

WorkshopPLUS - Essentials on Azure DevOps Services and GitHub

Lab Guides

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Module 6: Azure Boards - Work Items

Lab 1: Azure Boards - Work Items

Introduction

A work item is the basic building block of the project management and tracking capabilities in Azure DevOps. It represents requirements, bugs, issues, test cases, and risks. Work items capture and provide the information about the status and progress of a project.

[Exercise 1: Working With Teams, Areas and Iterations](#)

[Exercise 2: Create Work Items](#)

[Exercise 3: Create a Work Item Query](#)

[Exercise 4: Working With Azure DevOps Using Excel](#)

[Exercise 5: Create a Work Item Template](#)

Objectives

After completing this lab, you will be able to:

- Create areas and iterations.
- Create work items.
- Create work item queries.
- Use Microsoft Excel as a client to create/edit work items in Azure DevOps.
- Create work item templates.

Prerequisites

- Microsoft Excel
- [Lab 2: PartsUnlimited Lab Setup](#)

Estimated Time to Complete This Lab

45 minutes

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 1: Working with Teams, Areas and Iterations

Exercise 1: Working with Teams, Areas and Iterations

Objectives

After completing this exercise, you will be able to:

- Create teams, areas, and iterations

Prerequisites

- [Lab 2: PartsUnlimited Lab Setup](#)

Scenario

In this exercise, you will work with areas and iterations. Areas define either logical, physical, or functional boundaries, and iterations indicate different phases of the application development lifecycle.

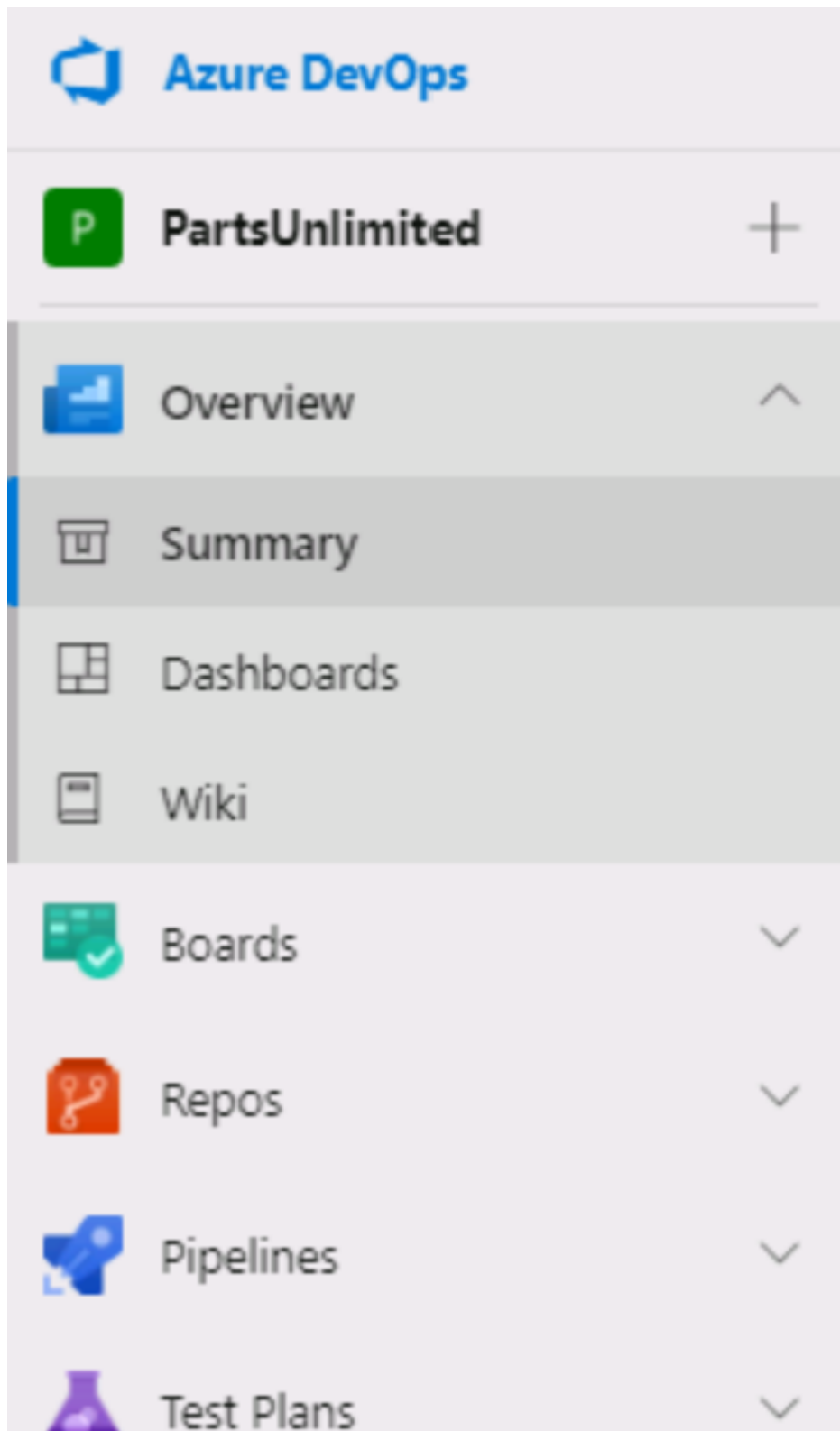
Tasks

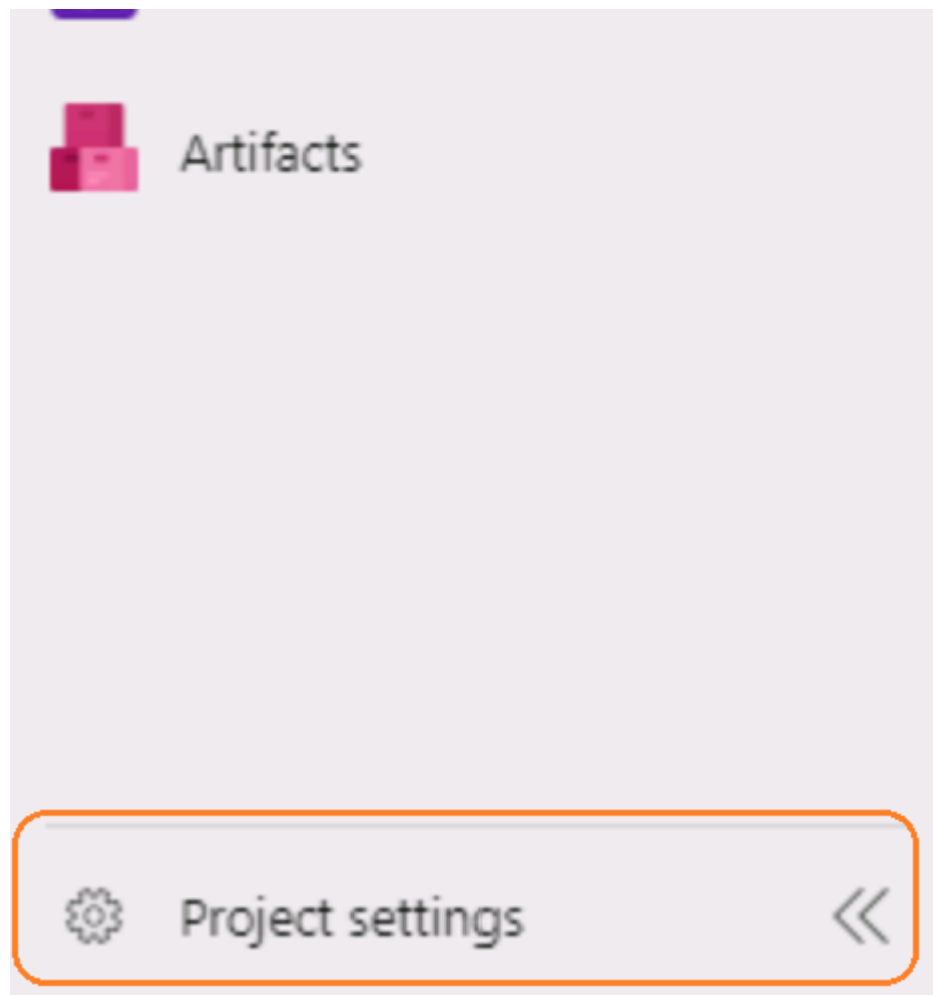
- [Task 1: Create teams, areas, and iterations](#)
- [Task 2: Set permissions](#)

