Azure Boards

A**zure boards** is the place, where you can track the work of your team, using work items. In this book, I have used the **Basic** work item process, which is the simplest work item process in Azure DevOps which contains only 3 work item types (WITs).

1. Epic:
2. Issue
3. Task

Epic:

- *Simple Term:* A big, important goal or project.
- *Explanation:* An Epic is like a major task or a large piece of work that you want to accomplish. It's too big to handle all at once, so you break it down into smaller parts.

Issue:

- *Simple Term:* Something's not working as expected.
- *Explanation:* An issue in Azure could be anything from a service not responding, an error message popping up, or a task not completing successfully. It's a hiccup that needs to be addressed.

User Stories:

- *Simple Term:* What the user wants or needs.
- *Explanation:* User Stories are like small chapters in your Epic story. Each one describes something a user wants or needs in simple language. They help you understand what needs to be done from the user's perspective.

Tasks:

- *Simple Term:* Tiny steps to get things done.

- *Explanation:* Tasks are like the to-do list for each User Story. They break down the user's needs into even smaller steps. Completing these tasks one by one adds up to finishing the whole User Story and, eventually, the Epic.
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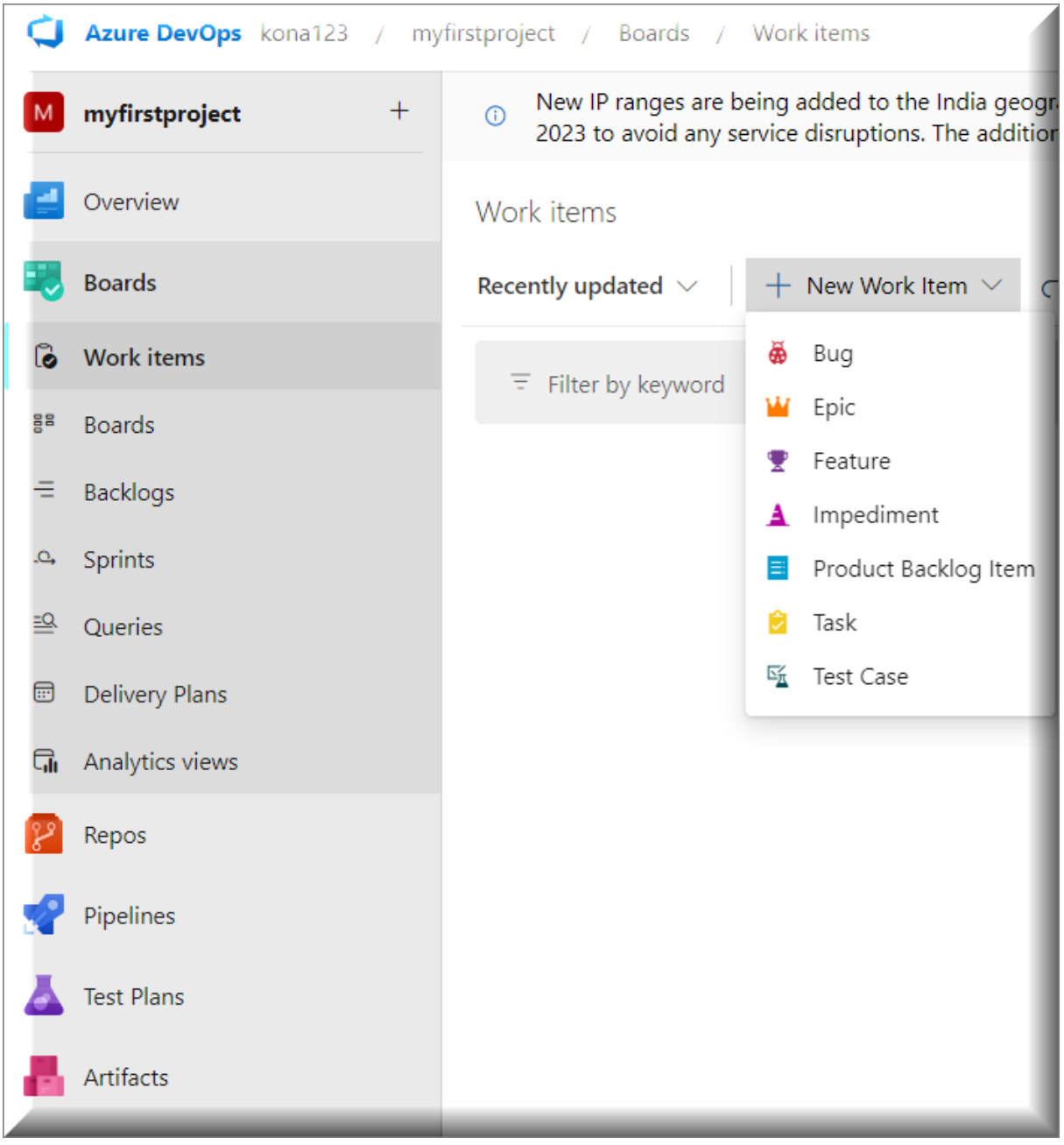
To access Azure Boards, navigate to your project and click on **Boards** menu item on the left.



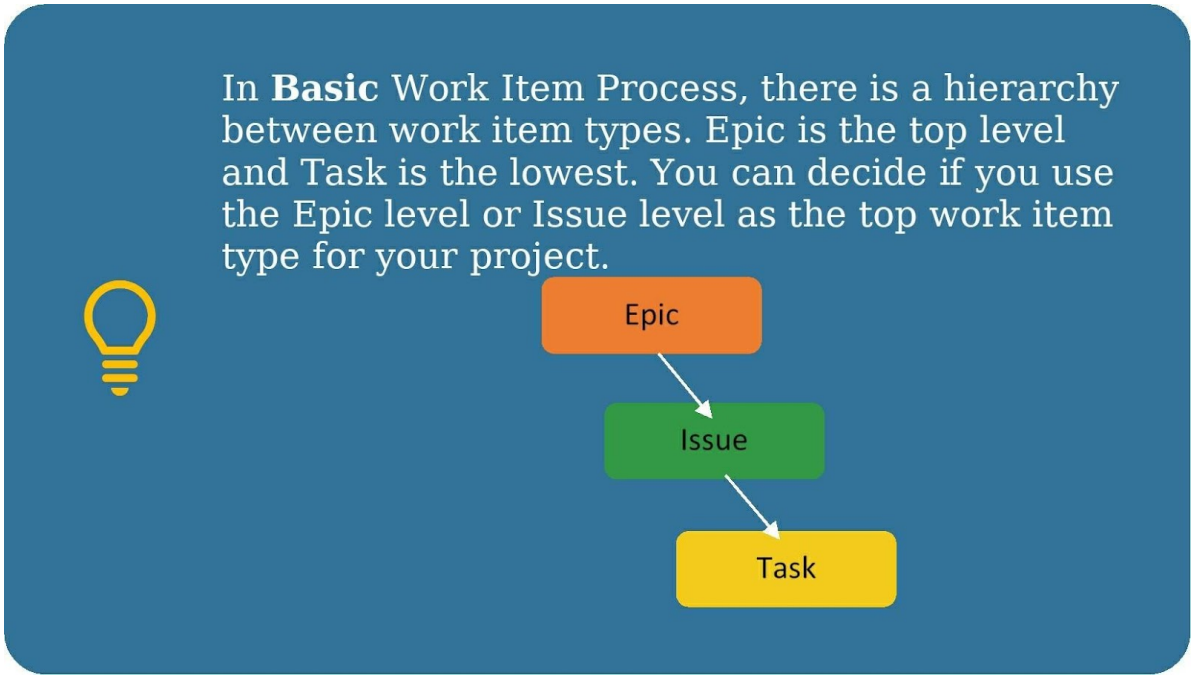
There are 5 sub menu items under Boards.

