PROJECT REVIEW REPORT

Project Size Classification & Effort Estimation

Project Classification

Not a "Hobby"

This is a properly designed product with extensive conceptual groundwork, not just a weekend experiment.

Thinking First

The thinking work significantly outweighs the pure coding work. Architecture drives implementation.

Product Grade

Features a complete testing pyramid, clean abstractions, and modern build orchestration.

Architecture & Tech Stack

Desktop Architecture

A robust Electron setup with clear separation between Main and Renderer processes, secure IPC, and complex build orchestration.

Data & AI

Clean database abstraction using Kysely with a dual-client setup for prod/test environments. Deep AI integration via OpenAI API.

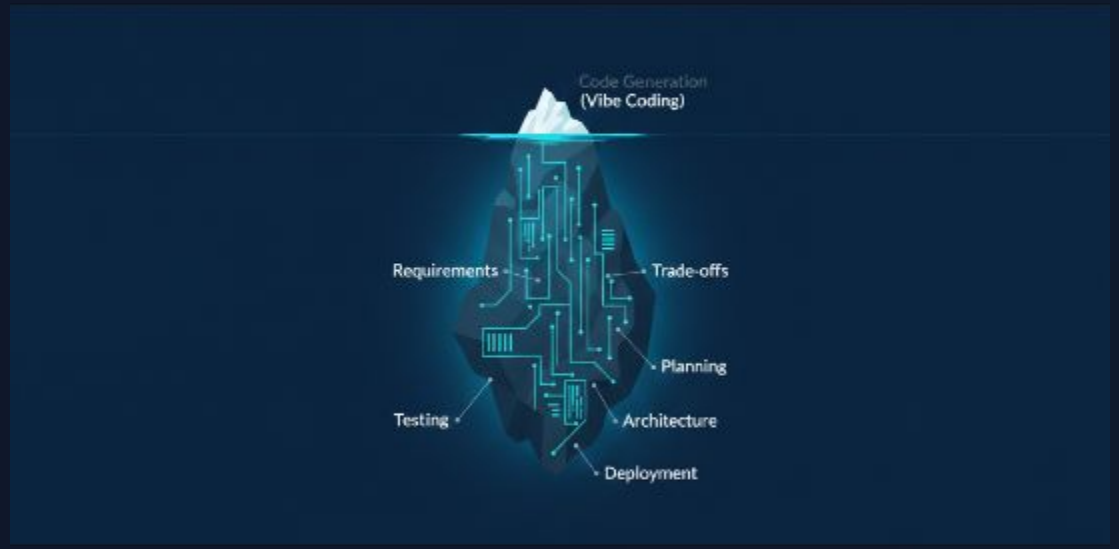
Modern Frontend

- React 18 & Vite 6
- Tailwind 4 for styling
- **XState** for robust state machines

Quality Assurance

A comprehensive testing pyramid covering Unit, Integration, and E2E layers.

The "Senior" Signal



Planning ≫ Code

For a project of this caliber, the visible production code is just the tip of the iceberg.

- **Planning:** ~44k lines of material
- **Code:** ~8k lines
- **Tests:** ~10k lines

> This ratio is typical of a senior or staff-level working style, not "code-first".

Material Volume Indicator

Area	Volume (Approx. Lines)	Notes
Thoughts / Concepts / Planning	~44,200	Dominant volume
Production Code	~8,300	Concise & Efficient
Tests	~9,960	More code than prod!
Documentation	~3,100	Not an afterthought
TOTAL	**~65,500 lines**	**Significant intellectual capital**

Effort Breakdown: Foundation

Conceptual Work & Research

`250–400 hours`

Architecture decisions, tech selection, and iterating on specs. 42 plan files with 30k lines are not a side effect—this is structured product development.

Architecture & Setup

`120–180 hours`

Marrying Electron + Vite + TS + ESM. Handling IPC security, dual SQLite clients, and complex build environments.

Effort Breakdown: Execution

Implementation

200–300 hours

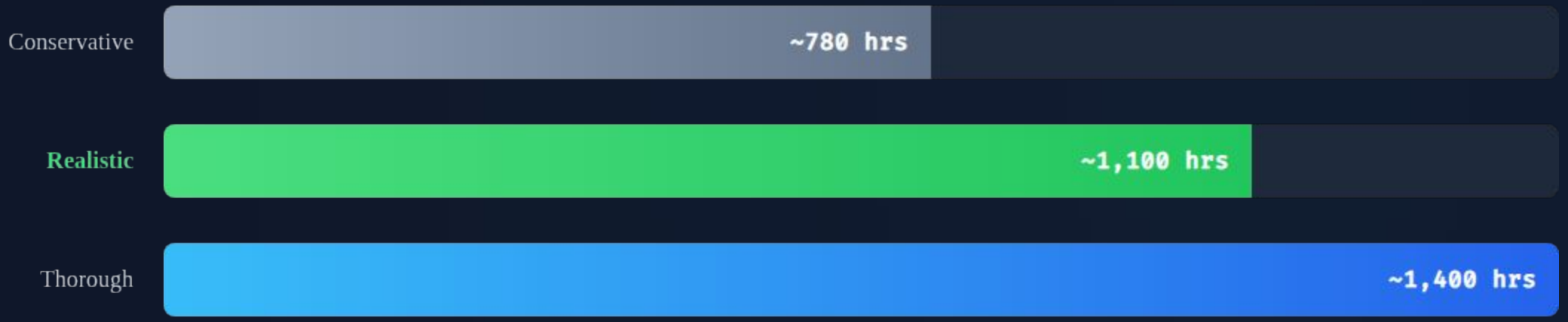
UI components, XState machines, DB access, OpenAI integration, and Zod schemas. Strict TS + Desktop context implies a slower but cleaner pace.

Testing & Documentation

210–320 hours

Designing for testability (mocks for DB/AI), stabilizing E2E tests, writing extensive docs, and ongoing refactoring.

Total Effort Estimation



Estimates are based on actual work phases, not just lines of code.

Calendar Duration

Full-Time

6–9

Months

(40h/week)

Part-Time

12–18

Months

(Alongside work)

Hobby Mode

2+

Years

(Evenings/Weekends)

Key Takeaway

1,000+

Hours of Work

If a single person designed, thought through, and implemented this alone without AI assistance.

Final Verdict

"This project does not look like 'someone just started coding', but like clear mental models, deliberate trade-offs, and product thinking."

Q & A

Discussion & Feedback

Image Sources

https://miro.medium.com/1*5susFVroAWN7Regjn-NOuQ.png

Source: levelup.gitconnected.com

https://img.freepik.com/free-vector/abstract-dark-blue-vector-futuristic-digital-grid-background_53876-110562.jpg

Source: www.freepik.com