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 1: Working with Teams, Areas and Iterations

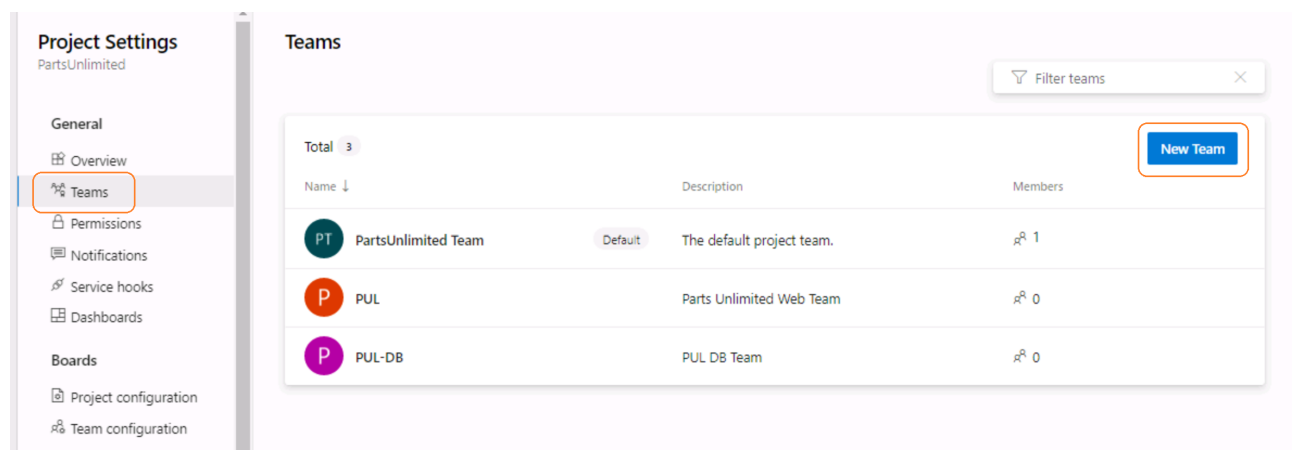
Task 1: Create teams, areas, and iterations

1. Navigate to the browser and go to the **PartsUnlimited** project in Azure DevOps Services.
2. Open the settings page using the **Project settings** navigation located at the bottom-left corner of the page.





3. Select the **Teams** tab under General. There are already a few teams in this project, but you'll create a new one for this lab. Click **New Team**.



4. Use **PUL-Web** as the team **Name** and click **Create**.


Create a new team



Name

PUL-Web




Members

 Add members

Description

Add a description to your team this will appear in the team page

Administrators

 Student1-19052640  

The team creator is the default team administrator. You can add more team administrators.

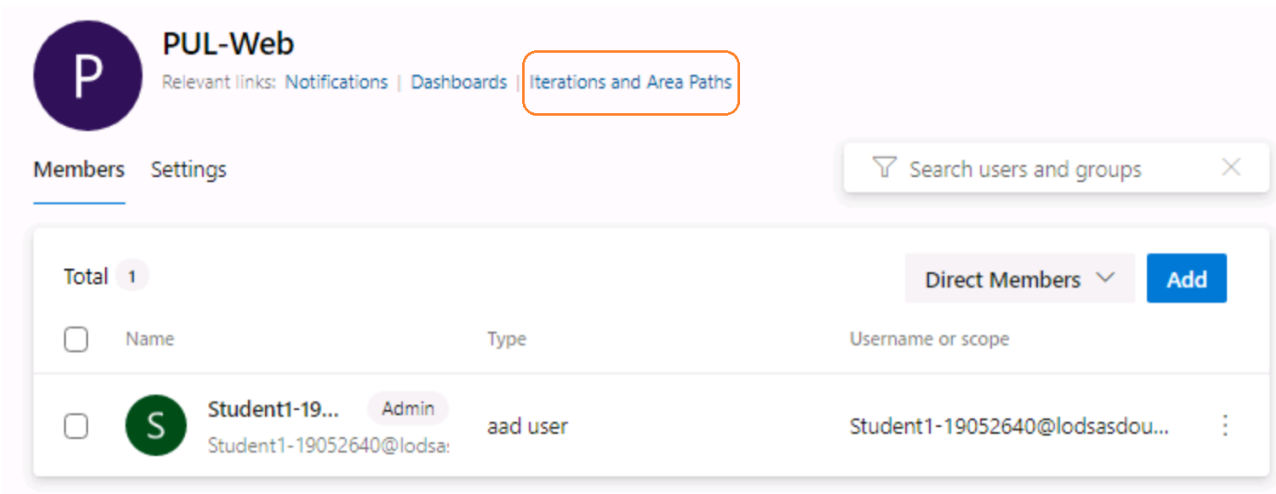
☒ Add admin(s) to team as member(s)

