

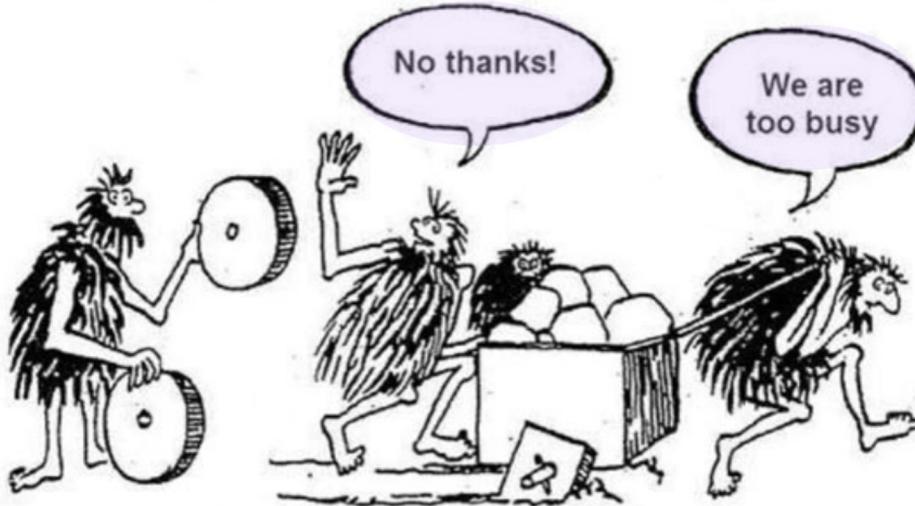
# Ivan Portilla

Mines ....

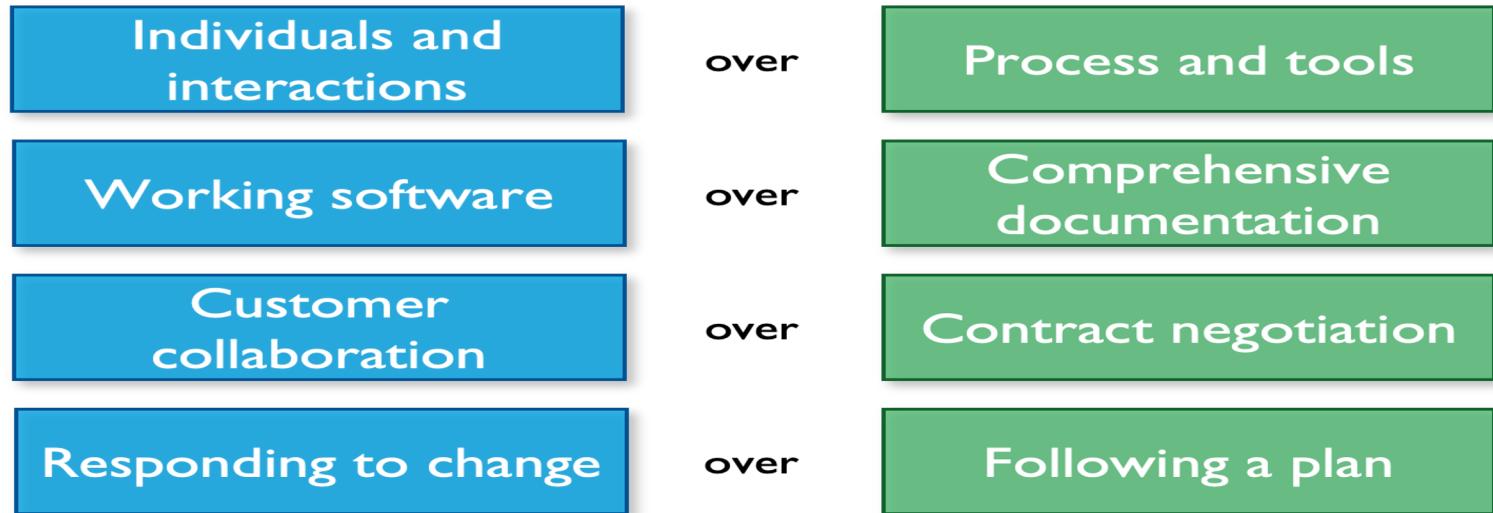


- Author & keynote speaker, recognized for my innovative work in data science, robotics and artificial intelligence.  
Member of the AI community in Colorado (CSM, CU, FRCC, SVVSD IC).
- Current role as AI leader at Ricoh-USA  
1 year at MSFT (OpenAI/ChatGPT)  
25 years at IBM (Watson)
- TedEx talk & contributions at  
<https://github.com/jiportilla/giveback>

