Overview:

Your task is to **build a multi-page**, **highly interactive website** called **MemeVerse**, where users can explore, upload, and interact with **memes**. This project will test your **frontend development skills**, including UI/UX, animations, state management, performance optimization, API handling, and advanced React techniques.

Project Requirements

1. Features & Functionalities

1. Homepage (Landing Page)

- Display trending memes dynamically (Fetched from an API).
- o Interactive animations & transitions.
- Dark mode toggle.

2. Meme Explorer Page

- o Infinite scrolling or pagination.
- o Meme categories filter (Trending, New, Classic, Random).
- Search functionality with debounced API calls.
- Sort by likes, date, or comments.

3. Meme Upload Page

- Upload memes (image/gif format).
- o Add funny captions using a text editor.
- Option to generate Al-based meme captions (Use a meme-related API).
- o Preview before uploading.

4. Meme Details Page

- Dynamic routing (/meme/:id).
- Display meme details, likes, comments, and sharing options.
- Comment system (Local storage for now).
- Like buttons with animation and local storage persistence.

5. User Profile Page

- Shows user-uploaded memes.
- o Edit profile info (Name, Bio, Profile Picture).
- View liked memes (saved in local storage or API).

6. Leaderboard Page

- o Top 10 most liked memes.
- User rankings based on engagement.

7. 404 Page (Easter Egg)

• A fun, meme-based 404 error page when users visit a non-existent route.

2. Tech Stack

- Next.js/React (Pages & App Router)
- React (Hooks & Components)
- Tailwind CSS (For Styling)
- Framer Motion / GSAP (For Animations)
- Redux Toolkit / Context API (State Management)
- Local Storage / IndexedDB (For Caching Data)
- Meme APIs (For Fetching Memes)
- Cloudinary / Firebase (For Image Uploads)
- Lighthouse / React Profiler (For Performance Optimization)

3. Free APIs for Use

Meme APIs

- Imgflip API Generate and fetch popular memes (Docs)
- Meme Generator API Create memes dynamically (<u>Docs</u>)

Image Upload & Storage APIs

• ImgBB API - Free image hosting for meme uploads (Docs)

4. Skills Tested

- UI/UX Design: Aesthetically pleasing and user-friendly layout.
- Animations: Smooth transitions, page loads, and UI feedback.
- State Management: Efficient use of Redux Toolkit or Context API.
- **API Handling:** Efficient API calls with caching and loading states.

- Performance Optimization: Lazy loading, image optimization, code splitting.
- **DOM Manipulation:** Interactive meme editing experience.
- **Dark Mode:** System-based preference and toggle.
- Client-side vs Server-side Rendering: Choose wisely for SEO and performance.
- Accessibility & Responsiveness: Mobile-first, accessible for all users.

5. Evaluation Criteria

Category	Point s
UI/UX & Animations	20
Functionality & Features	20
API Handling & State Management	15
Performance Optimization	15
Code Structure & Best Practices	10
Mobile Responsiveness	10
Creativity & Uniqueness	10
Total	100

Submission Guidelines

- Deploy your project using **Vercel** or **Netlify**.
- Submit your **GitHub repository** with a README explaining the project.
- Ensure a demo link is available.
- Make a **short video** explaining features, tech stack, and optimizations.