Cancel

Create

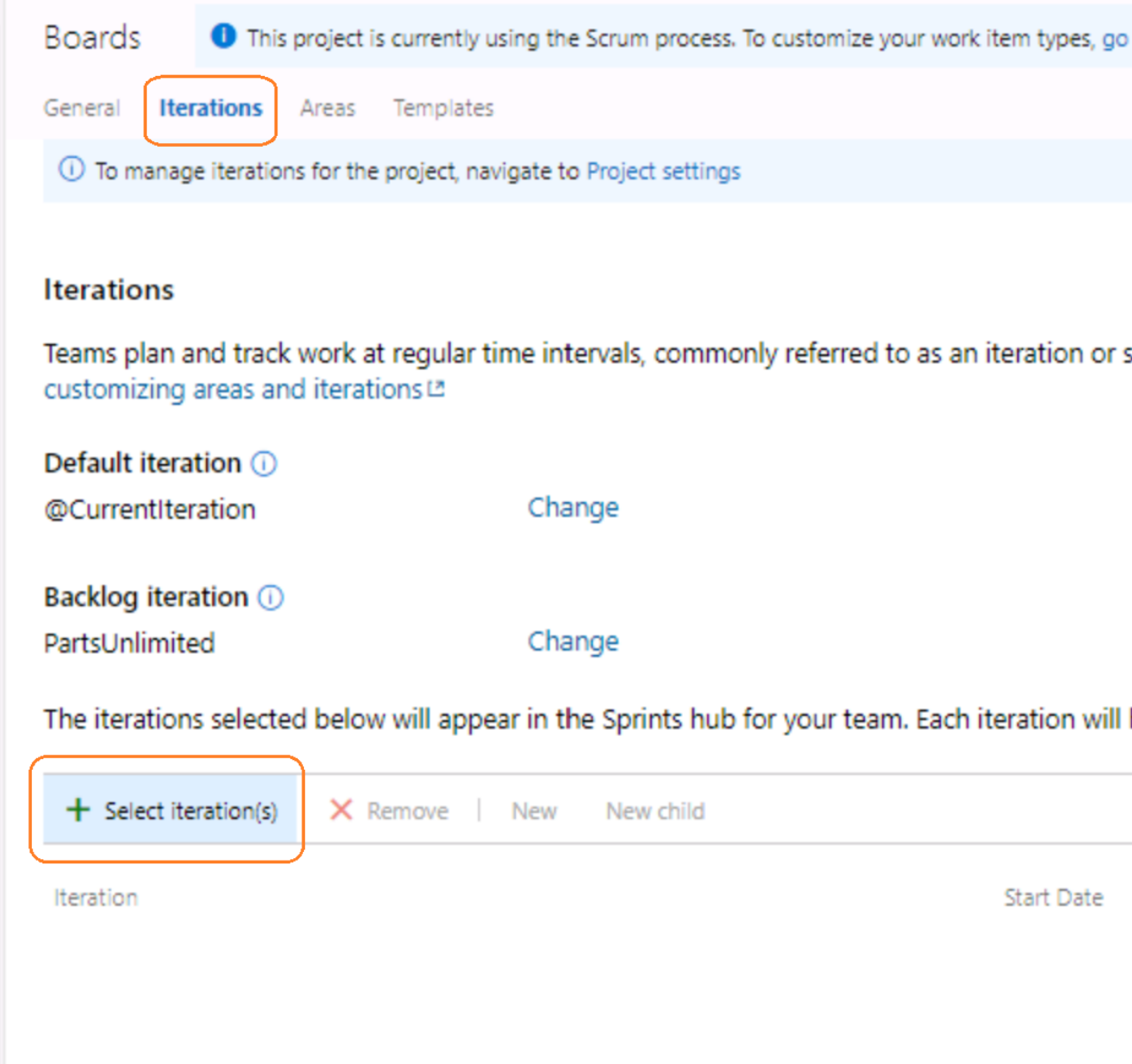
5. Select the newly created team to view its details.

6. By default, the new team has only you as its member. You can use this view to manage membership, notifications, dashboards, and more. But first you will want to define the schedule and scope of the team. Click **Iterations and Area Paths**.



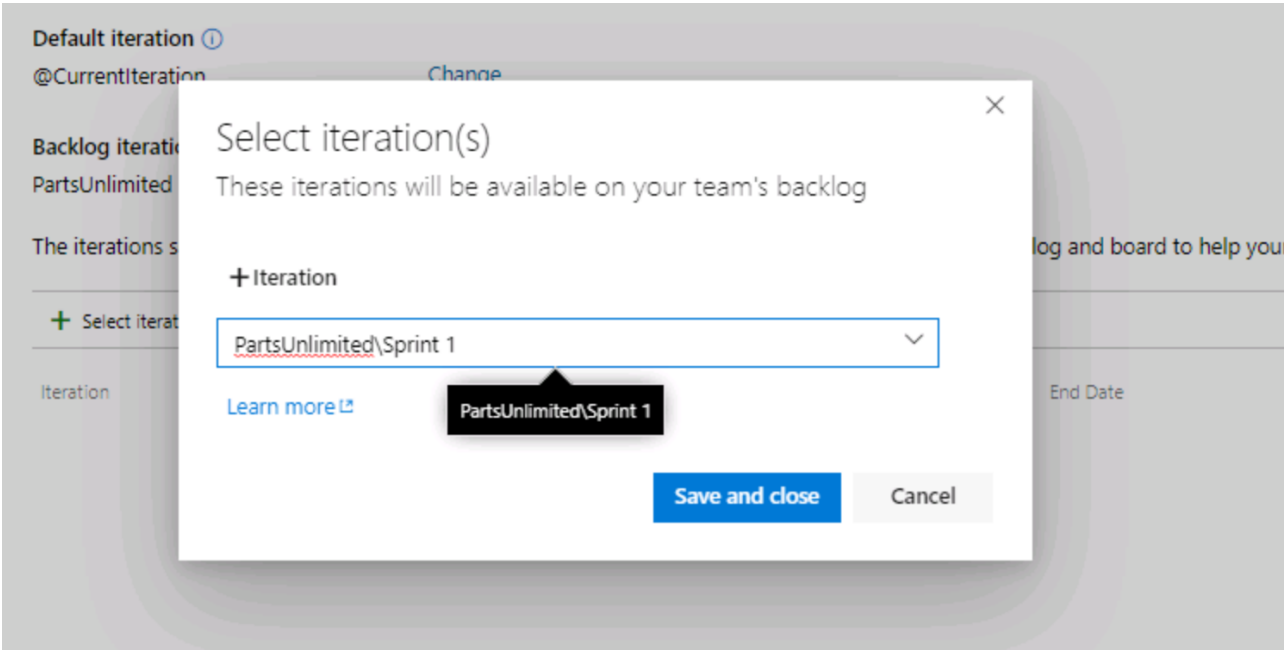
This should open a new new tab in the browser.

7. Select the **Iterations** tab and click **+ Select iteration(s)**. This team will use the same iteration schedule that's already in place for the other teams, although you can take a different route if that's better for your organization.



8. Select **PartsUnlimited\Sprint 1** and click **Save and close**.

Note that this first sprint has already passed. This is because the demo generator is designed to build out project history so that this sprint occurs in the past.



