Project 2 - Task 1: Blog Website Proposal

Cover Page

Student Name: Jiayi Wang

Course Title: WEB602

Project Title: Modern Blog Platform with Authentication & PWA Features

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Proposal

Introduction

This project aims to develop a modern, responsive blog platform that demonstrates advanced web development skills and best practices. The application will feature a complete user authentication system, content management capabilities, and progressive web app (PWA) functionality. The platform will serve as a showcase for implementing contemporary web technologies including Node.js, Express, MongoDB, and modern frontend frameworks.

The blog platform will provide users with the ability to create, edit, and share blog posts while maintaining a secure and user-friendly environment. The application will be designed with mobile-first responsive design principles and will include advanced features such as real-time updates, offline functionality, and push notifications.

Goals and Objectives

Primary Goals:

1. **Create a fully functional blog platform** with user authentication and content management
2. **Implement responsive design** that works seamlessly across all devices
3. **Demonstrate advanced web development skills** using modern technologies
4. **Ensure security best practices** with proper authentication and authorization
5. **Create a progressive web app** with offline capabilities and push notifications

Specific Objectives:

- Develop a secure user authentication system with signup, login, and logout functionality
- Create an intuitive content management interface for blog post creation and editing
- Implement form validation and error handling throughout the application
- Design a responsive, mobile-first user interface using modern CSS frameworks
- Implement session management and secure cookie handling
- Optimize for performance and user experience
- Document the codebase and create deployment instructions

Target Audience

Primary Users:

1. **Blog Authors/Content Creators**

   - Individuals who want to share their thoughts, experiences, or expertise
   - Writers looking for a simple yet powerful blogging platform
   - Professionals wanting to establish an online presence

2. **Readers/Visitors**

   - People interested in reading blog content
   - Mobile users who prefer responsive, fast-loading websites
   - Users who appreciate modern, clean interfaces

Secondary Users:

- **Developers and Technical Professionals** who will review the codebase
- **Instructors and Peers** who will evaluate the project implementation
- **Future Employers** who will assess technical skills and project quality

Key Features

1. User Authentication System

2. Blog Content Management

3. User Interface & Experience

4. Progressive Web App Features

- Offline functionality with service workers
- Installable app experience
- Fast loading with caching strategies
- Background sync capabilities

5. Security & Performance

Technology Requirements

HTML5, CSS3, SASS/LESS, JavaScript ES6, jQuery, Ajax, Bootstrap 4, VUE, SSL, Authentication/Authorization, Session & Cookies, Unit Testing, PWA, GitHub