font-size: 2rem;
        text-align: center;
        margin-bottom: 20px;
    }

    h3 {
        font-family: var(--font-title);
        color: var(--text-color);
        font-size: 1.2rem;
        margin-top: 0;
        margin-bottom: 10px;
        border-bottom: 1px dotted var(--border-color);
    }

    .album-list {
        display: flex;
        flex-wrap: wrap;
        gap: 20px;
        justify-content: center;
        margin-top: 20px;
    }
    .album-card {
        flex: 1 1 200px;
        text-align: center;
        border: 1px dotted var(--border-color);
        padding: 10px;
    }
    .album-card img {
        width: 100%;
        height: auto;
        border: 2px solid var(--accent-color);
        margin-bottom: 10px;
    }
    .album-card p {
```
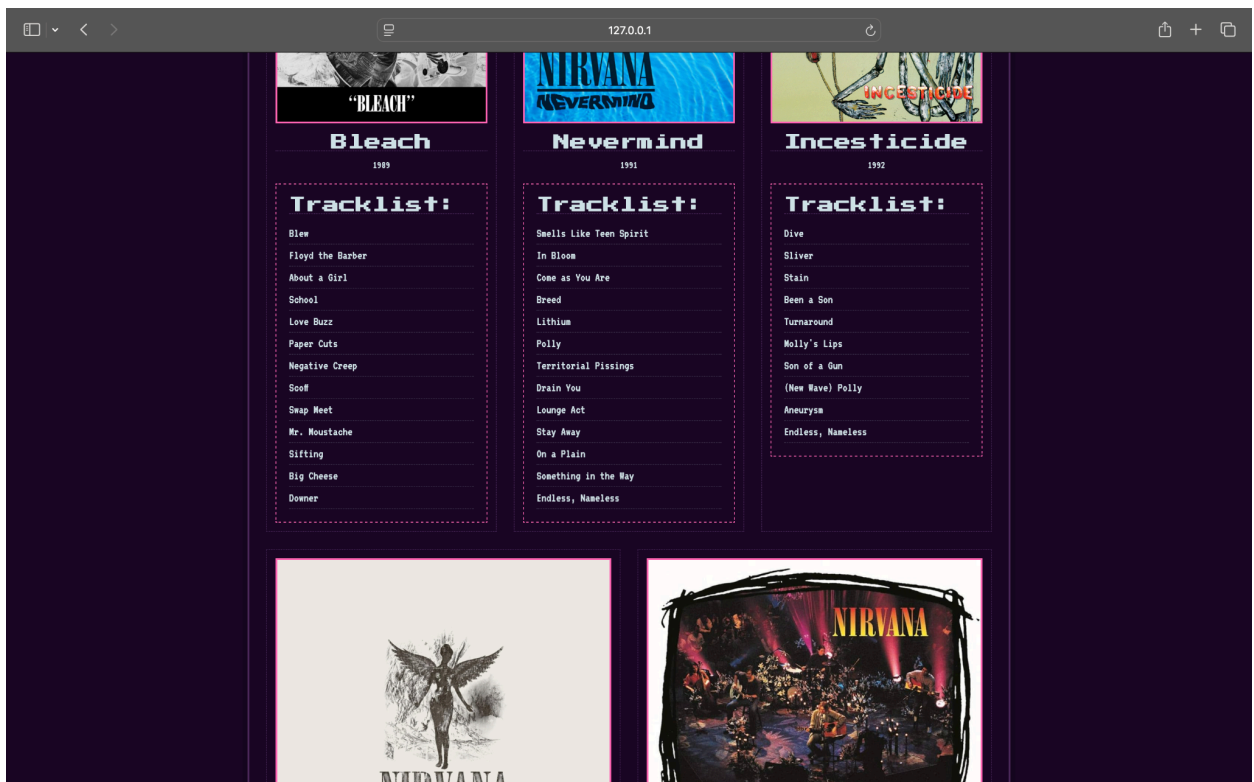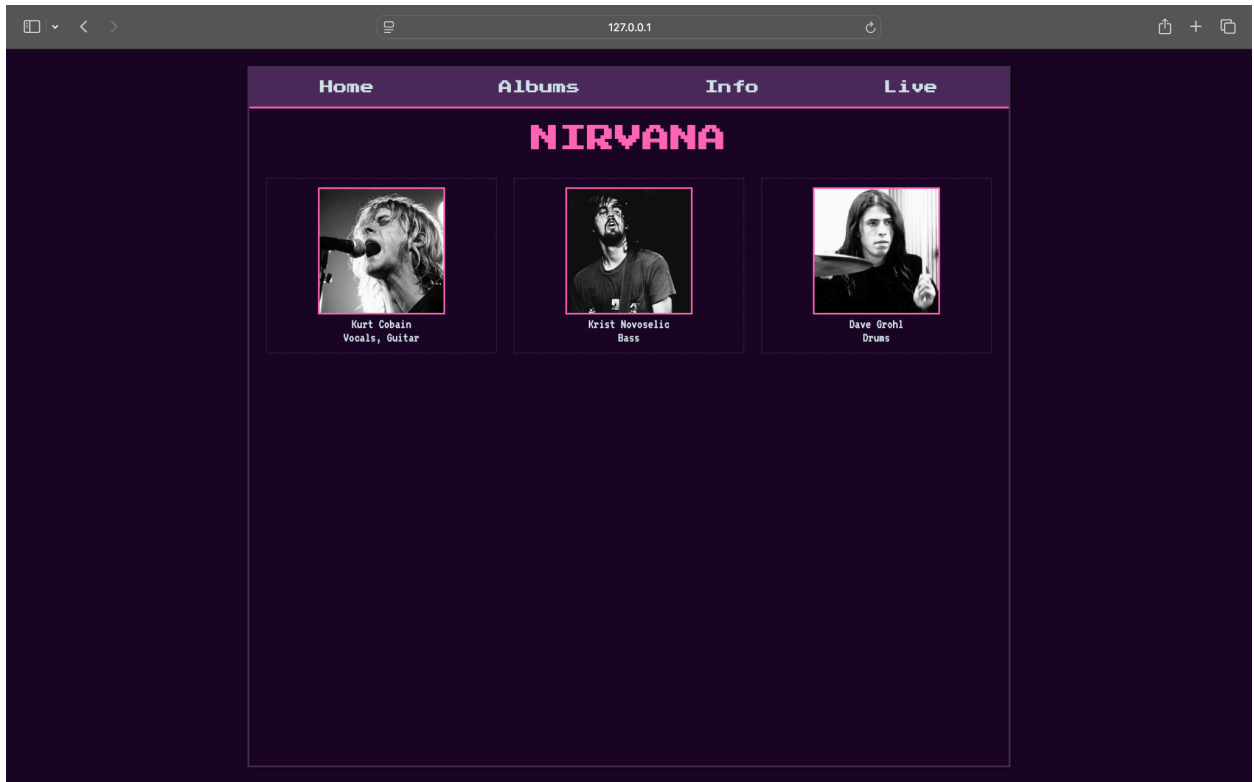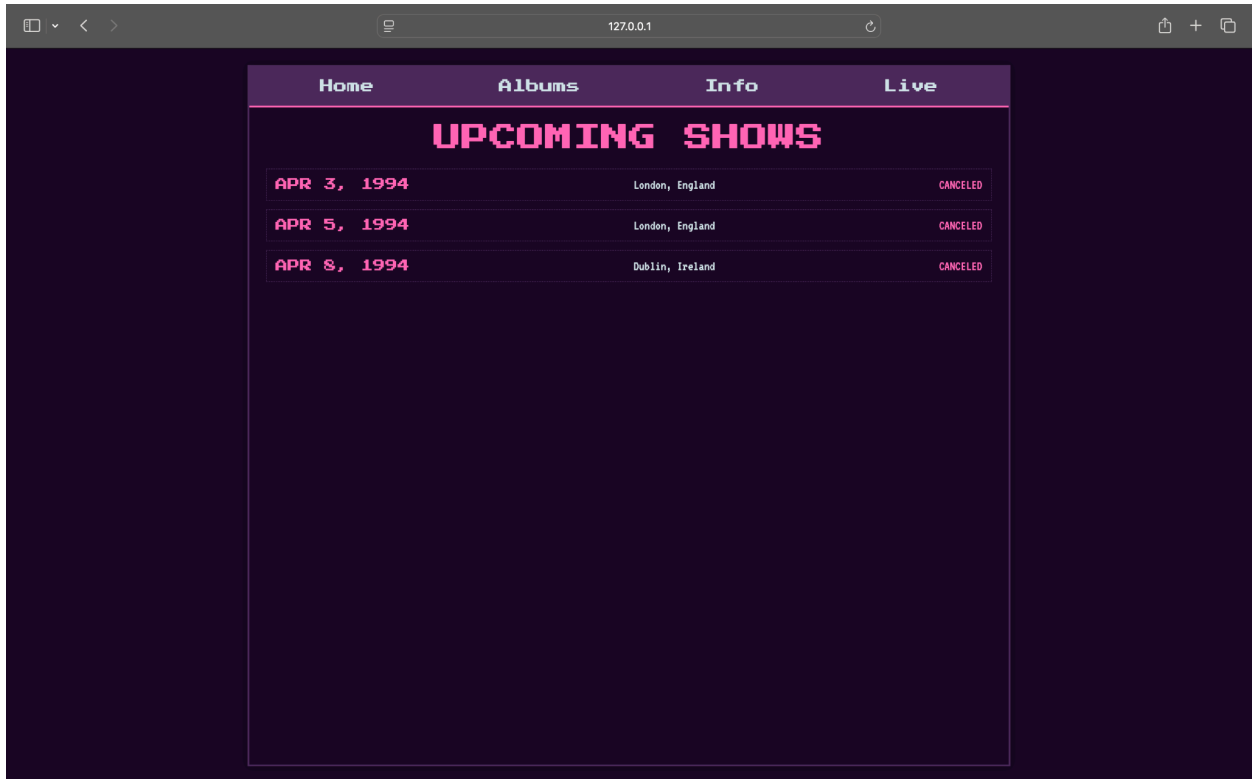
13. Screenshots of Final Output

14. Conclusion

This mini-project was an excellent opportunity to reinforce foundational front-end development skills using HTML and CSS. Building a responsive, multi-page website from the ground up offered valuable insights into layout structuring, UI aesthetics, and user-centric design.

15. References

· L&T LMS : https://learn.lntedutech.com/Landing/MyCourse