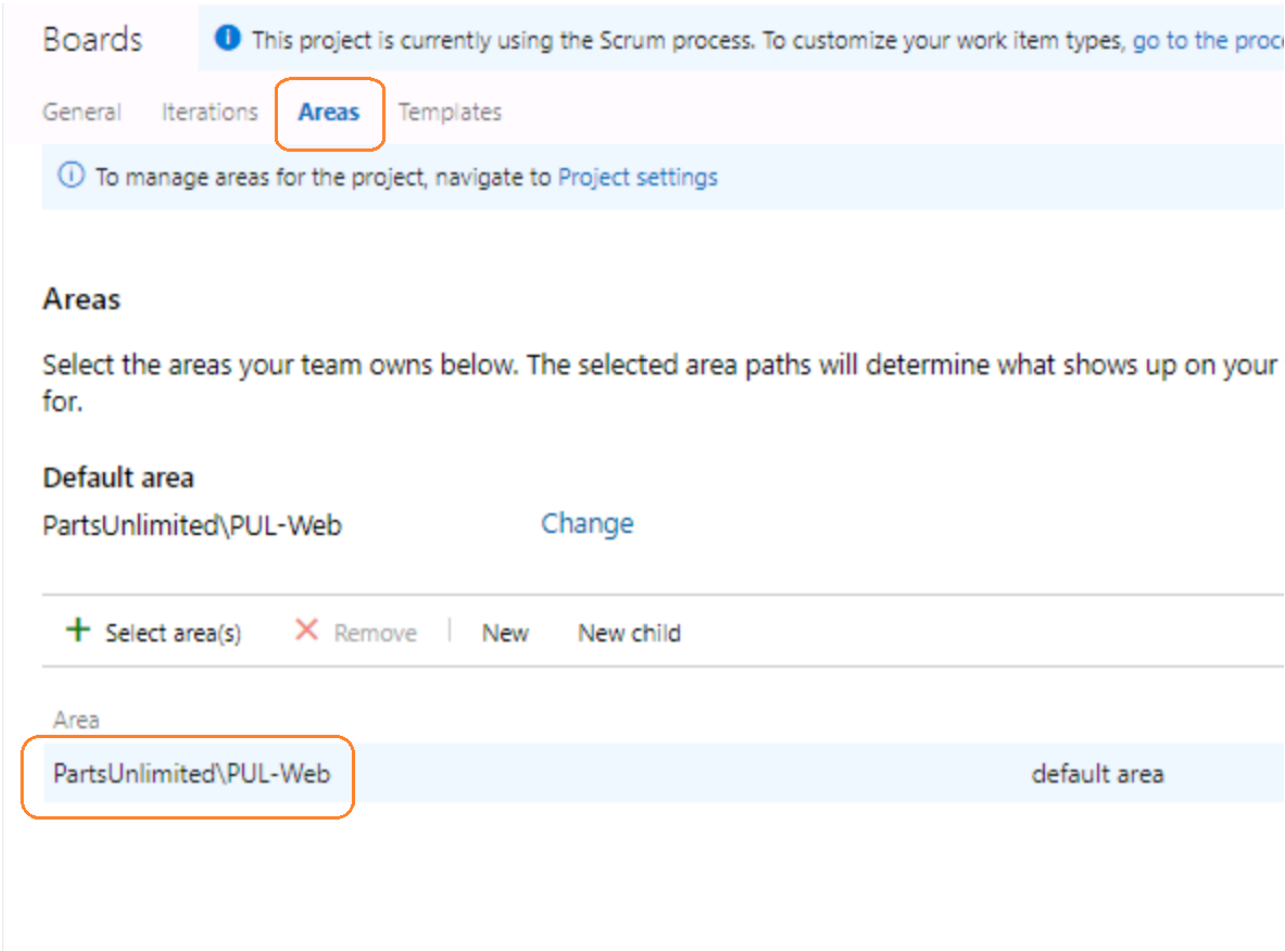
9. Repeat the process to add **Sprint 2** and **Sprint 3**. The second sprint is the current iteration, and the third is in the near future.

Your start and end dates for the sprints will be different.

The iterations selected below will appear in the Sprints hub for your team. Each iteration will have a backlog and board to help

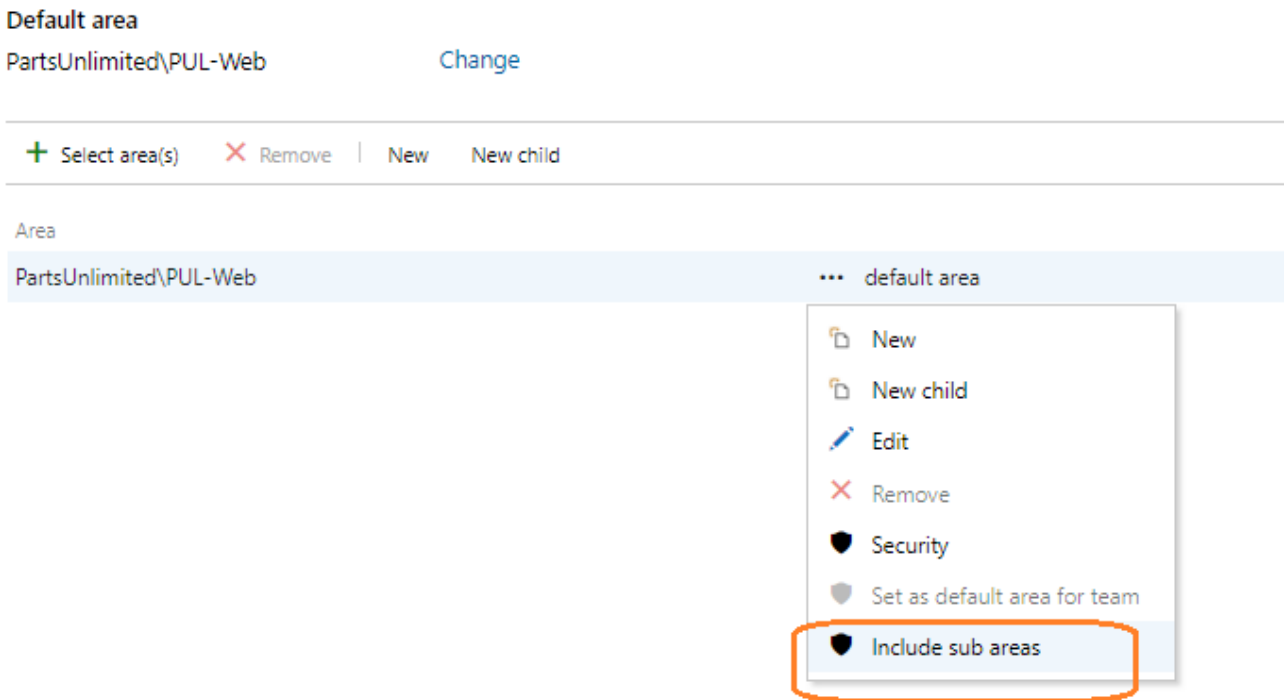
+ Select iteration(s) ✕ Remove New New child		
Iteration	Start Date	End Date
PartsUnlimited\Sprint 1	8/24/2021	9/14/2021
PartsUnlimited\Sprint 2	9/15/2021	10/6/2021
PartsUnlimited\Sprint 3	10/7/2021	10/28/2021

10. Select the **Areas** tab. By default, there is an area matching the name of the team.



11. Click on the **Options** for the **PartsUnlimited\PUL-Web** area and select **Include sub areas**.

The default setting for all teams is to exclude sub-area paths. We will change it to include sub-areas so that the team gets visibility into all of the work items from all teams. Optionally, the management team could also choose to not include sub-areas, thereby removing work items from their view as soon as they are assigned to one of the teams.