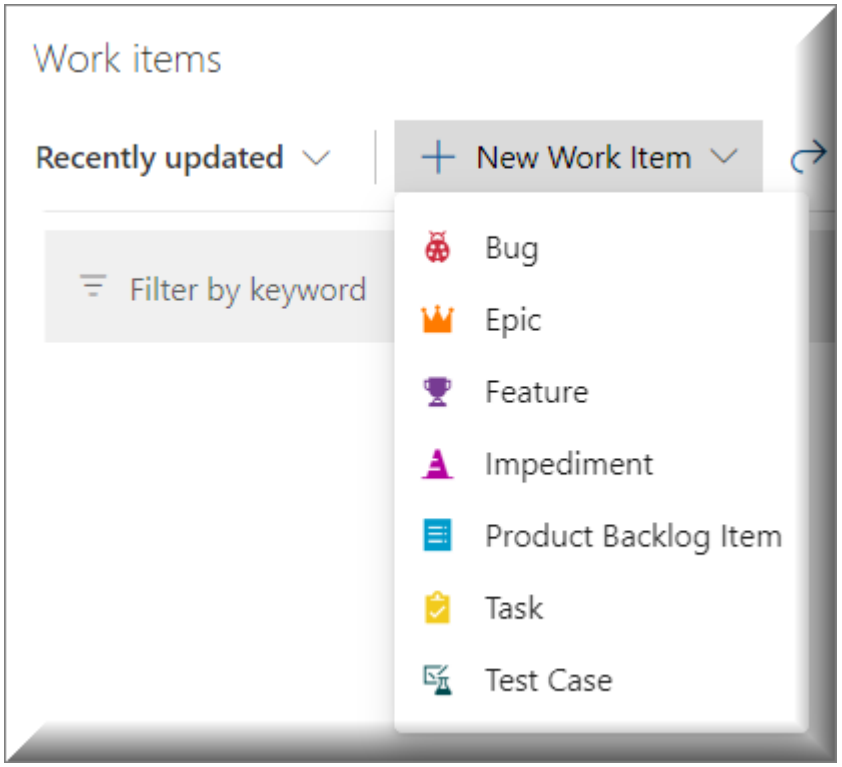
1. Work items
2. Boards
3. Backlogs
4. Sprints
5. Queries

Work items

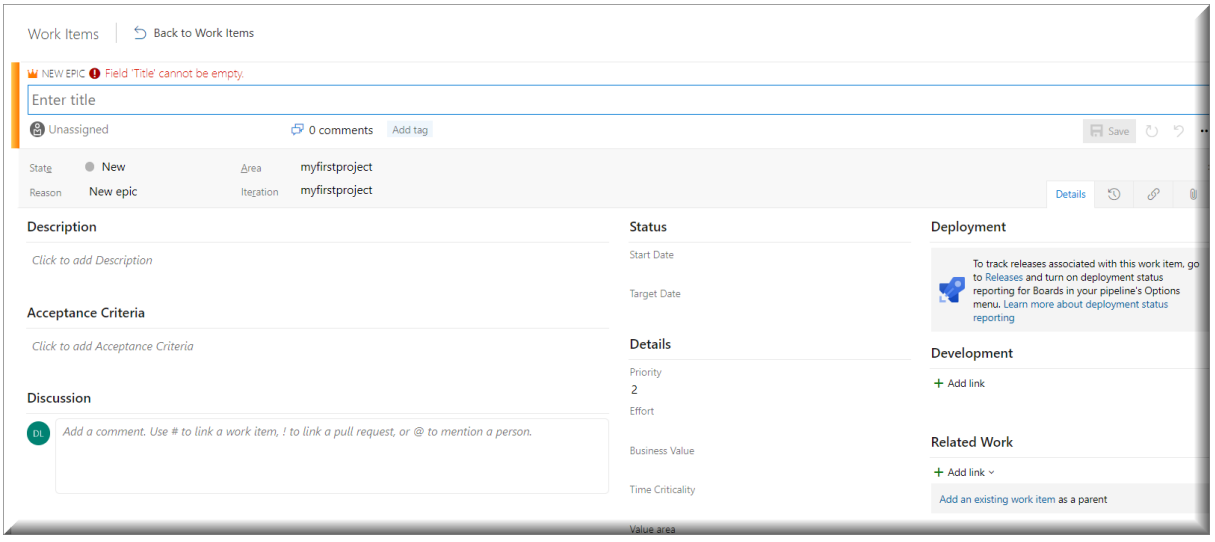
Use this, when you want to create a new work item of any type or see all the work items you and your team members have created. To create a new work item, click on **New Work Item** button.

Throughout this book, we use a simple application called MyQuiz to demonstrate real world use of Azure DevOps. However, before starting with the source code, it is quite important that we plan the work and create a backlog of tasks. As mentioned above, click on the **New Work Item** button to create your first work item. Then select **Issue** as the work item type.





New Work Item dialog box for an **Issue** is shown in Figure 29. Let us try to understand some of the important information that we need to fill in, when creating a new work item.



It is mandatory to provide a title for the new issue

. Then, you can assign it to a particular member of your team

. Leave it as “

unassigned

” if you have not decided who is going to work on the issue. By default, the initial state of every issue is set to “

To Do

”

. Basic work item process provides you 3 states,

To Do

–

Doing

–

Done

. You can later change into a different state when you are working on the issue. In addition to that, you can assign this to an

Area

and specify in which iteration this task is going to be fixed

. As we have not planned any iterations yet, we can keep the default value for now.

Create new work item page is divided into 4 sections

.

Details tab

The

details

tab is selected by default. Inside that, there is the

Description

area

, where you can describe the issue in detail. If you need to collaborate with other members of the team and want to make any comments related to

the issue, then you can use the **Discussion** section.

Under the

Planning

section

you can specify the

Priority

10

(1 is the highest priority) of the task and the

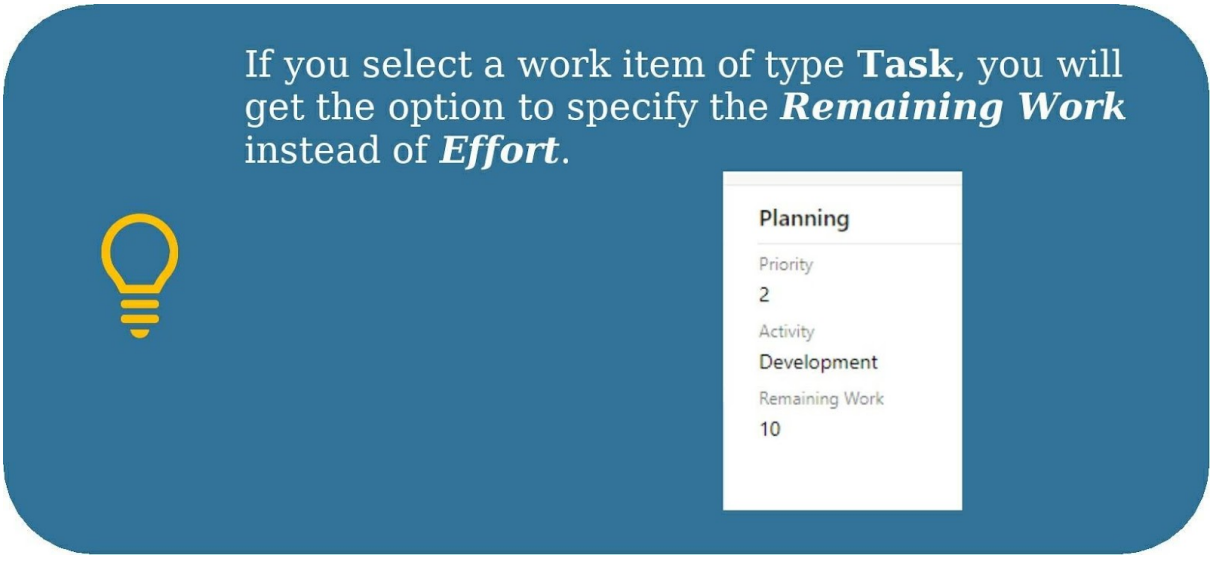
Effort

11

you need to put to complete the issue. You can select a unit best suits you, for example it could be in hours or days. Setting a value to

effort

is important when we break our work into small iterations.



Deployment

section will show all the releases that are associated with this work item. Under

Development

, you can either link a commit done to the source code, a branch of the source code or a pull request, or it will be automatically linked when there is a development link related to this work item. Under

Related Work

,

it shows the other work items that have any relationship to this issue.

History tab

Under **history** tab, you can see all the changes done to this issue throughout its life cycle, via graphically and textually.

Links tab

Here, you have the possibility to link an existing work item, a commit to the source code, branch, a pull request etc. In other words, all the links connected to **Development** and **Related Work** will be shown under this section.