# Why Agile?



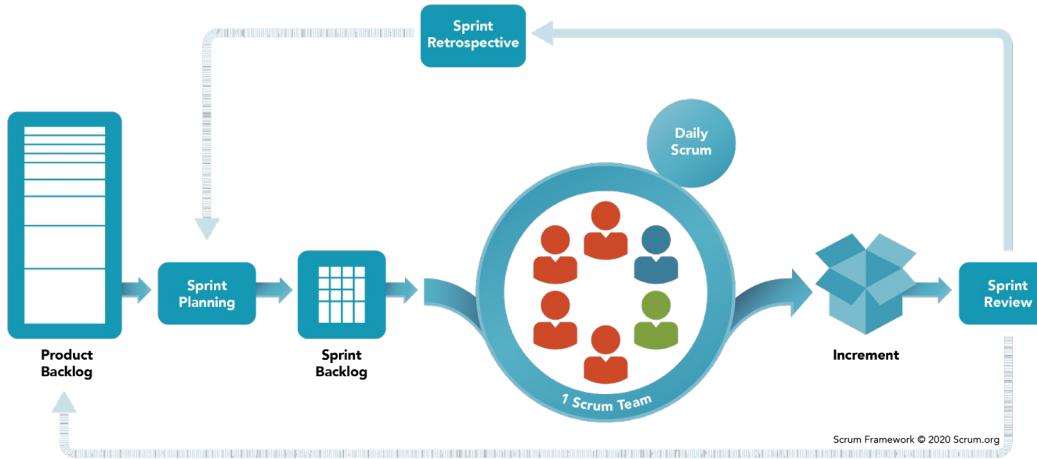
# The Agile Manifesto—a statement of values