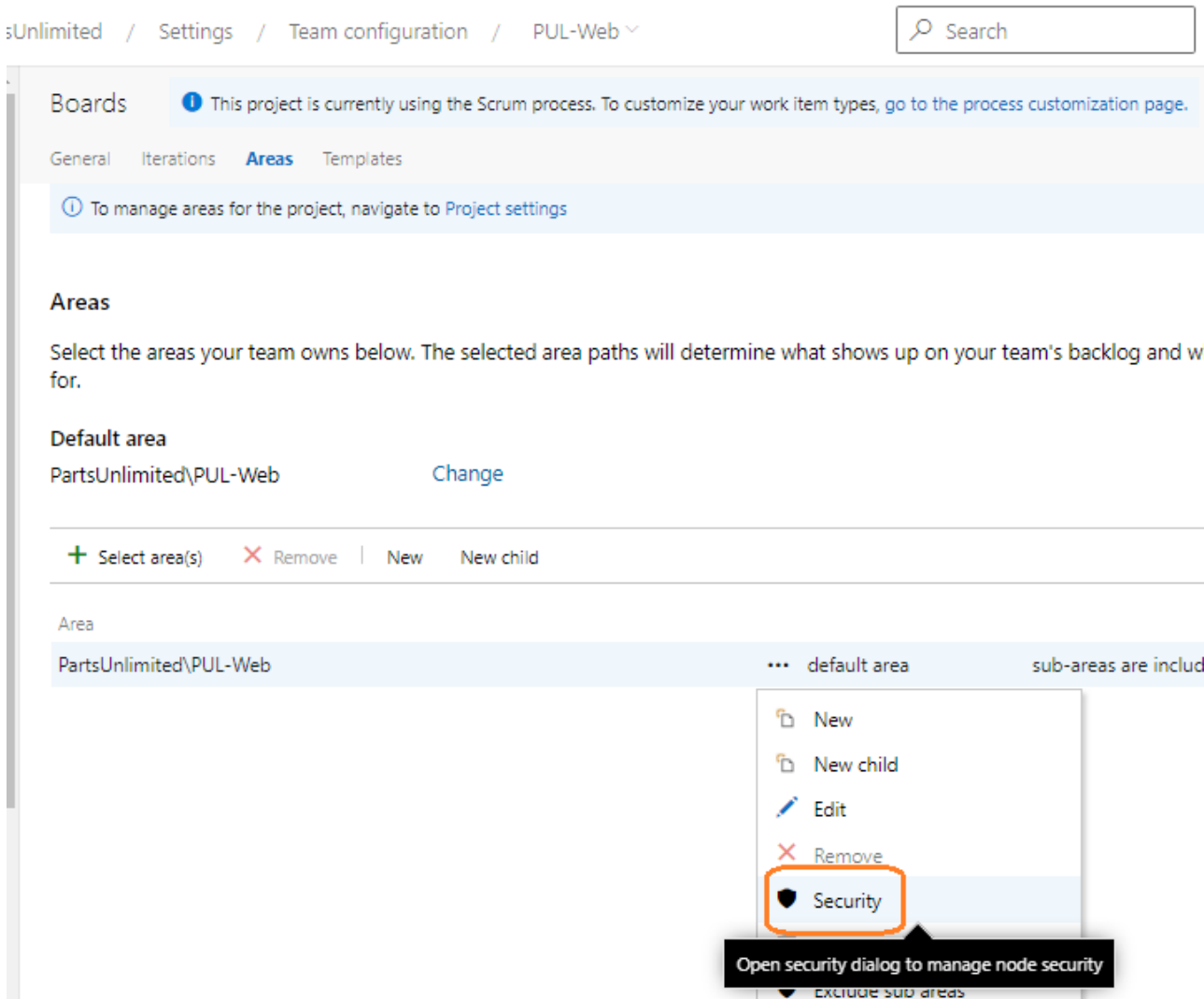


Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 1: Working with Teams, Areas and Iterations

Task 2: Set Permissions

You can secure and assign specific permissions to areas and iterations. By assigning permissions, you can scope the set of actions that users or groups can perform on work items or test plans that are assigned to an area or iteration. You can also restrict or allow users or groups to manage the project structure for an area or iteration.

1. In the **Areas** tab, for the PUL-Web team of the PartsUnlimited project, click the action **options** menu for **PartsUnlimited\PUL-WEB** area, and then click **Security**.



2. Review the **Permissions for PUL-Web** dialog box to see what you can manage with permissions. Both areas and iterations can have permissions managed in this manner. Leave the permissions as they are and **close** the window.

Permissions for PUL-Web



Inheritance ⓘ

Search for users or groups

▼ Azure DevOps Groups

PA

Project Collection Test Service Accounts

C

Contributors

R

Readers

▼ Users

PS

PartsUnlimited Build Service (AppInnovat

S

Student1-19052640

[AppInnovation-19052640]\Project Collection Test Service Accounts

Create child nodes

Not set ▼

Delete this node

Not set ▼

Edit this node

Not set ▼

Edit work items in this node

Not set ▼

Manage test plans

Not set ▼

Manage test suites

Not set ▼

View permissions for this node

Allow (inherited) ▼ ⓘ

View work items in this node

Allow (inherited) ▼ ⓘ

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Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 2: Create Work Items

Exercise 2: Create Work Items

Objectives

Work items play a prominent role in Azure DevOps. Whether describing work to be done, impediments to release, test definitions, or other key items, work items are the workhorse of modern projects. In this task you'll focus on using various work items to set up the plan to extend the PartsUnlimited site with a product training section. While it can be daunting to build out such a substantial part of a company's offering, Azure DevOps and the Scrum process make it very manageable.

This exercise is designed to illustrate a variety of ways you can create different kinds of work items, as well as to demonstrate the breadth of features available on the platform. As a result, these steps should not be viewed as prescriptive guidance for project management. The features are intended to be flexible enough to fit your process needs, so explore and experiment as you go.

Scenario

In this exercise, we will:

- Break down the product backlog items into tasks
- Introduce test cases
- Use Areas and Iterations from Exercise 1 when creating new work items
- Demonstrate work item linking concepts

Prerequisites

Complete [Exercise 1](#).

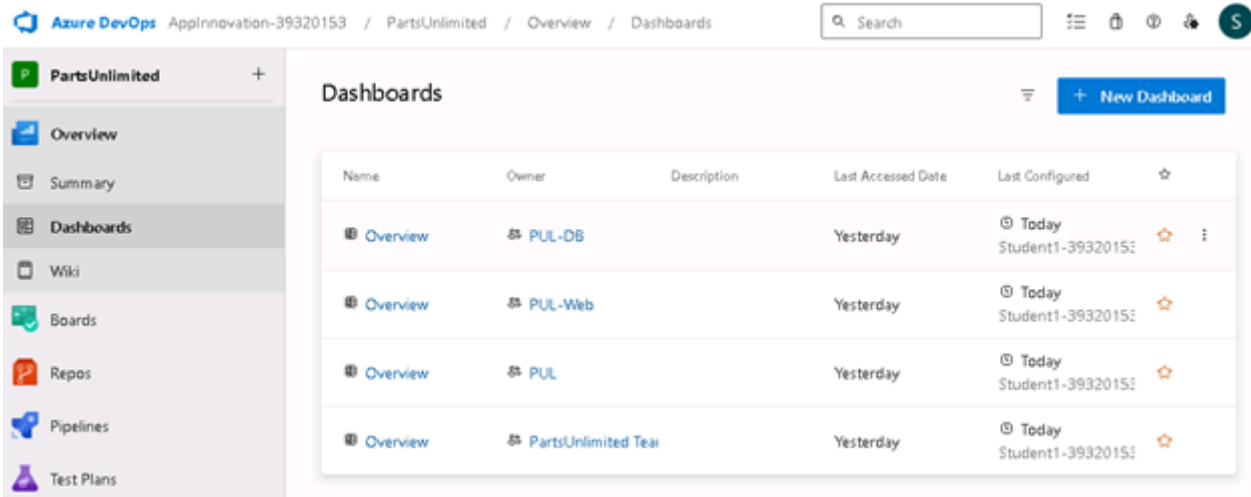
Tasks

- [Task 1: Create new Epic Work Item](#)
- [Task 2: Create a new Feature Work Item](#)
- [Task 3: Create a new Product Backlog Work Item](#)
- [Task 4: Create a new Task Work Item](#)