Attachments tab

The last tab is the **attachments** tab, where you can attach any images, documents etc. related to the issue.

On the top right-hand corner of the window, you will find some other actions regarding the issue. For example, you can follow this issue

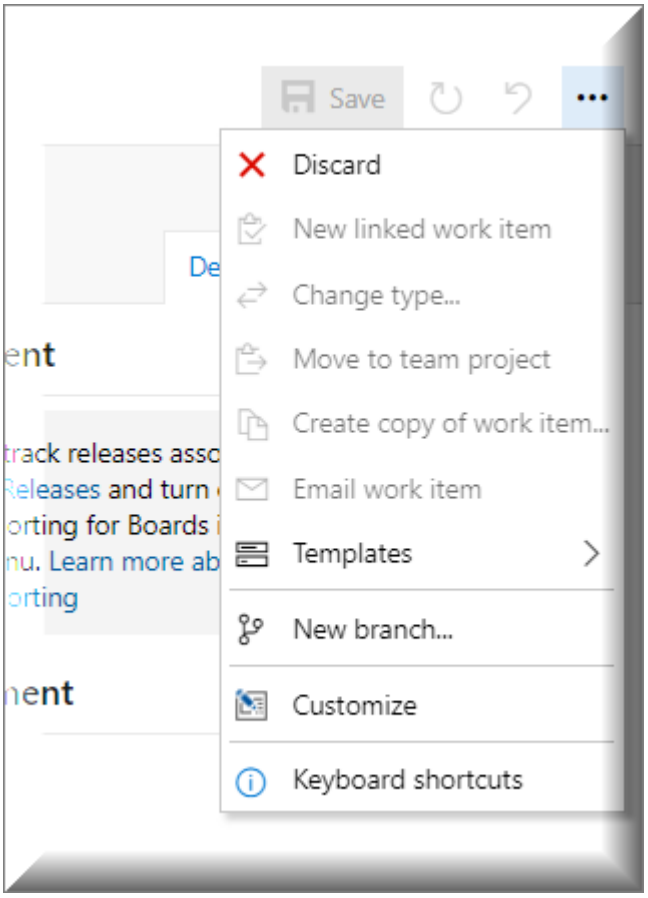
and get

notifications when a certain event occurs related to the issue. Notification settings can be modified by clicking on the gear icon

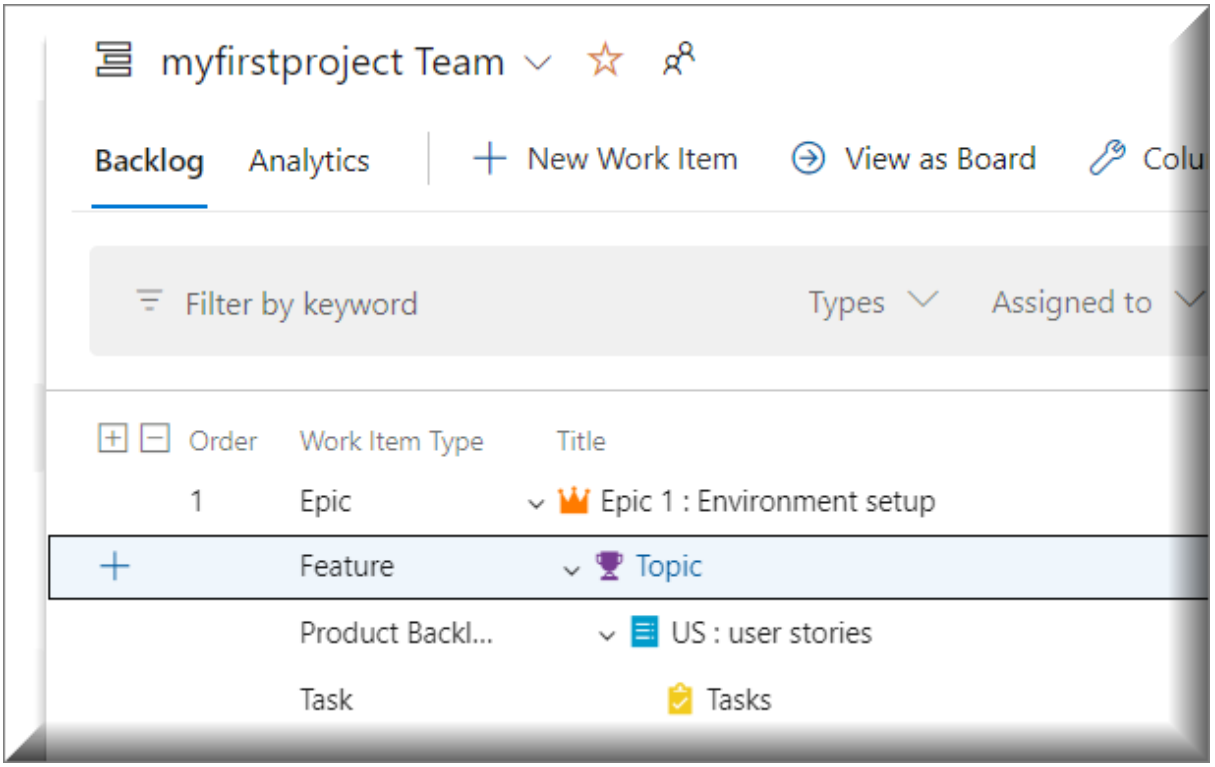
next to follow button. In addition to that, there is a context menu

where you can perform additional work related to the issue. These options are shown in Figure 30.

After you have filled all the necessary information, you can click on the **Save & Close** button to save the changes you made.



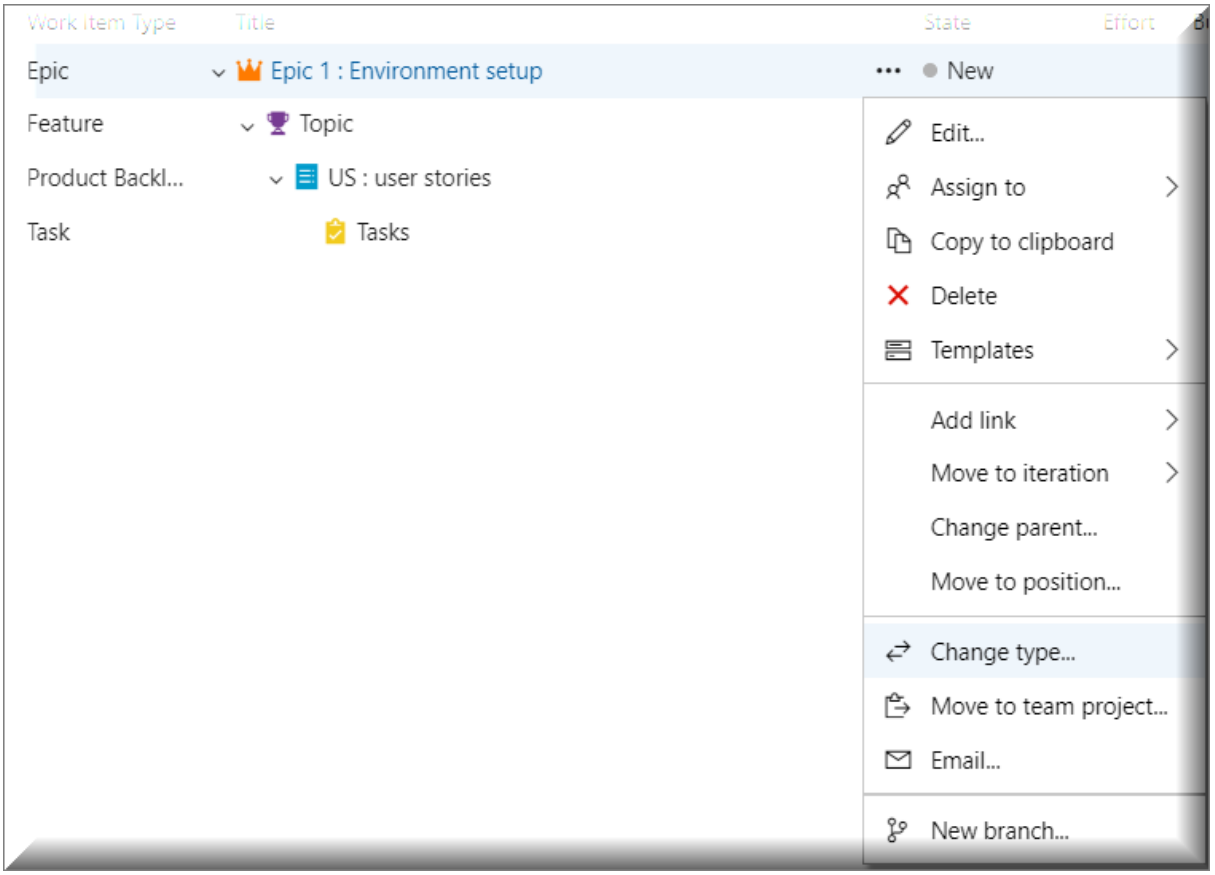
Once you have created an **Issue**, it will be shown in the Work items list.