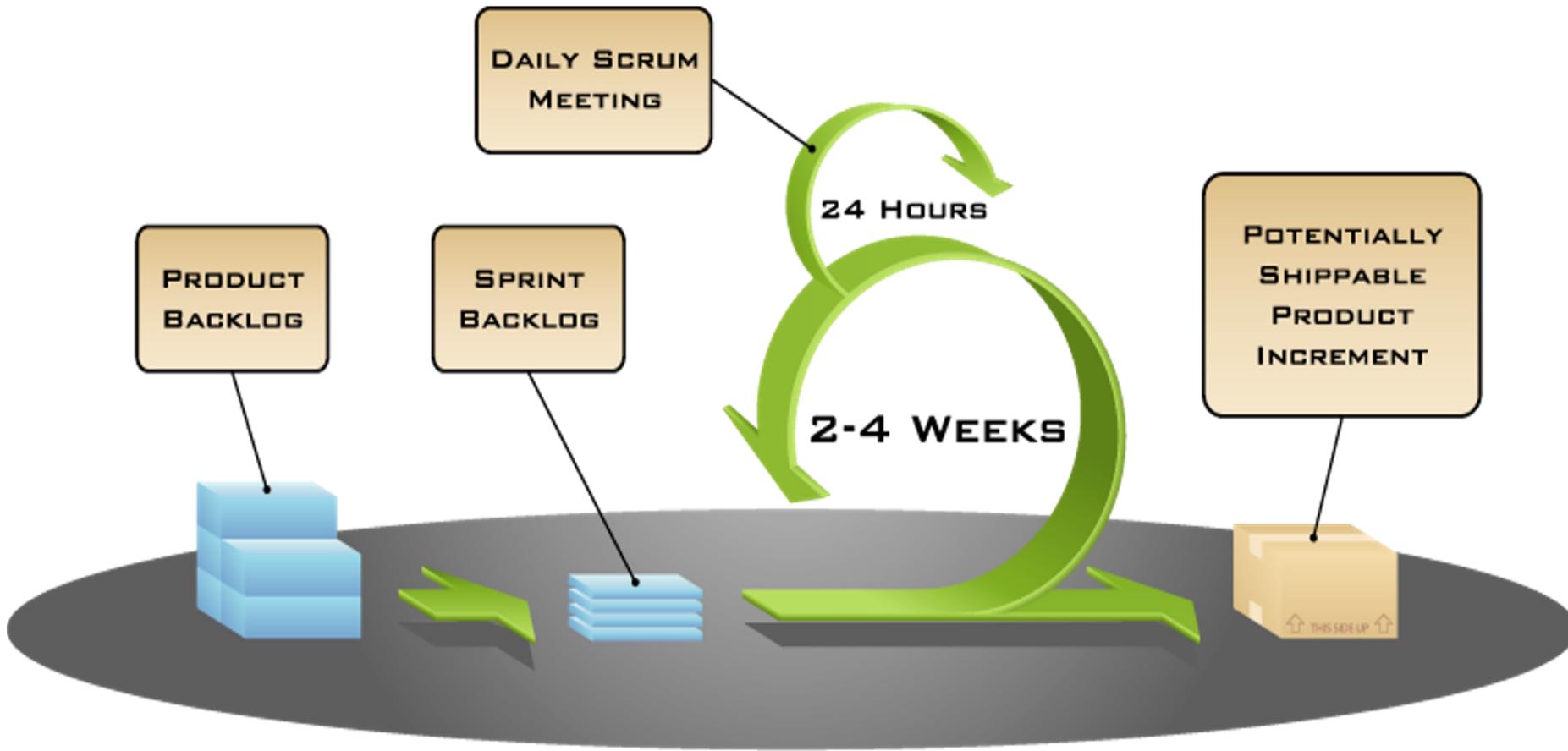


[Source: www.agilemanifesto.org](http://www.agilemanifesto.org)

# Agile Model

**Scrum** is an implementation of the **Agile Model** and it is the most widely-used one.





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# Scrum Framework

## Roles

- Product owner
- ScrumMaster
- Team

## Ceremonies

- Sprint planning
- Sprint review
- Sprint retrospective
- Daily scrum meeting

## Artifacts

- Product backlog
- Sprint backlog
- Burndown charts

# Daily Scrum

**Everyone answers 3 questions**

1

What did you do yesterday?

2

What will you do today?

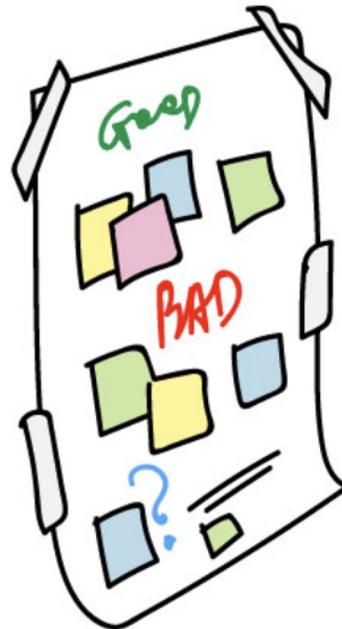
3

Is anything in your way?

- These are **not** status for the ScrumMaster
  - They are commitments in front of peers