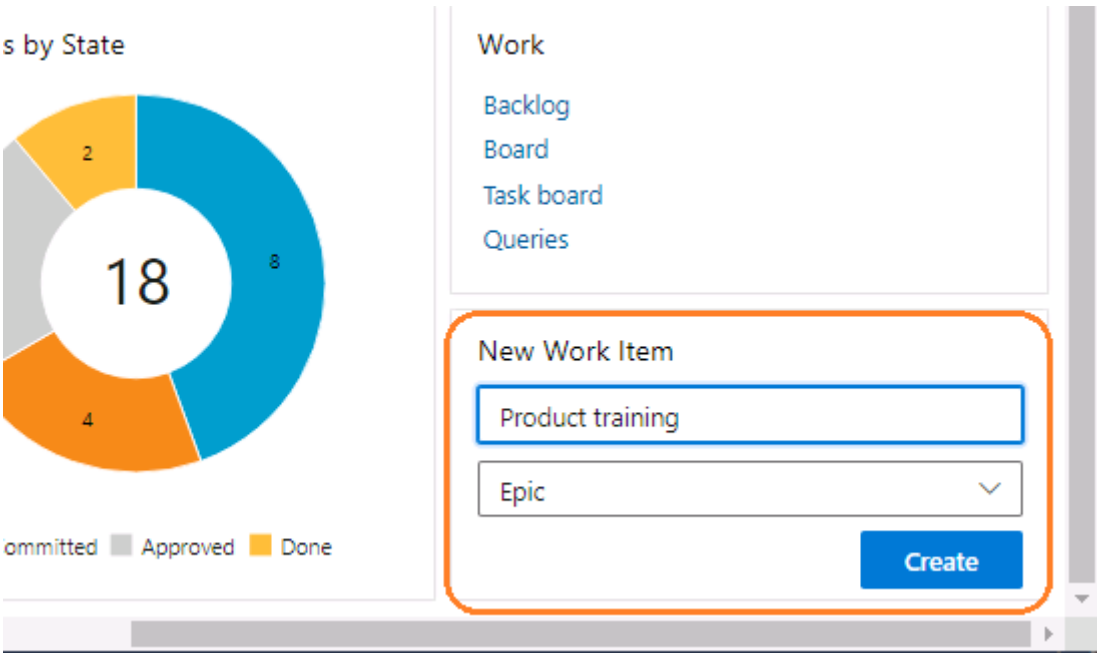
Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 2: Create Work Items

Task 1: Create new Epic Work Item

1. Within Azure DevOps Services browser page, make sure you are in the **PartsUnlimited** project. Select **Overview | Dashboards**.



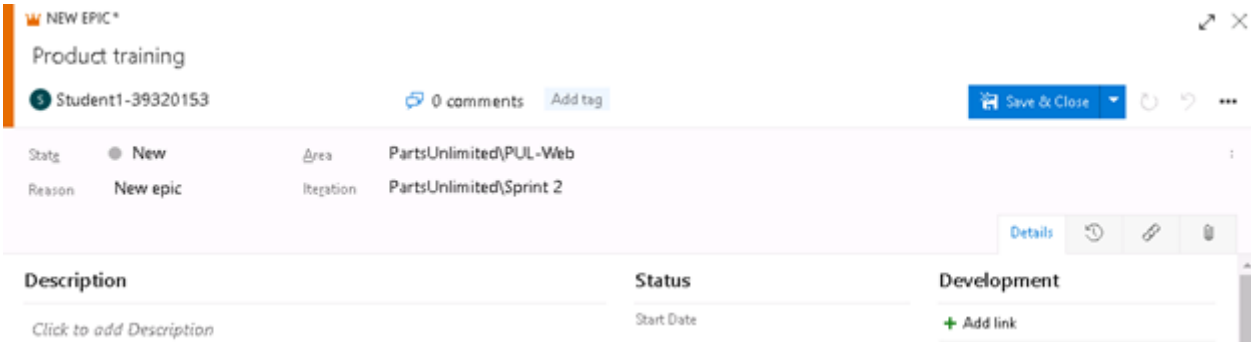
2. Select the **Overview** dashboard for the **PartsUnlimited Team**.
3. There are many ways to create work items in Azure DevOps, and you will explore a few of them here. Sometimes it's as simple as firing one off from a dashboard. Locate the **New Work Item** widget and select the **Epic** type from the dropdown. Enter the title name as **Product training** and click **Create**.



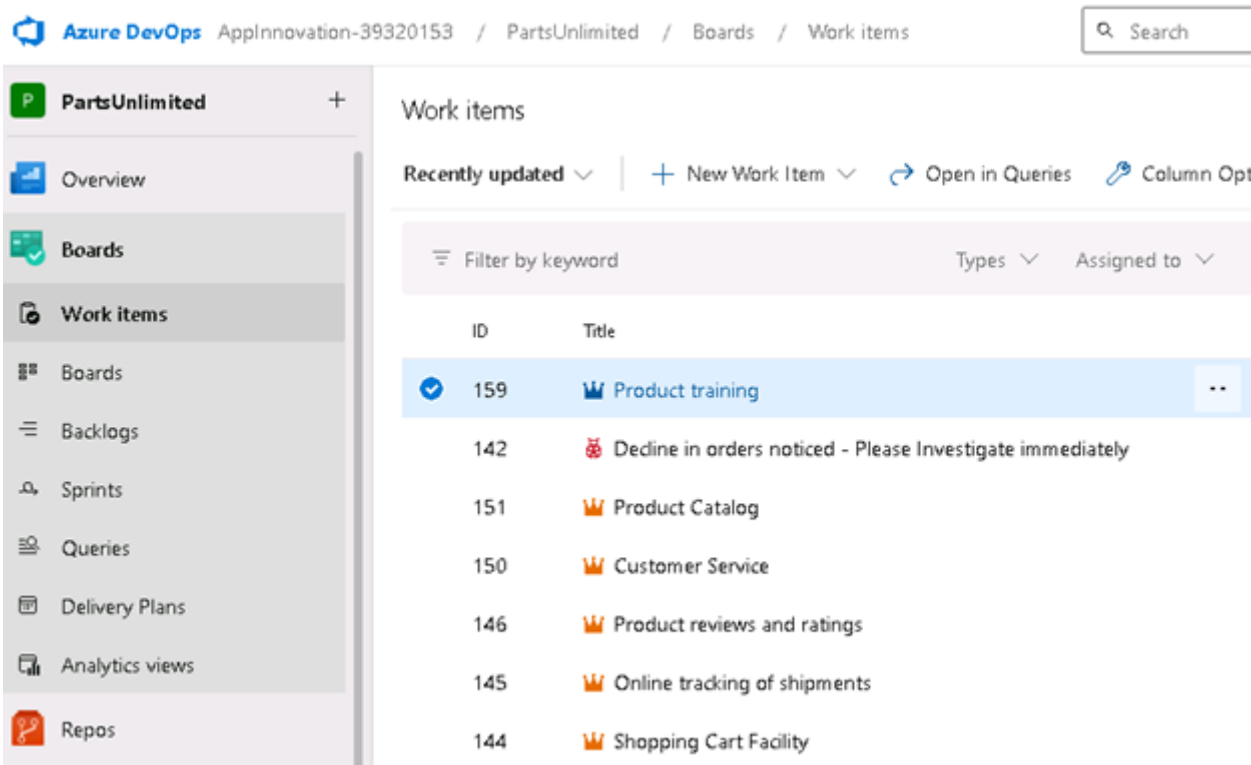
4. The previous step should have opened the window for creating new Epic. Set the following information for this epic.
- **Assign** the epic to yourself
 - **Area** to **PartsUnlimited\PUL-Web**

- **Iteration** to **PartsUnlimited\Sprint 2**
- click **Save & Close**

Ordinarily you would want to fill out as much information as possible, but you can run lean here for the purposes of this lab.