You can change the work item type by clicking on the ellipsis icon next to the title and then clicking on the

Change type

menu item.



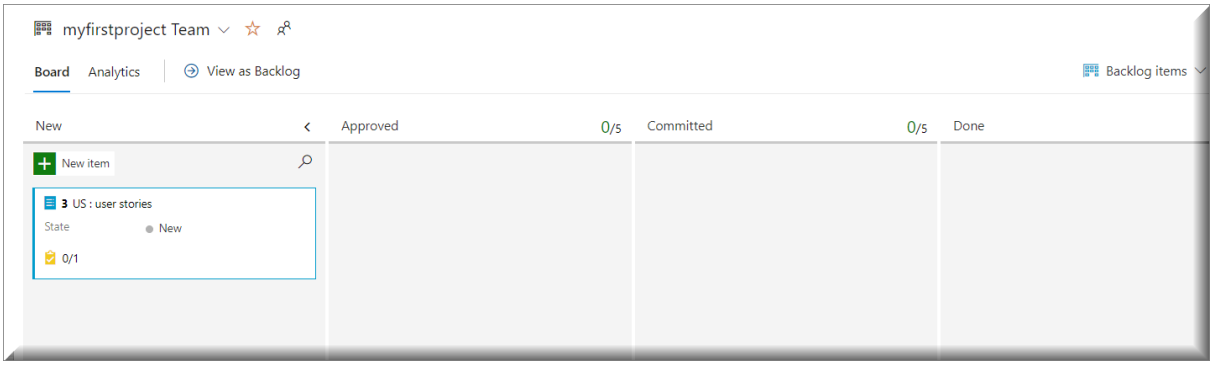
Then select the new work item type you want to change from the **Type** dropdown menu. You can also add a **reason** why you change the type. Click the **OK** button to complete the change process.

Boards

After you have created all the work items for the project, then you can view those items in two different ways.

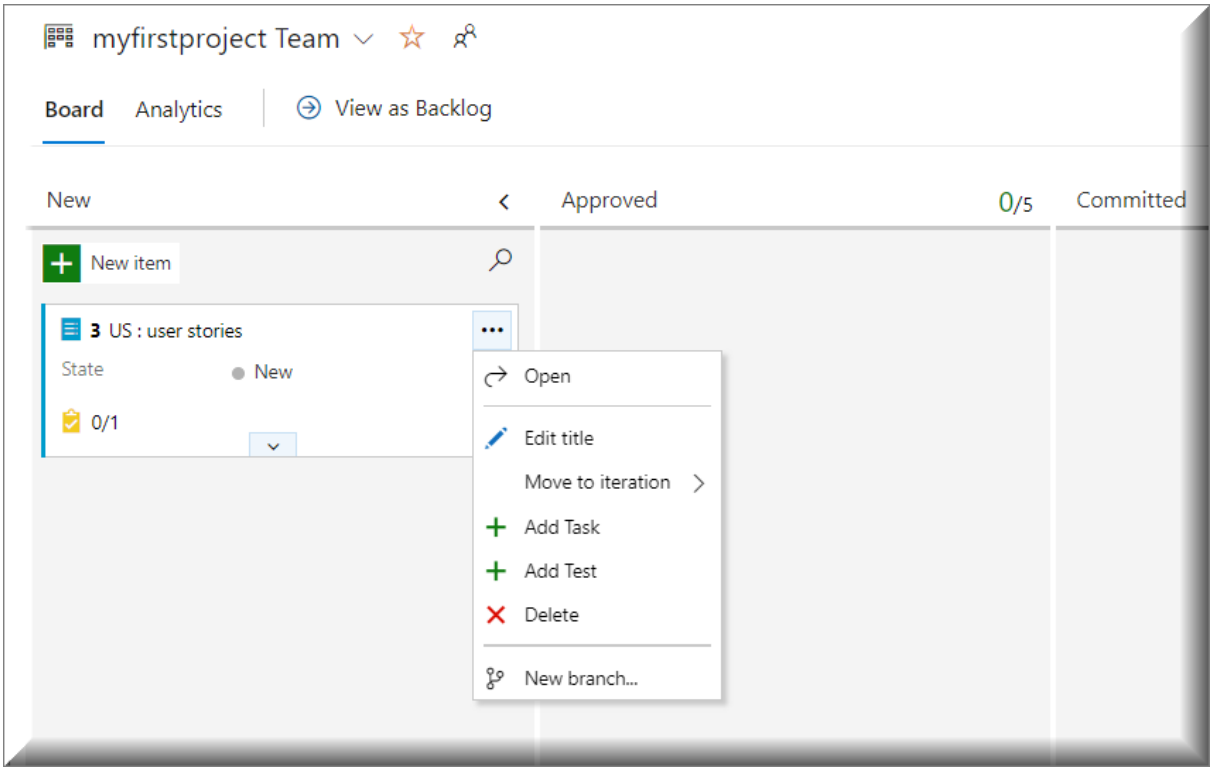
1. As a Kanban board or
2. As a backlog

By navigating to the Boards section, you can see a board view of your tasks as shown in Figure



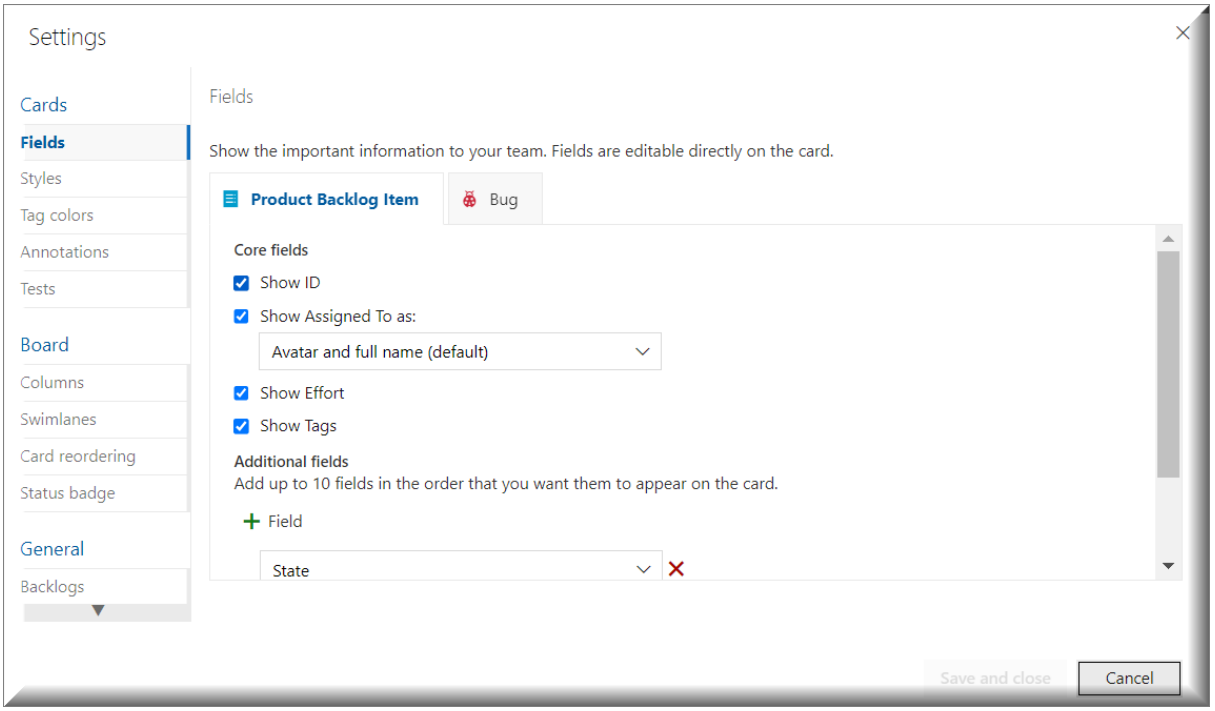
The board has 3 columns to match the 3 states provided by the **Basic** Work item process. Those are **To Do**, **Doing** and **Done**. The board can be filtered by either Issues or Epics. In Figure, it is showing only the Issues. It is possible to create an Issue or an Epic using this board by clicking on the **New item** button in the **To Do** column. Here, you type only the title and the rest you can edit by navigating to the issue itself.