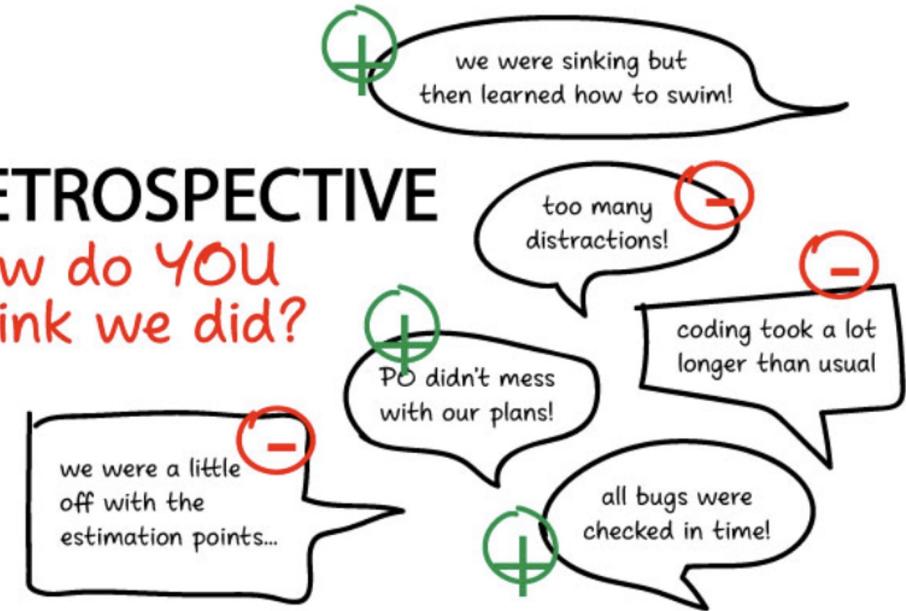
# Sprint Retrospectives

"I have not failed.  
I've just found  
10,000 ways that  
won't work."  
-- Thomas A. Edison



## RETROSPECTIVE

how do YOU  
think we did?



Tasks	Mon	Tues	Wed	Thur	Fri
Code the user interface	8	4	8		
Code the middle tier	16	12	10	7	
Test the middle tier	8	16	16	11	8
Write online help	12				



Requirements

Design

Code

Test



Rather than doing all of  
one thing at a time...

...Scrum teams do a little  
of everything all the time



<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

## Step 1: Create a scrum project

Once you [create](#) and log in to an account in Jira Software, you can select a template from the library. Select Scrum (you can preview the [free scrum template](#) here, or you can learn how to create a [Kanban project here](#)).

Next, you'll be prompted to choose a project type. If your team works independently and wants to control your own working processes and practices in a self-contained space, consider giving our team-managed Scrum template a try. See [Getting started with team-managed projects](#) at the Atlassian Community to learn more.

Once you've created your project, you will land on the empty [backlog](#). The backlog is also known as the product backlog and contains an ongoing list of your team's potential work items for the project.

## Step 2: Create user stories or tasks in the backlog

In Jira Software, we call work items like user stories, tasks, and bugs "[issues](#)". Create a few user stories with the quick create option on the backlog. If you don't have user stories in mind, just create sample stories to get started and see how the process works.

Backlog 0 issues

 What needs to be done?  
New Story in Backlog

# <https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

## WHAT ARE USER STORIES?

User stories are used to describe work items in a non-technical language and from a user's perspective.. As a {type of user}, I want {goal} so that I {receive benefit}.

Let's use a website as a simple example to create a user story.

As a customer, I want to be able to create an account so that I can see my previous purchases.

User stories are usually sketched out and prioritized by the product owner, and then the development team determines detailed tasks necessary to complete the story in an upcoming sprint. The development team is also responsible for estimating the relative effort required to complete the work of the story.

Once you've created a few user stories, you can start prioritizing them in the backlog. In Jira Software, you rank or prioritize your stories by dragging and dropping them in the order that they should be worked on.

These are just the starting stories for your project. You will continue to create stories for the project's lifetime. This is because agility involves continuously learning and adapting.

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

## Step 3: Create a sprint

Create your first sprint in the backlog so you can start planning the sprint.

### WHAT IS A SPRINT?

In Scrum, teams forecast to complete a set of user stories or other work items during a fixed time duration, known as a sprint. Generally speaking, sprints are one, two, or four weeks long. It's up to the team to determine the length of a sprint – we recommend starting with two weeks. That's long enough to get something accomplished, but not so long that the team isn't getting regular feedback. Once a sprint cadence is determined, the team perpetually operates on that cadence. Fixed length sprints reinforce estimation skills and predict the future velocity for the team as they work through the backlog.

