Product Requirements Document - Laxmideepak Portfolio Website

Project Overview

A modern, responsive portfolio website showcasing Laxmideepak Nelapatla's professional experience, skills, and projects with Apple-inspired light mode and dark mode themes.

Current Status: COMPLETED 🔽

Core Features Implemented

1. Theme System

- Apple-inspired light mode with custom CSS variables
- V Dark mode with cosmic/starry background
- V Theme switching with localStorage persistence
- WCAG 2.1 AA accessibility compliance

2. Navigation & Header

- V Glass morphism navigation bar
- Integrated time/weather display (04:15:39 PM Wed, Sep 3)
- Responsive navigation with Work, About, Contact links
- V Email me and Resume buttons

3. Hero Section

- Animated 3D text effects
- V Professional summary from resume
- V Static role display (Full Stack Software Engineer, Al/ML Engineer, Software Engineer)

V Profile image with border effects

4. Experience Section

- V Updated company names (Srinidhi Technologies, UTA Honors College)
- Corrected job titles and periods
- Achievement bullet points from resume
- V Card-based layout with hover effects

5. Projects Section

- 6+ projects including Dental Clinic Website, VisionCare Site, Al-Powered Land Use Predictor
- Project cards without images (as requested)
- V No "View Details" buttons
- V Technology stack displayed with icons
- Responsive grid layout

6. Skills Section

- 6 categories: Languages, WebFrameworks, Databases, DevOps/Cloud, ML/DS, Tools
- V Technology icons and emojis
- V Responsive grid layout
- V Hover effects and animations

7. Education Section

- Modern timeline design with animations
- V Updated degree names:
 - "Masters in Computer and Information Sciences" (UTA)
 - "BTech in Electronics and Communication Engineering" (JNTUH)
- Compact box sizes (1-2 lines as requested)
- Consistent heading style matching Projects section
- V Framer Motion animations

8. Contact Section

- Modal-based contact form
- V Alternative contact methods (Email, GitHub, LinkedIn)
- V Mobile-optimized design
- V Form validation and submission

9. Mobile Optimization

- Responsive design for all screen sizes
- Mobile-first approach
- V Touch-friendly interactions
- V Optimized text sizes and spacing

10. Technical Implementation

- V Next.js 15.2.4 with App Router
- V TypeScript for type safety
- Variable
 Tailwind CSS for styling
- V Framer Motion for animations
- V Custom hooks (useAnalytics)
- Component-based architecture

Content Updates Completed

Resume Integration

- V Professional summary updated
- Z Experience details synchronized
- V Skills expanded based on GitHub analysis
- Projects updated with real Vercel deployments
- Certifications included (AWS Certified Developer)

UI/UX Improvements

- Removed Writing section completely
- V Eliminated project images and view buttons
- Integrated time display in navigation
- Modern education timeline design
- Consistent heading styles across sections

Files Modified

- app/page.tsx Main page with all sections
- app/globals.css Apple light theme variables
- tailwind.config.ts Extended color palette
- components/GlassNav.tsx Navigation component

- components/ProjectCard.tsx Project display
- components/TimeWeatherDisplay.tsx Time/date widget
- components/ContactModal.tsx Contact form modal
- app/work/page.tsx Work page with projects
- app/layout.tsx Root layout with viewport meta

Testing Requirements for TestSprite

Functional Testing

- Theme Switching Light/dark mode toggle
- 1. Navigation All links and buttons working
- 1. Responsiveness Mobile, tablet, desktop layouts
- 1. Animations Framer Motion effects and transitions
- Contact Form Modal opening, form submission
- 1. Time Display Real-time updates

Content Validation

- 1. Resume Accuracy All content matches provided resume
- 1. Project Links Vercel deployments accessible
- 1. Skills Display Technology icons and categories
- Education Details Degree names and institutions

Performance Testing

- 1. Page Load Speed Initial render and navigation
- Animation Performance Smooth 60fps animations
- Mobile Performance Touch interactions and scrolling
- 1. Accessibility Screen reader compatibility

Cross-Browser Testing

- 1. Chrome/Safari/Firefox Modern browser compatibility
- 1. Mobile Browsers iOS Safari, Chrome Mobile
- 1. Responsive Design Various screen sizes and orientations
- 2.