



Project Definition Document

October 25, 2025

Project Title: Local-First Collaborative Text Editor using the Veilid Framework

Degree Programme: BSC Computer Science

Supervisor: Martin Nyx Brain

Category: Academic Client Project

Subcategory: Application Development

1 Proposal

1.1 Problem to be Solved

Current collaborative editors like Google Docs and Microsoft 365 rely on centralized infrastructure to handle collaborative editing of documents. This centralized approach to storage and coordination introduces risks in three main fields: user privacy, data ownership, and availability. This project will explore how to enable secure, consistent, and private document sharing between peers can be accomplished using Veilid's peer-to-peer architecture and CRDT-based state synchronisation.

1.2 Project Objectives

- Create
- Objective 2
- Objective 3

1.3 Project Beneficiaries

Identify who benefits from this project (users, researchers, organizations, etc.) and how they benefit.

1.4 Project Plan

Provide a high-level timeline of the project. You can use a list or table if preferred.

- Placeholder0
- Placeholder1
- Placeholder2
- Placeholder3

1.5 Risks Affecting the Project

Outline any technical, logistical, or ethical risks that may affect project success, and how you plan to mitigate them.

1.6 Legal, Social, Ethical and Professional Considerations

Discuss any relevant ethical or legal implications of your project (e.g., data privacy, bias, intellectual property, accessibility).

1.7 References

- Author, A. (Year). *Title of the paper*. Journal/Source.
- Author, B. (Year). *Title of another reference*.

2 Research Ethics Checklist

Summarize any ethical considerations and indicate whether formal ethics approval is needed. If applicable, reference consent forms or procedures.

3 Client Information Sheet (External Client Projects Only)

Provide details about the client organization, contact person, and nature of collaboration.

4 Appendix: Use of Generative AI (if applicable)

If AI tools (e.g., ChatGPT, Copilot) were used in preparing this document or project materials, describe exactly how and to what extent they were used.

5 Appendix: Legal, Social, Ethical, and Professional Issues (LSEPI)

For Category 3 projects, provide a more detailed analysis of relevant LSEPI topics.