Each Card on the board is associated with a context menu, where you can do things, such as creating a task or a test case, edit title and so on.



If you select the **Add Task** item for example, then it will be shown inside the card as shown below.

You can customize the **Board view** according to your needs, as it is configurable. Click on the gear icon on the top right-hand corner to do this. You can customize your cards, Board and General settings on the Kanban board.



Backlogs

Backlogs is also another way of showing your work items. This view is showing the work items in a list. Similarly, to Boards, you can filter items by Issues or Epics. This backlog view has a side pane on the right-hand side which can be used to plan your work items in different sprints and map your issues to Epics. This can be turned off according to your wish. You can switch between these two modes by clicking on either **Mapping** or **Planning** as shown below.

Below image shows the mapping side pane where you can drag and drop your issues to an existing Epic.

Sprints

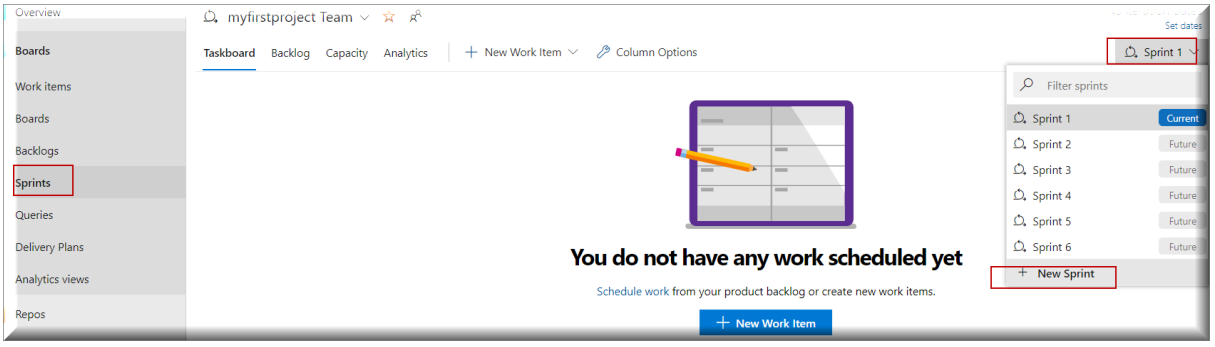
A sprint is a short iteration of your product life cycle. The definition of a sprint given by the Scrum guide is as follows.

The heart of Scrum is a Sprint, a time-box of one month or less during which a "Done", useable, and potentially releasable product Increment is created. Sprints

have consistent durations throughout a development effort. A new Sprint starts immediately after the conclusion of the previous Sprint. [2]

So, the final goal of a sprint is to produce a releasable product increment. Keeping that in mind, we have to plan our sprint. Usually, the duration of a sprint is equal to or less than one month. Let us say, our plan is to have 2 weeks lengthy sprints.

First, navigate to **Sprints** sub menu under Azure Boards. The **Basic** process has already created a sprint for us with the name **Sprint 1**. But it is not yet configured properly. So, as the first thing, you need to define the start and the end dates of the sprint. So, click on the **Set dates** link on the top right-hand corner.

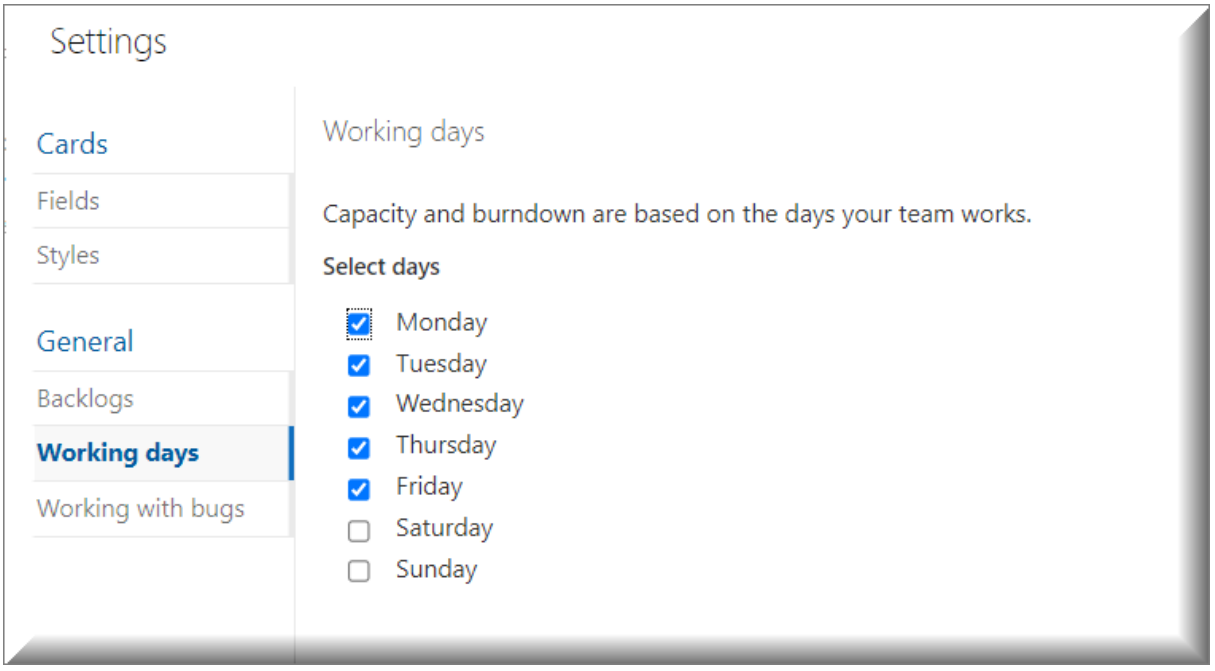


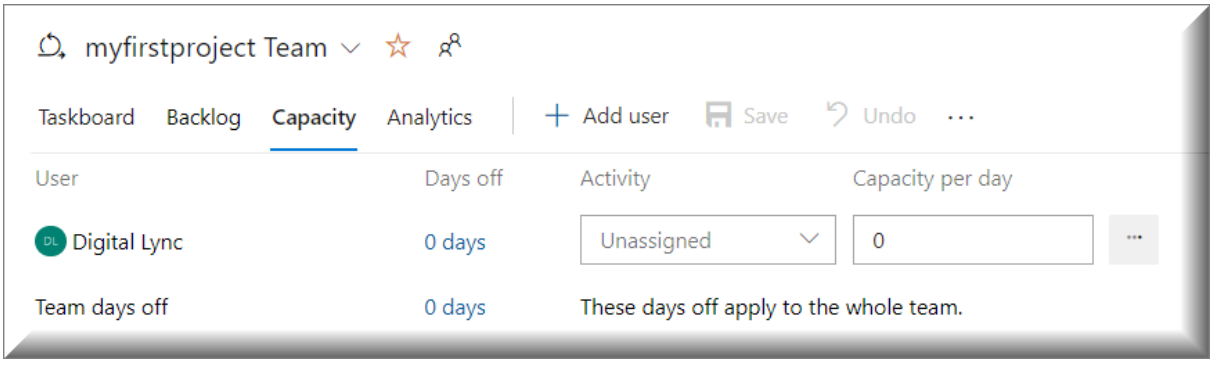
Specify the dates as shown below.

