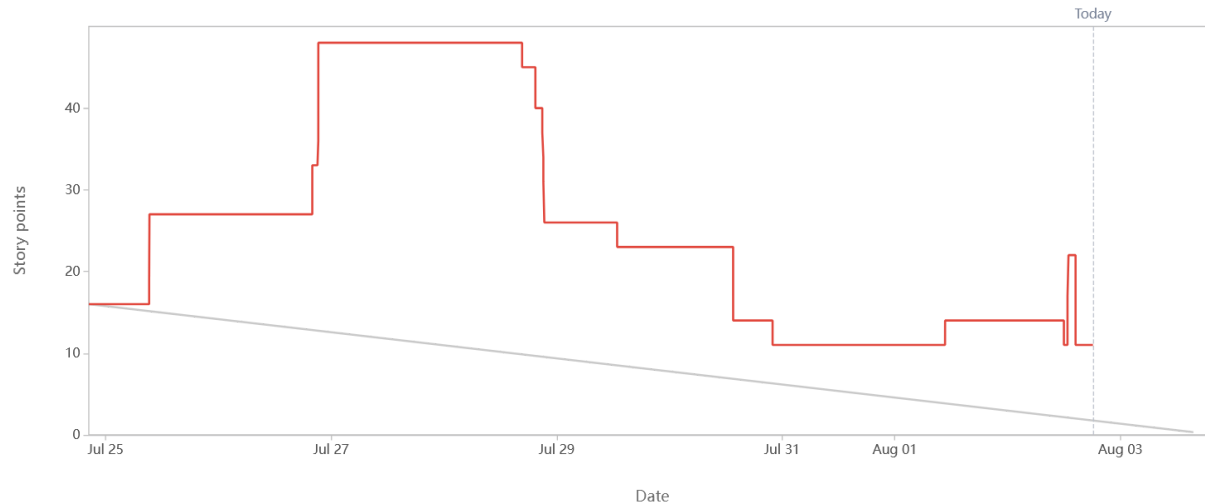


# Burndown



## Analysis

The burndown curve for this sprint reveals several major challenges that we encountered during this sprint.

- Story point estimation was delayed during this sprint due to a significant number of new cleanup tasks for refactoring and bug fixing. We took several days at the beginning of the sprint to attach story points to bugs that we added to the sprint, because of the complexity of these issues. This accounts for the steep increase of story points from under 20 to over 40.
- Some bugs were discovered very late during development but had to be addressed this sprint before the sprint demo. When these bugs were found, we created new tickets and assigned them story points as well. This is visible on the graph as the story point increases after August 1st.

Overall, the expected curve differs significantly from the actual curve, but this is partially due to delays in story point estimation that we made, which lead to the shallow expected curve seen in the chart above.

If we consider what the expected curve would be if it instead began on July 27th, then our progress would actually match the expected curve quite well. Unlike other sprints, which featured a long plateau at the beginning of the sprint, our sprint 4 managed to clear a significant number of story points in the first few days. This demonstrates an improvement from last sprint, and reflects the fact that we were able to encourage group members to tackle issues earlier and divide major tasks into smaller subtasks. We also improved our communication frequency when

it came to anticipating and resolving potential blockers, so members were more aware of what tasks needed to be addressed urgently.

This was the first sprint where we left tickets unresolved. This was a tough decision to make, as we decided that some tickets were not worth the time to implement considering the fact that they would take away time needed for testing. For example, we had a ticket for customer chat, but we decided that this feature was too optimistic and not essential for the main features of our application (ordering and tracking), so this low priority ticket was abandoned.

## Velocity

This sprint featured 65 story points spread across 19 issues. Both these values are a drastic increase from last sprint (44 points over 12 issues). Thus our velocity, by these metrics, was significantly faster this sprint. This can be attributed to the fact that we tackled a lot of bug fixes and refactoring tickets this sprint, in order to prepare for the final project presentation. Since many of these were urgent or potentially catastrophic, we moved faster this sprint to address these. For example, several fixes tackled issues that prevented use of the ordering and map tracking system, which would have affected our project demo later if they were not addressed.