5. Select **Boards | Work Items**.



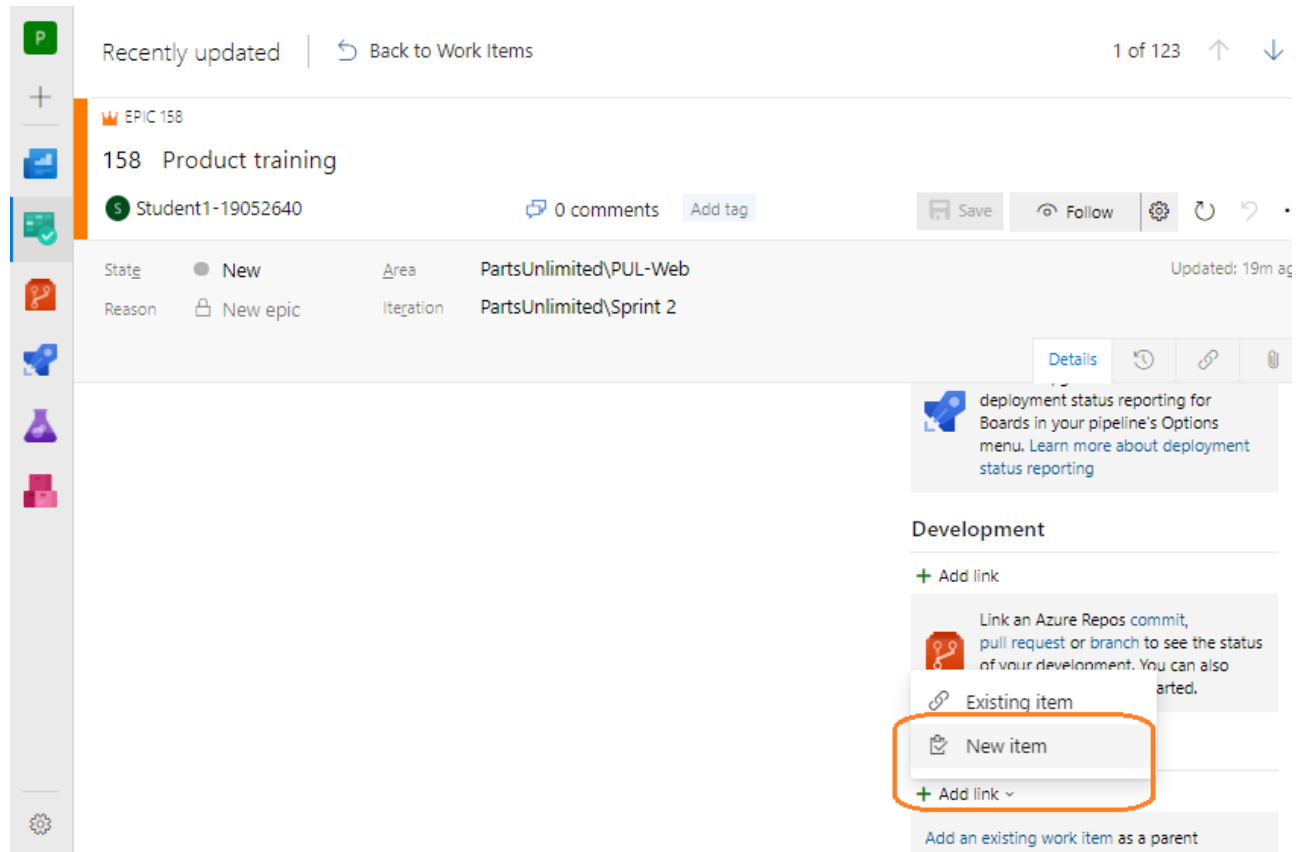
6. Locate the newly created epic **Product training** and open it.

The work item form includes everything you could ever want to know about a work item. This includes details about who it's assigned to, its status across many parameters, and all the associated information and history for how it has been handled since creation.

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 2: Create Work Items

Task 2: Create a new Feature Work Item

1. With the **Product training** epic work item still open, focus on the **Related Work** section. One of the ways to add a feature to this epic is to select **Add link | New item**.






2. In the **Add link** dialog box, set following information:

- Link type: **Child**
- Work item type: **Feature**
- Title: **Training dashboard**
- Click **OK**

×

Add link

You are adding a link from:

 158 Product training
Updated 21 minutes ago, ● New

Link type

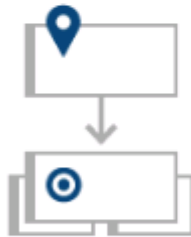
Child

☒ Work item type

Feature

Title

Training dashboard



Comment

OK

Cancel

- A **New Feature** work item should have opened now with Assignment, Area, and Iteration already set to the same values as the parent epic. The Feature should even be linked to the parent item it was created from. Click **Save & Close**.

NEW FEATURE

Training dashboard

Student1-19052640

0 comments

Add tag

Save & Close

State

New

Area

PartsUnlimited\PUL-Web

Reason

New feature

Iteration

PartsUnlimited\Sprint 2

Details

(1)