Planning the sprint

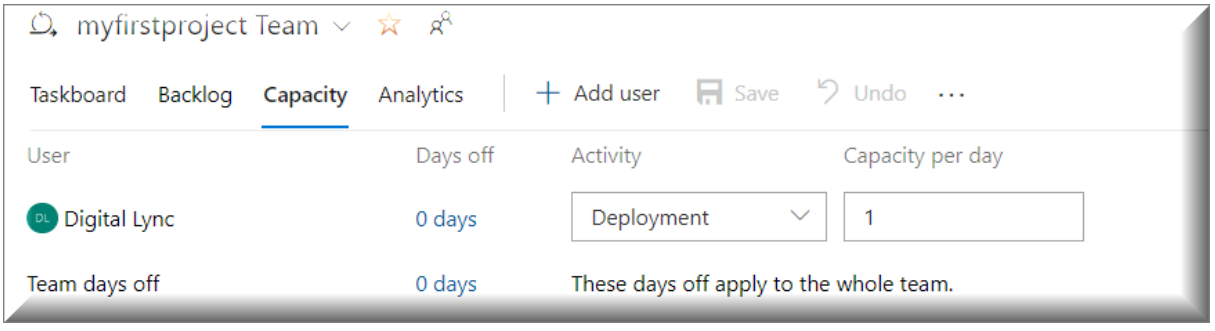
Planning the 2 weeks of the sprint is quite important to reach your goal at the end of the sprint. First, go to the **Sprints** sub menu item and click on the gear icon to set the working days of your sprint. As shown in image below, we have planned to work only on weekdays

Suppose we have 2 developers working on the project and each of them is working 6 hours a day. Click on the **Capacity** link to plan your sprint.



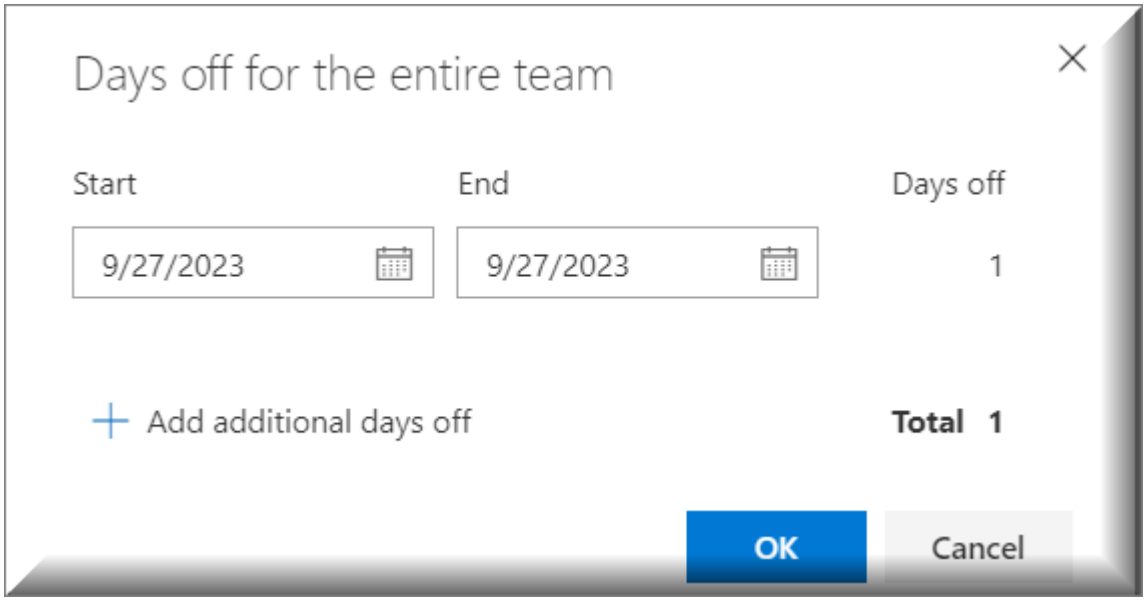


As shown below, the two developers working 6 hours a day and they are both doing development. If one person is involved in several activities like ***Design***, ***Requirements***, ***Deployment*** etc., then you can add them here as well.



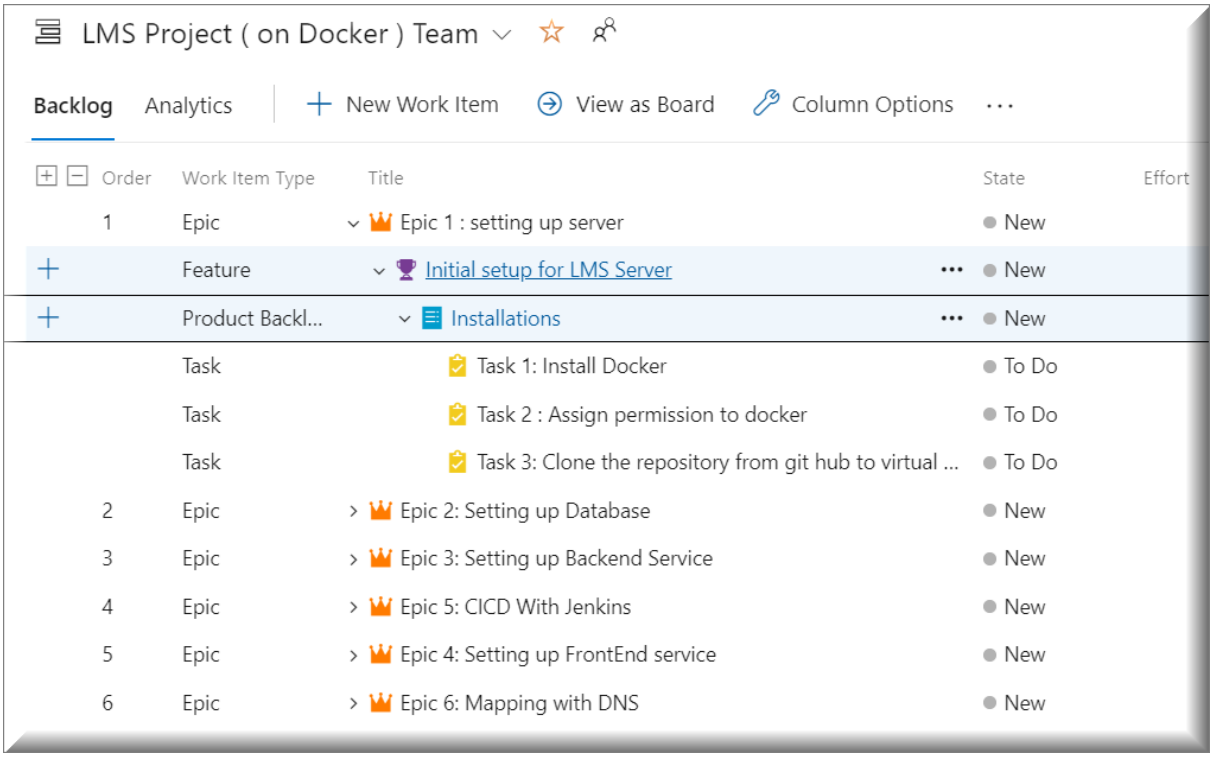
Before the start of the sprint, Digital lync says he is planning to have 2 days off during the sprint. So, we have to take that into account and plan for that. Click on **0 days** link in front of *Eric Martin* to add that information.

During the sprint planning meeting, both found that they have to participate in another meeting not related to this project during the course of the sprint. So, they need to exclude that day from the planning. So, click on the **0 days** link in front of the **Team days off** and set that date as a day off.

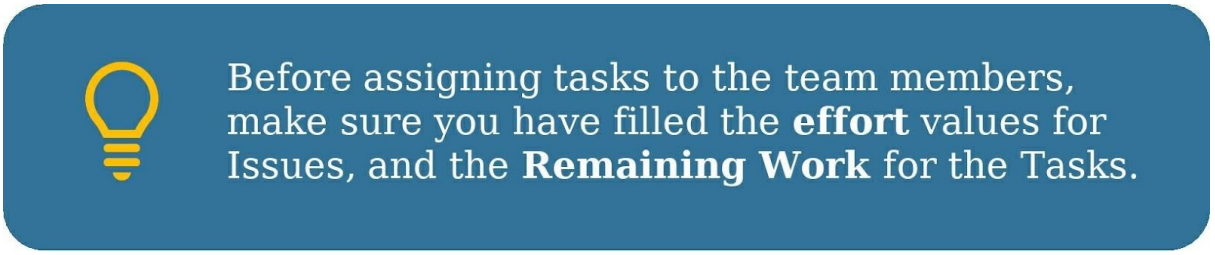


Now the capacity planning is completed and click on the **Save** button to save all your changes. Now click on the **Backlogs** sub menu under Azure DevOps, and on the right-hand side you can see the **Planning / Work Details** panes.