The screenshot shows a Jira Software interface for managing a backlog. On the right side, there is a circular callout highlighting a button labeled "Create sprint". Below this button, a list of seven backlog items is displayed, each with a title, a brief description, and a status indicator (green for completed, red for in progress). To the right of each item, there are buttons for "SB-9" and "SB-10", which likely represent the next and previous items in the sequence. The items listed are:

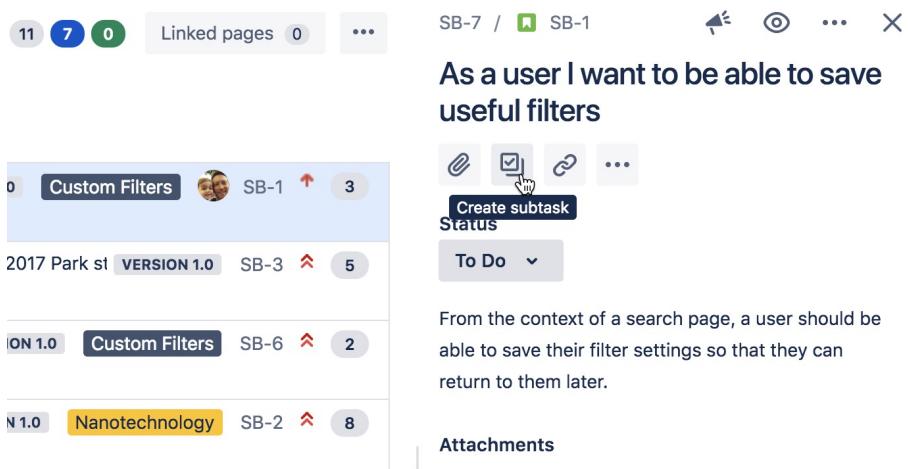
- Nanotechnology immersion along the information highway will close the loop on focusing solely on the bottom line.  
None
- Efficiently unleash cross-media information without cross-media value.  
None
- Completely synergize resource taxing relationships via premier niche markets.  
None
- Quickly maximize timely deliverables for real-time schemas.  
None
- TIS performance issue related to Java cleanup  
None
- Application server is down  
None

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

## Step 4: Hold the sprint planning meeting

At the beginning of a sprint, you should hold the sprint planning meeting with the rest of your team. The sprint planning meeting is a ceremony that sets up the entire team for success throughout the sprint. In this meeting, the entire team discusses the sprint goal and the stories in the prioritized product backlog. The development team creates detailed tasks and estimates for the high-priority stories. The development team then commits to completing a certain number of stories in the sprint. These stories and the plan for completing them become what is known as the sprint backlog.

Add story point estimates to your stories by adding a number in the **Story point estimate** field. You can also add more details to the stories or click the **create subtask** icon to further break down the work of the story.



The screenshot shows a Jira search results page with a sidebar for filter settings. The sidebar includes buttons for 'Create subtask' (highlighted), 'Status' (set to 'To Do'), and a dropdown for 'Attachments'. The main area displays a list of stories in the sprint backlog:

- 0 Custom Filters SB-1 3
- 2017 Park st VERSION 1.0 SB-3 5
- ON 1.0 Custom Filters SB-6 2
- N 1.0 Nanotechnology SB-2 8

At the top of the page, there are navigation icons and a header showing 'SB-7 / SB-1'.

When you're ready, drag the stories agreed to in the sprint planning meeting into the sprint that you just created. This is your sprint backlog.

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

#### WHAT IS THE SPRINT PLANNING MEETING?

**Attendees:** Required: development team, scrum master, product owner

**When:** At the beginning of a sprint.

**Duration:** Usually two hours per week of iteration – e.g. a two-week sprint kicks off with a four-hour planning meeting. The meeting ends when its purpose has been achieved.

