

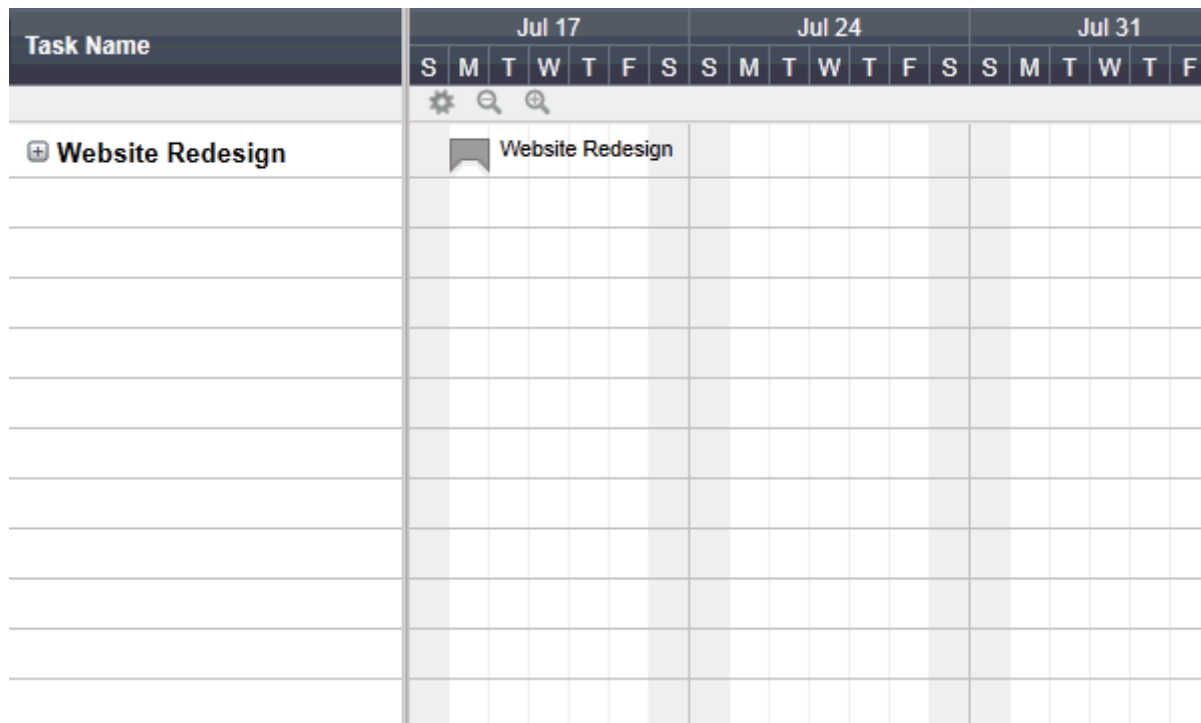
# Project Management Tools and Techniques

Prerequisites:

- [Technology Project Management](#)
- [The Systems Development Lifecycle \(SDLC\)](#)

## Gantt Charts

A **Gantt Chart** helps project managers plan project efforts over time, specifically identifying any dependencies that exist between sub-processes, or "tasks".