Now you can drag and drop which **Issues** you will be fixing in **Sprint 1**.



After you have assigned all the backlog item issues which will be considered in the current sprint, go back to the **Sprints** sub menu. If you know who is going to work on which task, then it is better to use the **Work Details** view to directly assign tasks to the developers. You can drag and drop Tasks to the team member who is supposed to fix that task.



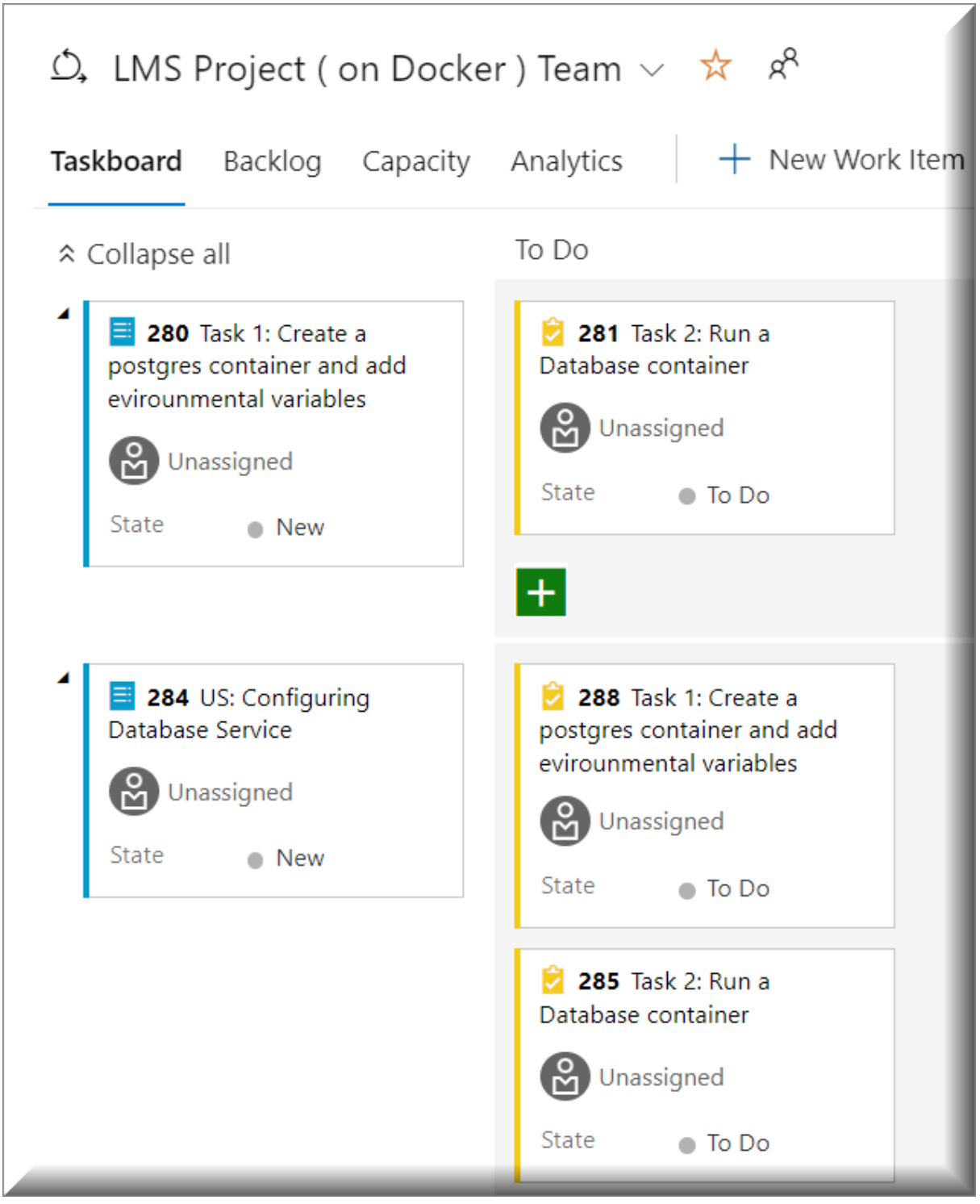
In this example, the whole team has 102 hours to work during the sprint.. So, it is the responsibility of the team leader to distribute tasks according to the capacity. Make sure not to overestimate or underestimate the work. Try to balance when estimating work.

During the sprint

Based on the priority of the tasks, team members can select which tasks they are going to focus on first. Naturally, it is those with the highest priority should be fixed at first. Unfortunately, in Azure DevOps, the backlog board is not automatically sorted

by **Priority**. So, you have to arrange your board by dragging and dropping backlog items. Figure 50 shows a backlog board that is ordered manually by its priority.

Once you select a specific item to work on, then drag the task from **To Do** column to **Doing** column to indicate your team, that you are committed to work on that task.



You can move the Task to state **Done** once you have finished your work on that task. When you move a task to the **Done** column, it automatically resets the **Remaining Work** to 0.

Analytics

You can measure the progress of your sprint using the **Analytics** section. Here, you can see the burndown trend of your work items in your Task backlog. You can compare the **ideal trend** and the **actual trend** of your team's work. This might be very helpful to check, how you have planned your work during a sprint and how successful you were doing that. As an example, the burndown chart shown in Figure 52 which shows an overestimated sprint, have failed to achieve the goal at the end of the sprint.

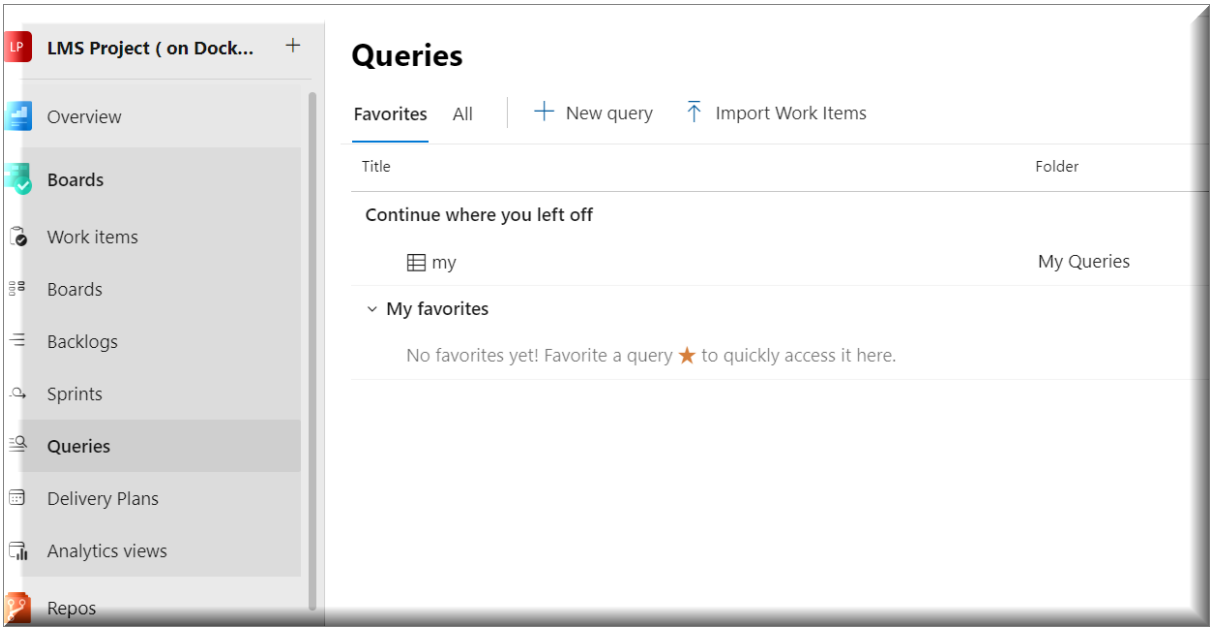
Queries

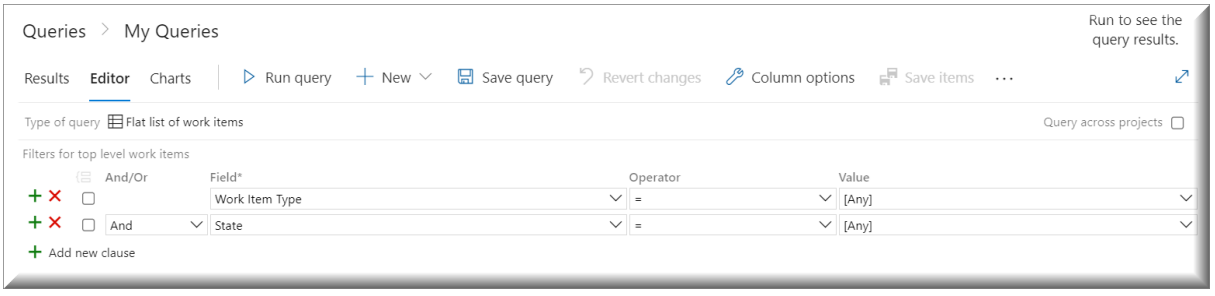
Both Work items and Backlog views we discussed above are predefined. However, if you need to view your own customized backlogs according to your need, then you can use Queries for

that. Here, you can filter your queries using different field values.

