

KT1: Work Plan

Objective

Build an autonomous CRUD application with relational storage, tests, logging and deliverables for KT1-KT4.

Scope

- Implement `Task Management System` (recommended variant).
- Build web interface with task list, creation, editing, deletion.
- Add search, filtering by status and pagination.
- Add persistence and seed data.
- Provide tests and documentation.

Stages and Timeline

Stage | Tasks | Duration | Deliverable

--- | --- | --- | ---

1. Requirement decomposition | Analyze assignment and acceptance criteria | 4h | Scope statement
2. Architecture and DB design | Define modules, entities, data flow | 8h | KT2 architecture doc
3. Implementation | Build MVC pages, services, persistence | 16h | Working project
4. Testing | Unit/scenario tests, fixes | 8h | Test suite and report
5. Documentation | Final report and presentation material | 4h | KT3 and KT4 docs

Total: 40 hours.

Resources

- .NET SDK 9
- IDE (Visual Studio or VS Code)
- SQLite
- NuGet packages (`Microsoft.EntityFrameworkCore.*`, `Serilog.*`, `xUnit`)

Risks and Mitigation

- Version incompatibility: pin EF Core to `9.0.3`.
- Scope growth: keep one domain entity and complete it end-to-end.
- Test instability: isolate tests via unique in-memory DB names.