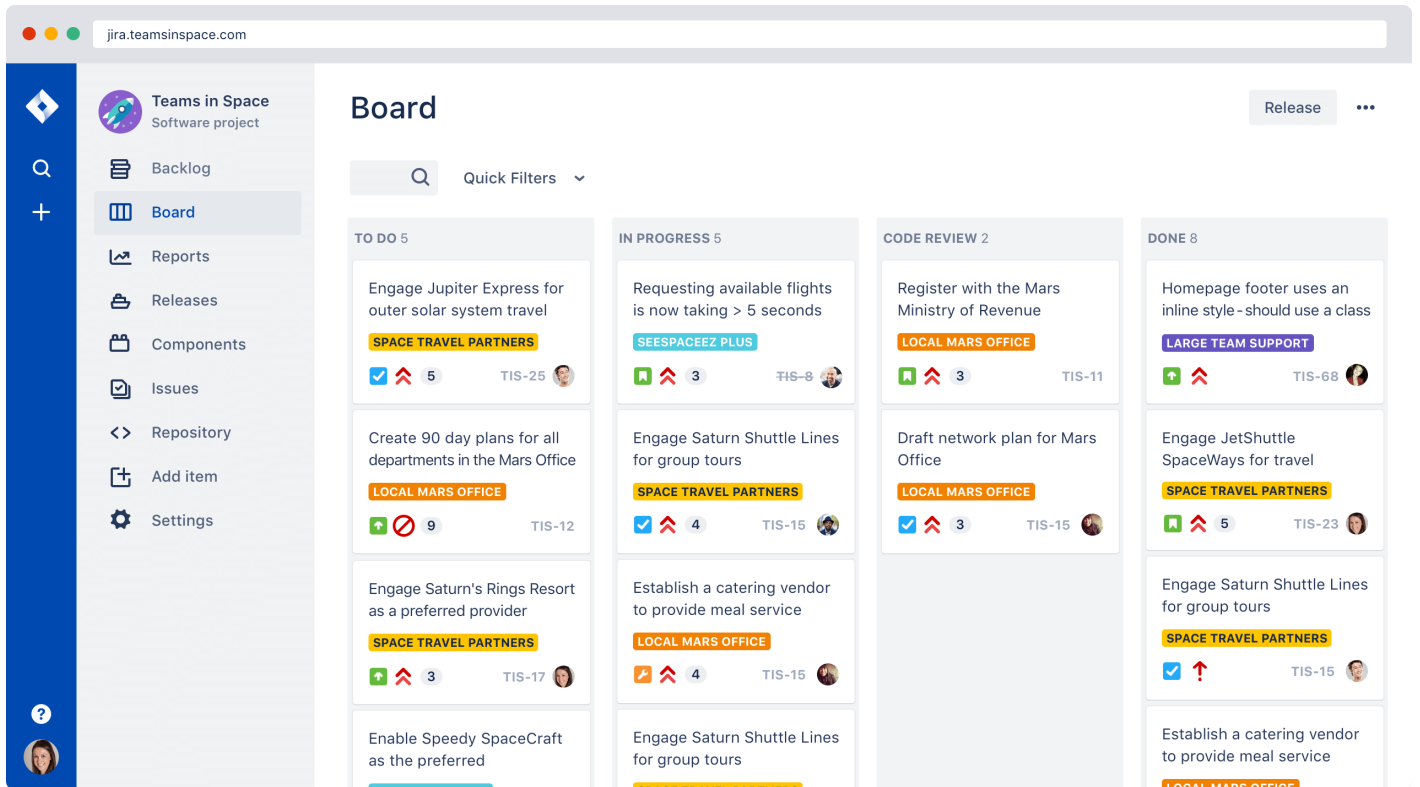


Each task is generally associated with a length of time, and perhaps dates denoting when that sub-process are supposed to begin and end.

Gantt charts are especially relevant for projects following a waterfall approach, as they help identify a project's "critical path", or the ordering of activities which will lead to the minimum overall project completion time.

## Sprint-tracking Boards

Agile teams tend to organize efforts into short "sprints" lasting one or more weeks each. To help them plan and track their efforts, they often use visual board-like tools. These boards usually depict tasks as "cards" which can be moved into various columns representing states of completion (e.g. "planned", "in-progress", and "done").



Some popular services which provide sprint-tracking boards:

- [Trello \(example board\)](#)
- [Jira](#)
- [Asana](#) (highly recommended)
- [GitHub Projects](#)

## Kanban Boards

Kanban is a popular framework used to implement agile software development. It requires real-time communication of capacity and full transparency of work. Work items are represented visually on a kanban board, allowing team members to see the state of every piece of work at any time. - [Atlassian Agile Coach](#)

A Kanban board is like a specific kind of sprint-tracking board, except there are a fixed number of items or tasks which can at any one time be included on the board. This forces participants to focus on effective prioritization of tasks, and to not over-extend the team or over-estimate its ability to deliver on planned work.