**Purpose:** Plan the work of the sprint. The team agrees to the sprint goal and the sprint backlog.

#### WHAT IS A SPRINT GOAL?

When creating a sprint, the product owner usually identifies a sprint goal. This provides a theme for the work to be completed in the sprint. A sprint goal also provides some flexibility in the number of stories that are completed in a sprint. A sprint is considered a success if the sprint goal is achieved.

#### WHAT IS AGILE ESTIMATION?

Traditional software teams give estimates in a time format: days, weeks, months.

Many agile teams, however, have transitioned to story points. Story points rate the relative effort of work, often in a Fibonacci-like format: 0, 0.5, 1, 2, 3, 5, 8, 13, 20, 40, 100.

## Step 5: Start the sprint in Jira

Name the sprint. Some teams name the sprint based on their sprint goal. If there is a commonality between the issues in the sprint, name the sprint around that theme. Otherwise, you can name the sprint whatever you like.

Add a duration of the sprint and start and end dates. The start and end dates should align to your team's schedule. For example, some teams start sprints on a Monday and then end on a Friday morning in the next week. Other teams decide to start and end their sprints mid-week. It's up to you! If you're unsure how long your sprints should be, we recommend trying two weeks.

Add the sprint goal as agreed to in the sprint planning meeting.

Once you start your sprint, you will be taken to the Active sprints tab in the project.

The screenshot shows the Jira Software interface. On the left, a sidebar menu is open under the 'Scrum Bucket' project. The 'Active sprints' option is highlighted with a cursor. The main area displays the 'Alpha Squad Sprint 11' board. This board has a 'TO DO' column containing two items: 'As a user I want to be able to save useful filters' and 'Provide performance and monitoring plans for 2017 Park strategies within the Commonwealth Planning FrameworkAnalyse'. Each item has a 'Custom Filters' button. Below these items are 'SB-1' and 'SB-2' sections, each with its own set of items and a 'Nanotechnology' button. To the right of the board, a vertical sidebar lists project management categories: 'IN PROG...', 'Provide strateg...', 'Frame...', 'Maintain...', 'Organis...', 'Innovat...', 'Custo...', 'New fu...', and 'CS@Mines'.

This is where your team will work to pick up items from the to-do column and move them into in-progress and eventually, done! If you're using the team-managed scrum template, this will be called a **Board**.

## Step 6: Hold the daily standup meetings

After your sprint has started, have your team meet daily, typically in the morning, to review what everyone is working on. The purpose of this is to see if anyone on your team is experiencing any roadblocks towards the completion of sprint tasks.

**WHAT IS THE DAILY STANDUP MEETING?**

**Attendees (Primarily):** development team

**When:** Once per day, typically in the morning

**Duration:** No more than 15 minutes. Don't book a conference room and conduct the standup sitting down. Standing up helps keep the meeting short!

**Purpose:** The daily standup is designed to inform everyone quickly of what's going on across the team and to plan the work of the day. It's not a full status meeting. The tone should be light and fun, but informative. Have each team member answer the following questions:

- What did I complete yesterday?
- What will I work on today?
- Am I blocked by anything?

## Step 7: View the Burndown Chart

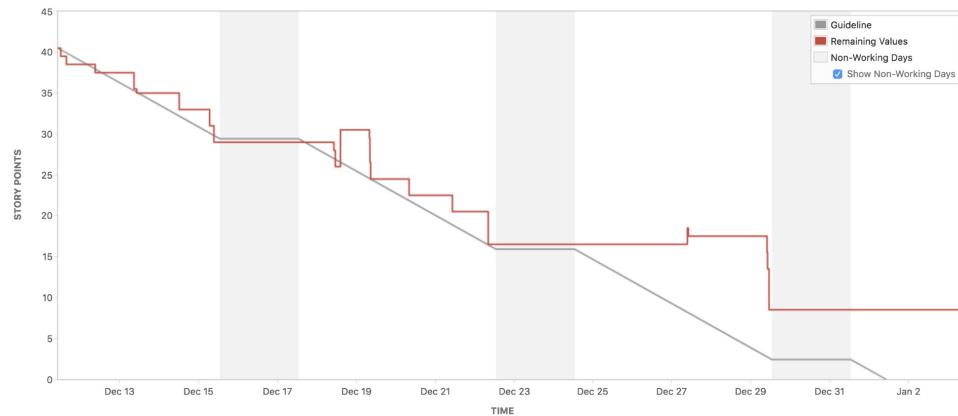
It's a good idea to check the Burndown Chart during a sprint. In Jira Software, the Burndown Chart shows the actual and estimated amount of work to be done in a sprint. The Burndown Chart is automatically updated by Jira as you complete work items. To view this chart, click Reports from the sidebar, and then select the Burndown Chart from the reports dropdown.

