

Phase 3 - Medium Priority Implementation Plan

Overview

This phase focuses on refactoring, performance optimization, and documentation improvements.

Tasks

1. Template Refactoring (12 hours)

- Create shared template components to reduce duplication
- Extract common template logic into reusable hooks
- Consolidate template types and interfaces
- Improve template component organization

2. Performance Optimizations (8 hours)

- Implement lazy loading for heavy components
- Add code splitting for routes
- Optimize bundle size with dynamic imports
- Implement image lazy loading
- Add React.memo for expensive components
- Use useMemo and useCallback strategically

3. Caching Strategies (4 hours)

- Enhance React Query caching configuration
- Implement service worker caching improvements
- Add localStorage caching for user preferences
- Optimize API call patterns

4. Template Linking Fixes (3 hours)

- Fix broken template navigation
- Improve template selection flow
- Add proper template versioning support

5. Documentation Improvements (6 hours)

- Add JSDoc comments to key functions
- Create component documentation
- Update README with new features
- Add inline code comments for complex logic
- Create ARCHITECTURE.md

6. Performance Monitoring (2 hours)

- Add performance measurement utilities
- Implement Web Vitals tracking

- Add bundle size monitoring

Total Estimated Time: 35 hours

Success Criteria

- ☐ Template duplication reduced by 50%+
- ☐ Bundle size reduced by 20%+
- ☐ Initial load time improved by 30%+
- ☐ All major components documented
- ☐ Performance monitoring in place
- ☐ All tests passing