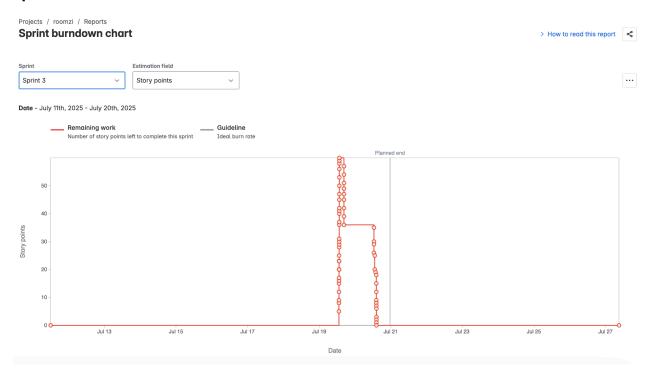
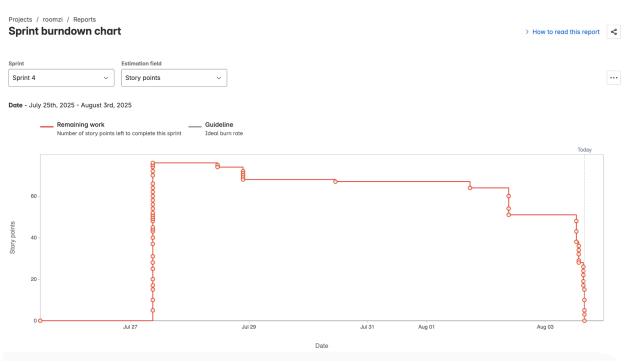
# **Burndown Analysis**

## **Sprint 3 Burndown Chart**



## **Sprint 4 Burndown Chart**



## **Detailed Analysis**

#### **Sprint 3 Overview**

- **Dates:** July 11, 2025 July 20, 2025
- Story points: ~60 points completed
- **Burndown pattern:** The chart remained flat until July 18th, with sharp drops in remaining story points until July 20th, reflecting that most development and testing occurred during the last two days of the sprint.
- **Scope change:** Several tasks were added mid-sprint, including document upload, calendar fixes, and profile bugs, but they weren't added to Jira until later in the sprint.

#### **Sprint 4 Overview**

- **Dates:** July 25, 2025 August 3, 2025
- Story points: ~70 points completed
- **Burndown pattern:** The chart reflects a steady decline in all remaining story points from when they were created on July 27th to August 3rd. The last day of the sprint, August 3rd, also shows a sharp drop in remaining story points as tasks were closed off.
- **Scope change:** There were no added or deleted tasks throughout the middle of the sprint, however, there were other factors that hindered the completion of certain tasks, as reflected in the sharp drop on August 3rd.

### **Sprint Velocity Comparison**

- Sprint 3 saw a spike near the end of the sprint, reflecting a sudden increase and sudden drop in velocity.
- Sprint 4 maintained a slow but steady decline throughout the sprint, with a sharp drop on the final day.

Overall, sprint 4 had more consistent progress during the duration of the sprint, although both sprints ended with a sharp drop.

### Impact of Mid-Sprint Changes

- Sprint 3:
  - Execution was delayed until the final days of the sprint
  - Burn pattern was inaccurately skewed due to delayed task updates
- Sprint 4:
  - While no tasks were added or deleted mid-sprint, feature requirements were discussed and modified throughout, resulting in delayed completion of several tasks

#### **Changes & Reasons**

 Increased complexity in sprint 4: The two new features: Map and AI Chat Integration, were more complex and relied on different tools that were not yet used in previous sprints.

- 2. **Broad scope:** Several bug fixes and smaller additions (e.g. edit listing, input validation) were included in sprint 4 alongside the two key features.
- 3. **Late PR reviews & merges:** Mid-sprint discussion about feature requirements revealed last-minute changes that need to be made. While the majority of the features were completed, these changes delayed the final merging of feature branches.

#### Reflection & Lessons Learned

- 1. **Balance task distribution:** Take complexity into further account when assigning tasks to avoid rushes in the final days of the sprint.
- 2. **Clarify requirements early:** Hold detailed discussions outlining each feature in the sprint meeting to prevent misunderstandings and mid-sprint changes.
- 3. **Plan specific deadlines:** Set smaller deadlines within the sprint to maintain a consistent velocity.
- 4. **Success:** Sprint 4 showed an improvement in sprint planning and velocity compared to sprint 3. The team completed 100% of the sprint 4 goals with a more consistent project momentum.