Navigate to the **Queries** sub menu item in Azure Boards. Then you will see the page shown below.

You can create a new query by clicking on the **New query** button. Let us create a query to list all the work items which has a **priority** value of **1**. The query should be as follows.





Run your query by clicking on the button **Run query**. Now we have one task and one issue with Priority 1. So, the query produces 2 results. Once you are satisfied with the results, you can save the query for later use. So, click on the button **Save query** to save your query. When you save it, you either make it a **shared query** or a **private query** which is only available to you.

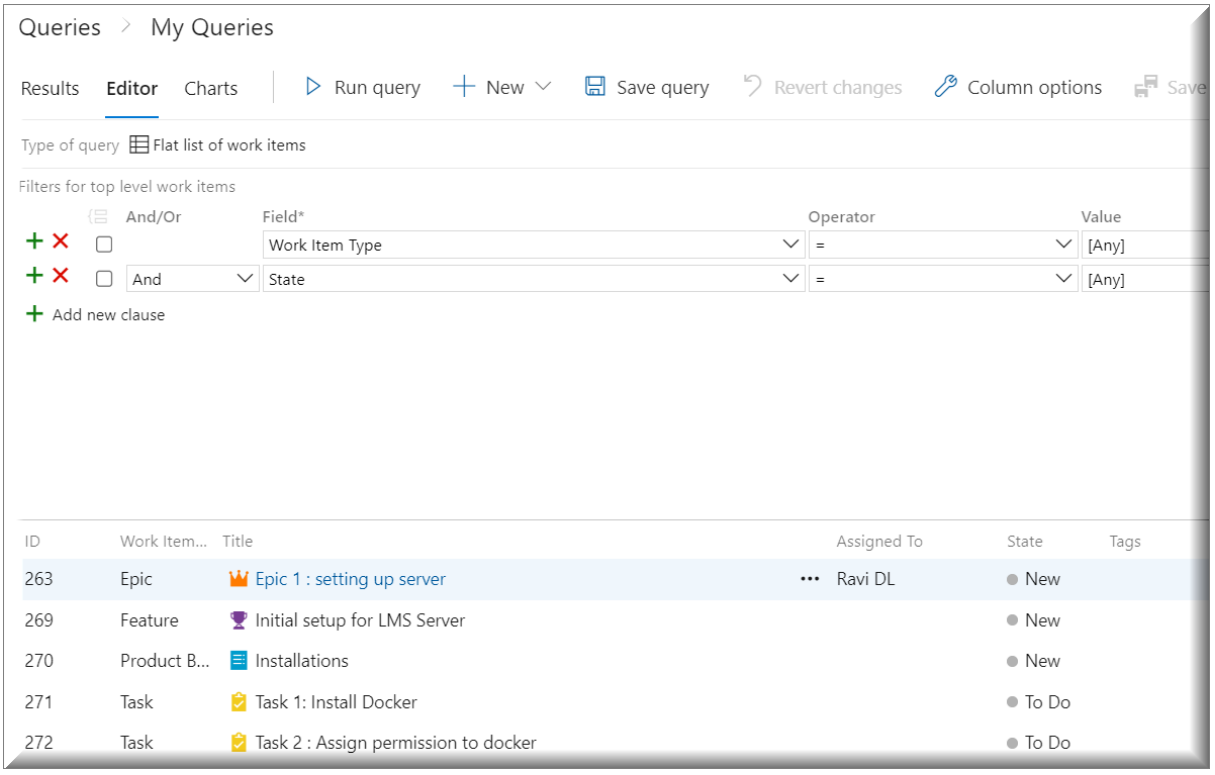
If you save the query as a shared query, then you have the possibility to show it in the project dashboard. In order to do that, click on **Overview** and then **Dashboards**.

Click on **Add a widget** if this is your first time working on the Dashboards section.

Then search for the value “**Query**” in the add widget search box as shown in Figure 57.

Then add the **Query Results** widget and click on the gear icon to configure your widget.

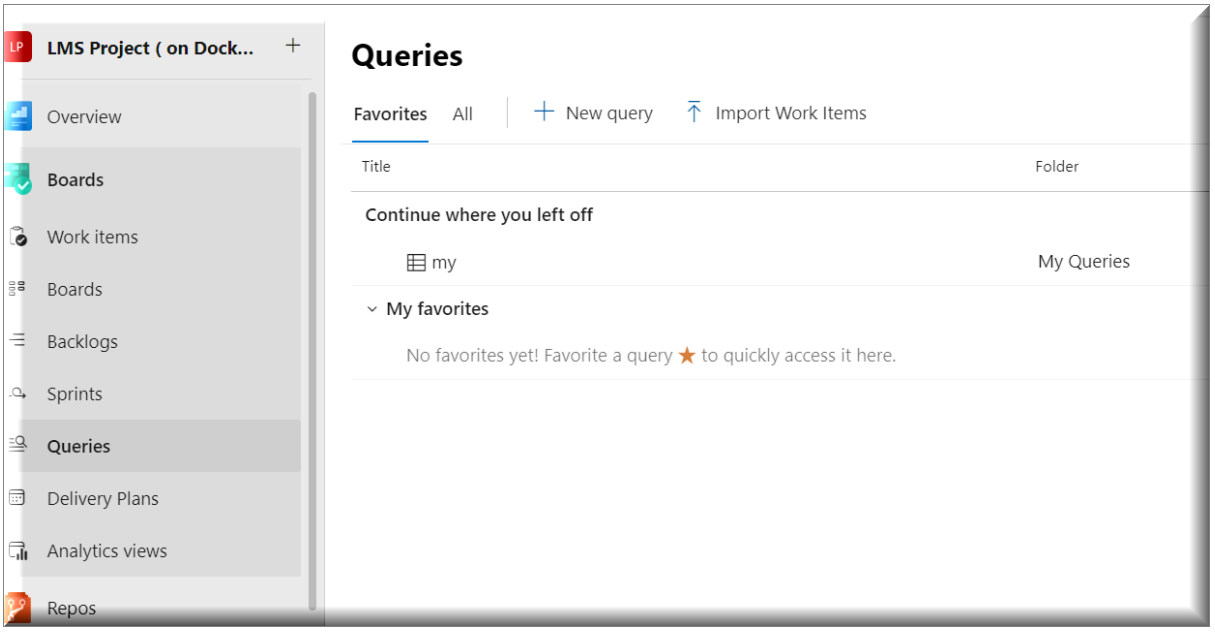
Under the settings, provide a suitable name to your widget and select the query you saved under shared queries.



Now you will see the **First Priority Work Items** in the dashboard of your Team project.

Summary

In this chapter, we learned the basics of Azure Boards. We used the **Basic** work item process for our project and created our first work item using the Work Items functionality in Azure Boards. Moreover, we went through the Kanban board and backlog views. In addition to that, you learned how to plan a sprint based on the capacity of your team. Finally, you learned how to create customized queries and how to use them in Dashboards of your project.


LMS Project (on Dock...
Overview
Boards
Work items
Boards
Backlogs
Sprints
Queries
Delivery Plans
Analytics views
Repos
Queries
Favorites
All
New query
Import Work Items
Title
Folder
Continue where you left off
my
My Queries
My favorites
No favorites yet! Favorite a query ★ to quickly access it here.