

KT3: Final Report

Title

Task Management System

Goal

Develop an autonomous CRUD application using C#/.NET, relational storage and quality controls.

Planned Work

- Requirement analysis and stage decomposition
- Architecture and model design
- Development and integration
- Testing
- Delivery package preparation

Implementation Summary

- Created ASP.NET Core MVC application.
- Implemented complete CRUD for `TaskItem`.
- Added search, status filter and pagination.
- Added SQLite persistence via EF Core.
- Added logging (console and rolling file).
- Added automated tests for service logic.

Testing Summary

- Unit and scenario tests in `tests/TaskManagementSystem.Tests`.
- Main logic branches validated:
 - create
 - read with filters
 - update
 - delete
 - missing entity behavior

Repository Structure

- `src/TaskManagementSystem.Web` - application source
- `tests/TaskManagementSystem.Tests` - tests
- `docs/` - KT1-KT4 artifacts

Conclusion

The solution satisfies functional CRUD requirements and includes quality artifacts required by KT1-KT4.