

Web Application Development Project Guide

Project Proposal Presentation Requirements

Slide Structure (5-7 minutes presentation)

- **Title Slide**
 - Project title, group number, course name (EN813701), academic year (2025)
 - All group members with ID numbers and leader designation
- **Motivation** (Use bullet points, not paragraphs)
 - What specific problem does this solve?
 - Why is this problem worth solving?
 - Who experiences this problem daily?
- **Related Work & Competitive Analysis**
 - At least 3 existing similar applications/websites
 - Clear comparison table showing similarities and differences
 - Why existing solutions are insufficient
 - What makes your approach unique
- **Objectives & Scope**
 - 3-5 specific, measurable objectives
 - Clear scope boundaries (what's included/excluded)
 - Target user demographics and characteristics
- **Tools & Technology**
 - Frontend framework/technology
 - Backend technology stack
 - Database choice
 - Hosting platform
 - Development tools
- **UX/UI Design**
 - User personas (2-3 specific user types)
 - Use case diagrams for different user roles
 - User journey/flow diagrams
 - Initial wireframes or mockups
 - Font sizes must be readable (minimum 14pt)
- **API Integration Strategy**
 - Specific external APIs to be called (with URLs)
 - How each API enhances user value
 - Your developed API specifications

- API integration architecture diagram
- **Prototype**
 - Interactive mockups or wireframes
 - Key user interface screens
 - Navigation flow demonstration
- **Methodology & Timeline**
 - Development approach (Agile, etc.)
 - Weekly timeline (W1, W2, not Q1, Q2)
 - Specific milestones with dates
 - Risk assessment and mitigation
- **Conclusions**
 - Summary of expected outcomes
 - Success metrics
 - Next steps

Scoring Criteria (10 points total)

Criteria	Points	Details
Motivation	2	Clear problem statement, target users identified
Related Work Analysis	2	Thorough comparison, clear differentiation
Interface Prototype	2	Usable mockups, good UX flow
Methodology & Timeline	1	Realistic timeline, clear milestones
APIs to Call	1	Specific APIs identified, integration planned
Slide Quality & Presentation	2	Professional slides, confident delivery

Progress Presentation Requirements

Slide Structure (10 minutes + 3 minutes Q&A)

Templates to use: *Template 30 (User Flow Optimization), Template 32 (Interface Layout), Template 15 (Feature Implementation Request)*

- **Cover Slide**
 - Group number, app name, all members
- **User Interface**
 - Current implementation screenshots
 - Responsive design demonstration
 - Font sizes must be large enough to read
 - Use Template 32 (Interface Layout) for design improvements
- **Main Functions**
 - Live demonstration of working features
 - API integration examples
 - User interaction flows
 - Use Template 15 (Feature Implementation Request) for feature development
- **Demo**
 - Working application demonstration
 - Real data examples
 - Error handling showcase
 - Use Template 30 (User Flow Optimization) for smooth user experience
- **Member Contribution**
 - Specific tasks completed by each member
 - Percentage breakdown of work distribution
 - Current responsibilities
- **Collaboration via github**
 - Repository structure demonstration
 - Individual commit history evidence
 - Branch usage examples (feature branches, bug fixes)
 - Merge request/pull request demonstrations
 - Proper commit message examples
- **Gen AI Usage & Learning**
 - Document which prompt templates were used (minimum 3 templates)
 - Show examples of AI-generated content vs. your modifications
 - Reflection on AI effectiveness and learning outcomes
 - Evidence of validating/testing AI suggestions
- **Conclusions**
 - Completed milestones
 - Upcoming tasks with specific deadlines
 - Challenges and solutions

Scoring Criteria (20 points total)

Criteria	Points	Details
Interface Quality	8	Usable, responsive, professional design
Functionality	6	Working features, API integration
Documentation & Presentation	2	Clear slides, good delivery
Team Contribution	2	Fair work distribution, clear roles
Gen AI Usage & Reflection	2	Gen AI usage, explanation, and reflection

Extra Credit Opportunities (+3 points max)

- Real user feedback collection (+1)
- English presentation without reading devices (+1)

Final Project Submission Requirements

Templates to Use for Final Stage

- **Template 34 (User Guide Creation)** - For creating user documentation
- **Template 33 (Technical Documentation Request)** - For API documentation
- **Template 38 (Security Testing)** - For final security validation
- **Template 37 (Test Case Generation)** - For comprehensive testing
- **Template 4 (Real User Validation)** - For demonstrating real usage

Deliverables

- **Web Application URL** - Live, functional application
- **Presentation Slides** - Final presentation materials
- **Web API URL** - Your developed API with documentation
- **Called API URLs** - External APIs used (not libraries/frameworks)
- **Repository URL** - Complete source code
- **Video URL** - 1-3 minute demo video

Final Presentation Structure (10 minutes + 3 minutes Q&A)

- **Title Slide** - Project details, team, course info
- **Motivation** - Problem and solution summary
- **Tools & Technology** - Final tech stack used
- **Called APIs** - External APIs integrated
- **Developed API** - Your API with code examples and sample output

- **Demo** - Live application demonstration
- **Problems & Solutions** - Challenges faced and resolved
- **Conclusion & Future Work** - Achievements and next steps
- **Acknowledgements** - Libraries, resources (exclude instructors)

Final Scoring Criteria (30 points total)

Criteria	Points	Details
Call External API	3	Meaningful integration, not just display
Develop API	2	Functional API others can use
Use Your API	3	Client app uses your developed API
Interface	8	Professional, responsive, user-friendly
Functionality	8	Complete features, error handling
Real App Usage	2	Evidence of actual user adoption
Gen AI Usage & Learning	2	Template usage documented, reflection on AI learning
Documentation & Presentation	2	Complete slides, video, links

Common Pitfalls to Avoid

Proposal Stage

- ❌ Using all uppercase letters in diagrams
 - ❌ Vague timelines (Q1, Q2 instead of W1, W2)
 - ❌ Insufficient related work research
 - ❌ Unrealistic scope for timeframe
 - ❌ Generic user groups instead of specific personas
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Success Factors

Technical Excellence

- Working, deployed application
- Meaningful API integrations
- Clean, documented code
- Proper error handling
- Responsive design

User Focus

- Real problem solving
- Actual user feedback
- Intuitive interface design
- Clear value proposition
- Evidence of adoption

Professional Presentation

- Clear, well-designed slides
- Confident delivery
- Complete documentation
- Proper time management

- Team coordination

Remember: Your goal is to create a real application that real users will actually use, not just a class project. Focus on solving genuine problems with quality implementations.