### WHAT IS A BURNDOWN CHART AND HOW DO YOU READ IT

A Burndown Chart shows the actual and estimated amount of work to be done in a sprint. The horizontal x-axis in a Burndown Chart indicates time, while the vertical y-axis typically indicates story points.



Use the Burndown Chart to track the total work remaining for a sprint, and to project the likelihood of achieving the sprint goal. By tracking the remaining work throughout the iteration, a team can manage its progress and respond accordingly.



## Step 8: View the sprint report

At any point during or after the sprint, you can view the Sprint Report to monitor the sprint.



### WHAT IS THE SPRINT REPORT?

The Sprint Report includes the Burndown Chart, and lists the work completed, work not completed, and any work added after the sprint started.

## Step 9: Hold the sprint review meeting

The sprint review, or sprint demo, is a sharing meeting where the team shows what they've shipped in that sprint. Each sprint usually produces a working part of the product called an increment.

This is a meeting with a lot of feedback on the project and includes a brainstorming session to help decide what to do next.

**Attendees (Primarily):** development team, scrum master, product owner.

**Optional:** stakeholders

**When:** Typically on the last day of the sprint

**Duration:** Typically two hours for a two-week sprint

**Purpose:** Inspect the increment and collaboratively update the product backlog.

### Questions to ask:

- Did the team meet the sprint forecast?
- Was there work added or removed during the middle of the sprint?
- Did any work not get completed within the sprint?
- If so, why?

## Step 10: Hold the sprint retrospective meeting

After you complete the sprint, have your team do a retrospective. Document your retrospective somewhere. May we suggest [Confluence](#)?

### WHAT IS A SPRINT RETROSPECTIVE MEETING?

**Attendees:** development team, scrum master, product owner.

**When:** At the end of an iteration.

**Duration:** Typically 90 minutes for a two-week sprint.

**Purpose:** The team inspects itself, including its processes, tools and team interaction. Improvement issues are often added to the next sprint's backlog.

Retrospectives aren't just a time for complaints without action. Use retrospectives to find out what's working so the team can continue to focus on those areas. Also, find out what's not working and use the time to find creative solutions and develop an action plan. Continuous improvement is what sustains and drives development within an agile team, and retrospectives are a key part of that.

### Questions to ask:

- What did we do well during the sprint?
- What could we have done better?
- What are we going to do better for next time?

## Step 11: Complete the sprint in Jira

At the end of the sprint, you must complete it.

The screenshot shows a Jira Scrum board for 'Alpha Squad Sprint 11'. The board is organized into three columns: TO DO, IN PROGRESS, and DONE. The TO DO column contains two items: 'As a user I want to be able to save useful filters' (SB-1) and 'Provide performance and monitoring plans for 2017 Park strategies within the Commonwealth Planning FrameworkAnalyse' (SB-2). The IN PROGRESS column contains one item: 'Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.' (SB-3). The DONE column contains two items: 'SB-2 Provide performance and monitoring plans for 2017 Park strate... Generate report on Western Hiking Trail degradation' (SB-4) and 'SB-6' (SB-6). In the top right corner of the IN PROGRESS column, there is a button labeled 'Complete sprint' with a circular callout around it. The top left of the board shows 'Quick filters' and 'Assignee' dropdowns, and the top right shows a timer at '0 days'.

If the sprint has incomplete issues, you can:

- Move the issue(s) to the backlog.
- Move the issue(s) to a future sprint.
- Move the issue(s) to a new sprint, which Jira will create for you.

# Questions?

