**Project Name:** E Tech Solution IT Website  
create a dynamic and responsive website for E Tech Solution, an IT services business. The site must provide information about the company, services offered, contact details, client resources, and a blog section for tech updates. The website must be user-friendly, accessible, and optimized for performance.

**2. Section**

The website must achieve the following learning outcomes:

* **Develop dynamic and accessible websites using valid HTML and CSS that comply with industry standards.**  
  *Implementation:* Constructing the website's structure with semantic HTML5 elements and styling it using modern CSS techniques, ensuring adherence to best practices and web standards.
* **Implement browser APIs, JSON, and remote APIs to create interactive and data-driven web experiences.**  
  *Implementation:* Enhancing interactivity by utilizing browser APIs, fetching data from remote APIs, and handling JSON data to dynamically update content.
* **Utilize performance monitoring tools to optimize usability, responsiveness, and user engagement.**  
  *Implementation:* Employing tools like Google Lighthouse to assess and improve site performance, ensuring quick load times and a responsive design across devices.

**3. Project Scope**

**Pages & Structure:**

* **Home Page:** Overview of E Tech Solution, mission, and services.
* **Services Page:** Detailed descriptions of IT services offered.
* **Contact Page:** Contact form, business information, and social media links.
* **Blog Page:** Regularly updated tech-related articles and company news.

**Additional Features:**

* Responsive navigation with expandable links for large view and mobile view.
* A favicon and social media metadata.
* Optimized images with lazy loading.
* Accessible design and content structure.
* Dark mode toggle for enhanced user experience.
* **Animated Elements:** Utilize CSS animations to create interactive and engaging user experiences. For instance, implement hover effects on buttons and smooth transitions between sections.
* **Background Images:** Incorporate subtle background images or patterns to enhance visual appeal without compromising readability. Ensure these images are optimized for different screen sizes.

**4 Design & Development Standards**

**HTML & CSS**

* Valid, standards-based HTML markup.
* CSS follows best practices with responsiveness and design principles (proximity, alignment, repetition, contrast, and white space).
* No horizontal scrolling on any screen size.
* **CSS Animations and Transitions:** Implement smooth animations to enhance user interaction. For example, use keyframe animations for element entrances and exits, and transitions for hover effects.
* **Background Images:** Use high-quality, optimized background images that adapt to various screen sizes. Consider implementing a subtle parallax effect to add depth.

**JavaScript Features**

* Use of ES modules and well-organized code.
* Minimum of three functions handling DOM interactions and event listeners.
* Conditional branching for interactive elements.
* Array methods for dynamic content population.
* Use of template literals for efficient string management.
* Local storage to save user preferences.
* Fetching JSON data from a remote API and a local JSON file.
* 1-2 asynchronous functions with error handling (try/catch block).
* 15+ dynamically generated items, displaying at least 4 data points each.
* Implementation of a modal dialog structure.
* Dark mode preference saved using local storage.
* **JavaScript Animations:** Enhance user interaction with animations such as content sliders or interactive form validations.

**6. Performance & Optimization**

* Total page size under 500kB for optimal loading speed.
* Image compression and lazy loading.
* Efficient JavaScript execution to improve user experience.
* **Optimized Background Images:** Ensure background images are compressed and use responsive techniques to serve appropriate sizes based on device.

**7. HTML Form & User Interaction**

* A well-structured HTML form meeting accessibility and usability standards.
* Form data displayed on a separate action page.

**8. Color Scheme & Design Style**

**Color Scheme:**

* **Primary Color:** Electric Blue (#007BFF) – Represents technology, trust, and innovation.
* **Secondary Color:** Dark Navy (#0A192F) – A deep, professional shade for contrast.
* **Accent Color:** Neon Green (#00FF7F) – Adds a futuristic, high-tech feel.
* **Background Color:** Off-White (#F8F9FA) – Keeps the site clean and readable.

**Design Style:**

* **Minimalist and Sleek:** Focus on clear typography, whitespace,

Integrating the specified learning outcomes into the E Tech Solution IT Website project plan will ensure a comprehensive educational experience. Here's how each objective aligns with the project's components: