

# Sprint 1 Plan

**Product Name:** LEMMA

**Team Name:** LEMMA

**Sprint Completion Date:** April 21, 2025

**Revision Number:** 1.0

**Revision Date:** April 7, 2025

## Goal

Establish the core application structure, implement the basic markdown editor functionality, and set up the local database foundation for storing and retrieving notes privately on the user's machine.

## Task Listing, Organized by User Story

US1.1 - As a user, I want to create and edit markdown notes so that I can capture my thoughts with rich formatting.

1. Research and select appropriate markdown editing library (4 hours)
  2. Implement basic text editor component with markdown support (6 hours)
  3. Add toolbar with common markdown formatting options (5 hours)
  4. Create preview pane to display rendered markdown (4 hours)
  5. Implement keyboard shortcuts for common formatting actions (3 hours)
  6. Add support for code blocks with syntax highlighting (4 hours)
  7. Test editor functionality across different operating systems (2 hours)
- Total for user story 1.1: 28 hours

US1.2 - As a user, I want my notes to be automatically saved so that I don't lose my work.

1. Design auto-save mechanism with configurable intervals (3 hours)
  2. Implement auto-save functionality for active note (5 hours)
  3. Create visual indicator for save status (2 hours)
  4. Add version history capability for recovery (6 hours)
  5. Test auto-save under various conditions (3 hours)
- Total for user story 1.2: 19 hours

US1.3 - As a user, I want to organize my notes with tags and categories so that I can easily find related content.

1. Design database schema for tags and categories (4 hours)
2. Create UI components for tag creation and management (5 hours)
3. Implement tag selection and filtering functionality (6 hours)
4. Build category hierarchy management system (6 hours)
5. Design and implement UI for browsing notes by tags/categories (5 hours)
6. Test with various organizational structures (2 hours) Total for user story 1.3: 28 hours

US1.4 - As a user, I want to set up a local database to store my notes so that they remain private and accessible offline.

1. Research and select appropriate database technology (4 hours)
2. Design database schema for notes storage (5 hours)
3. Implement data access layer for CRUD operations (6 hours)
4. Create migration strategy for future schema updates (3 hours)
5. Test database performance with large datasets (3 hours) Total for user story 1.4: 21 hours

US1.5 - As a developer, I want to establish the Electron.js application framework so that we have a foundation for our desktop app.

1. Set up initial Electron.js project structure (3 hours)
2. Configure build and packaging scripts for multiple platforms (5 hours)
3. Implement main window management and application lifecycle (4 hours)
4. Create basic application menu structure (2 hours)
5. Set up development environment with hot reload (3 hours)
6. Create installer scripts for Windows/Mac/Linux (4 hours) Total for user story 1.5: 21 hours

## Team Roles

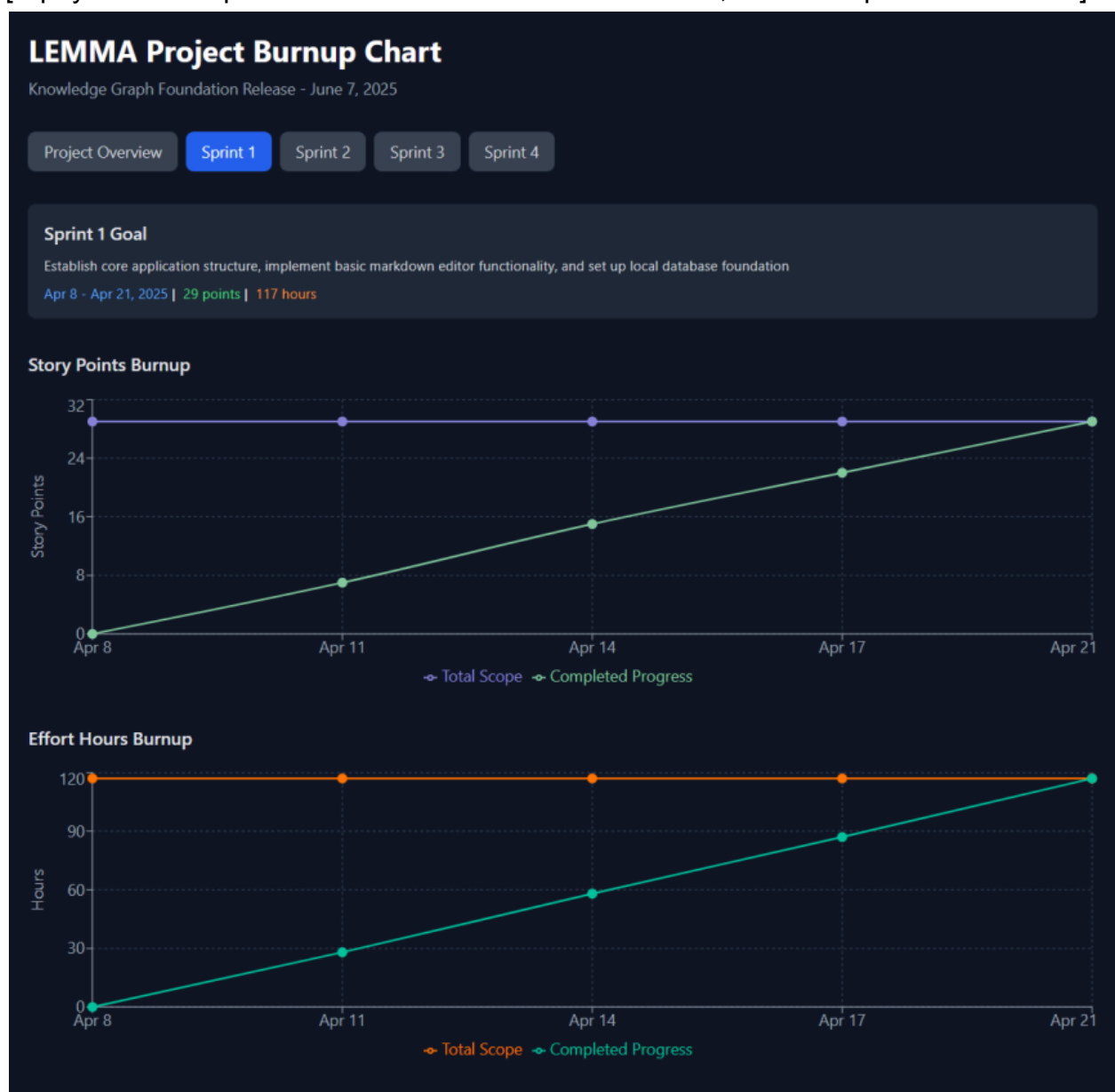
- Project Lead (Cory): Scrum Master, Developer (assisting all areas)
- Team Member 1 (Howard): Frontend Developer (UI/UX, markdown editor)
- Team Member 2 (Jiancheng): Database/Backend Developer
- Team Member 3 (Mason): Chrome Extension Developer (assisting with frontend for Sprint 1)

# Initial Task Assignment

- Project Lead: US1.5, Set up initial Electron.js project structure
- Frontend Developer: US1.1, Research and select appropriate markdown editing library
- Database/Backend Developer: US1.4, Research and select appropriate database technology
- Chrome Extension Developer: US1.3, Design database schema for tags and categories

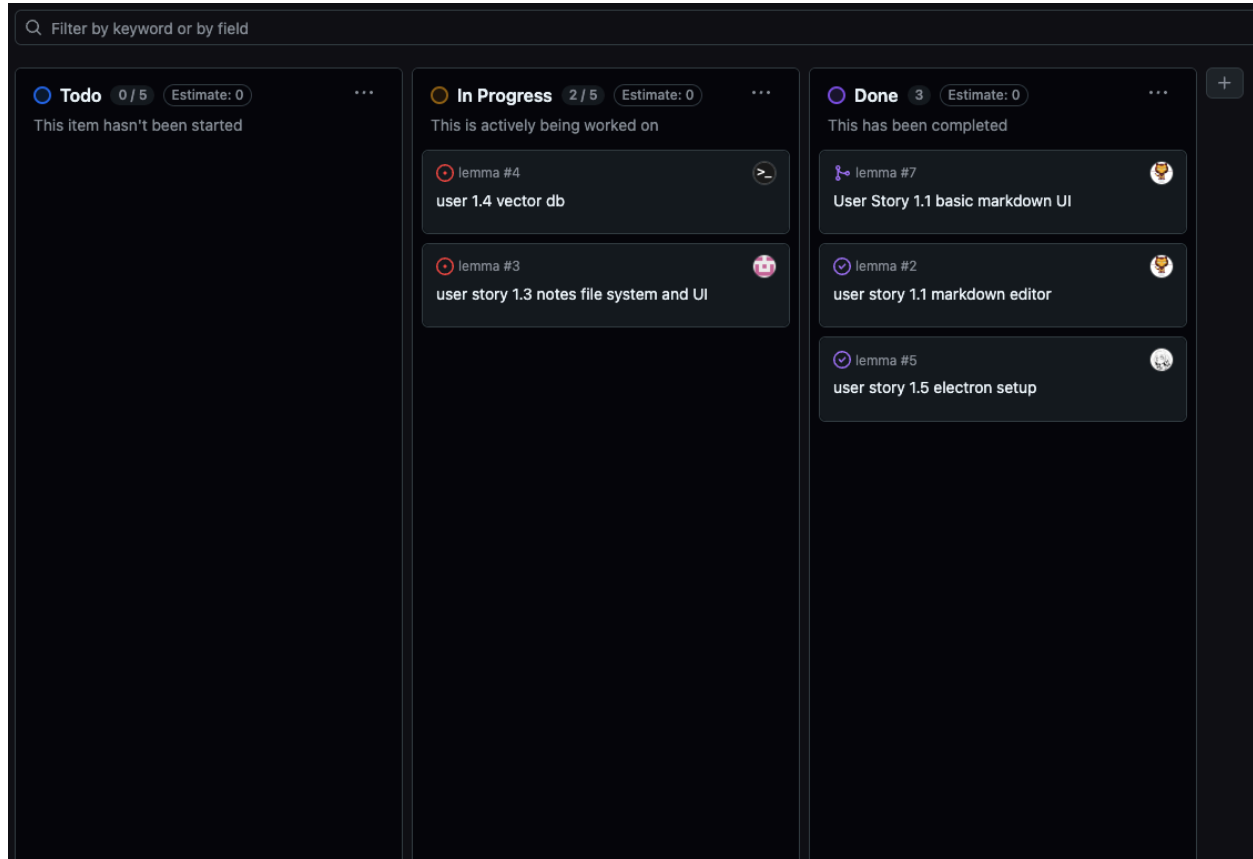
## Initial Burnup Chart

[A physical burnup chart is created and located in the lab, labeled "Sprint 1 - LEMMA"]



## Initial Scrum Board

[A physical scrum board is set up in the lab with four columns: User Stories, Tasks Not Started, Tasks in Progress, and Tasks Completed. All tasks are currently in the "Tasks Not Started" column, except for the initial assignments which are in "Tasks in Progress"]



## Scrum Times

- Monday, Wednesday, Friday at 10:00 AM - Daily standup (TA/tutor will join Friday meeting during lab time)
- Additional ad-hoc scrum meetings will be scheduled as needed