Development

+ Add link

Related Work

+ Add link

Parent

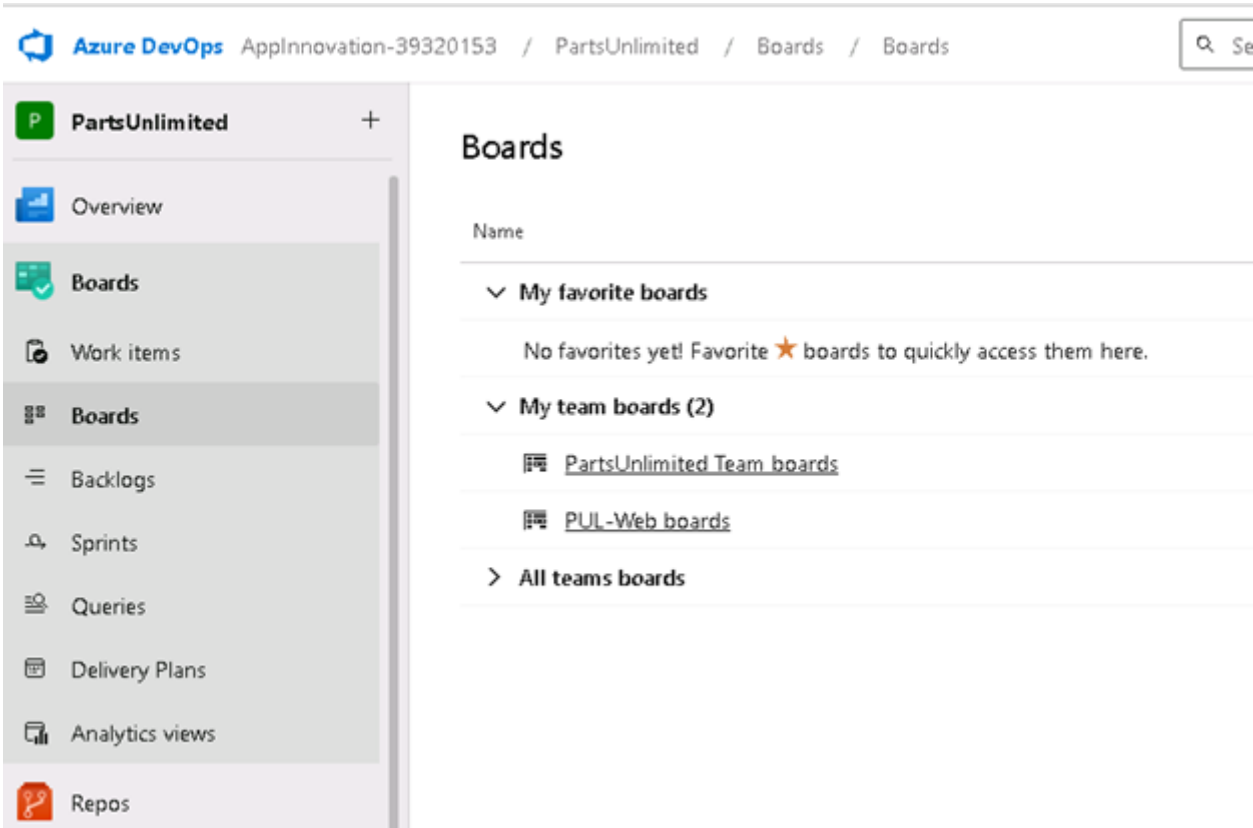
158 Product training

Updated 27 minutes ago, New

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 2: Create Work Items

Task 3: Create a new Product Backlog Work Item

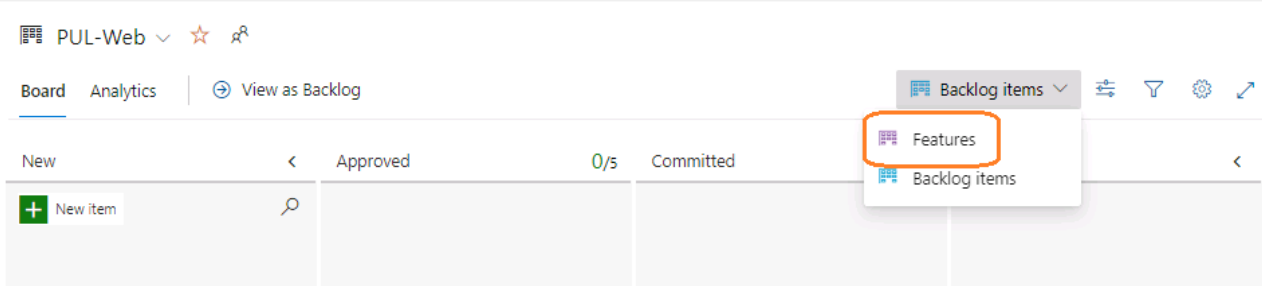
- 1. Navigate to the **Azure Boards | Boards**.



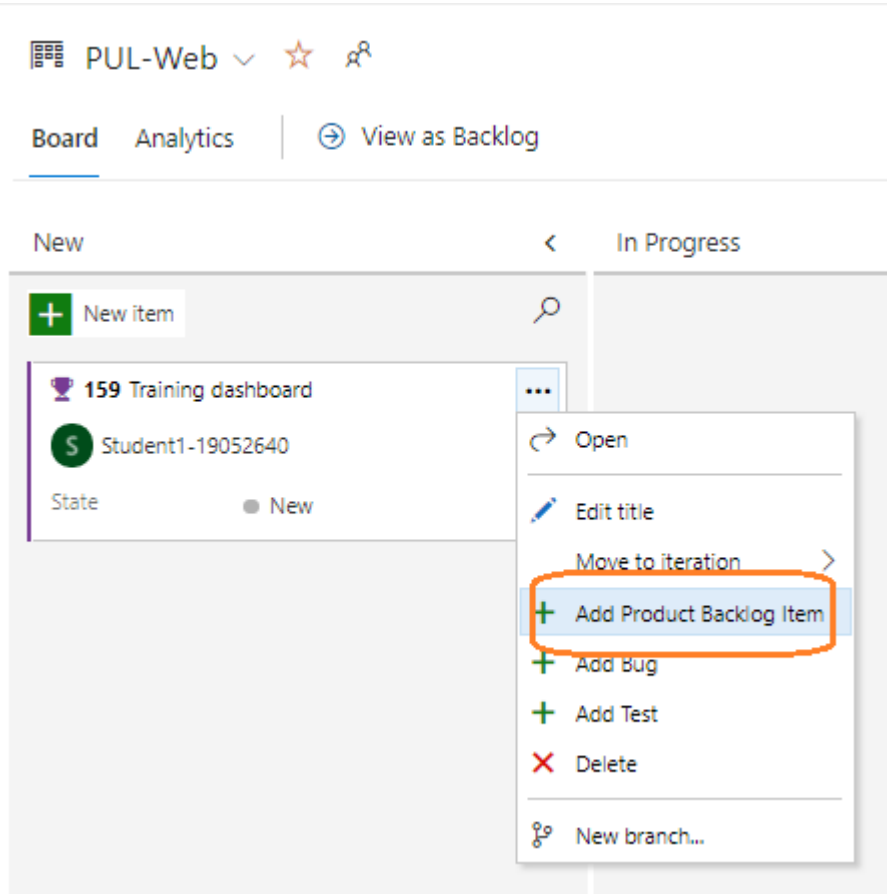
- 2. Select **PUL-Web boards**. This will open the board for that particular team.

Boards	
Name	Team
My favorite boards	
No favorites yet! Favorite ★ boards to quickly access them here.	
My team boards (2)	
PartsUnlimited Team boards	PartsUnlimited Team
PUL-Web boards	PUL-Web
All teams boards	

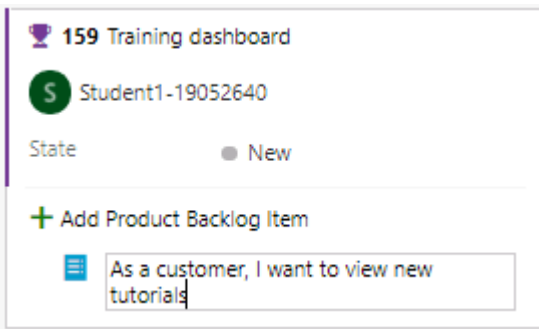
- 3. Switch the board from showing Backlog items to showing **Features**. This will make it easy to add tasks and other work items to the features.



4. Select **Options** for **Training dashboard** Feature, select **Add Product Backlog Item**.



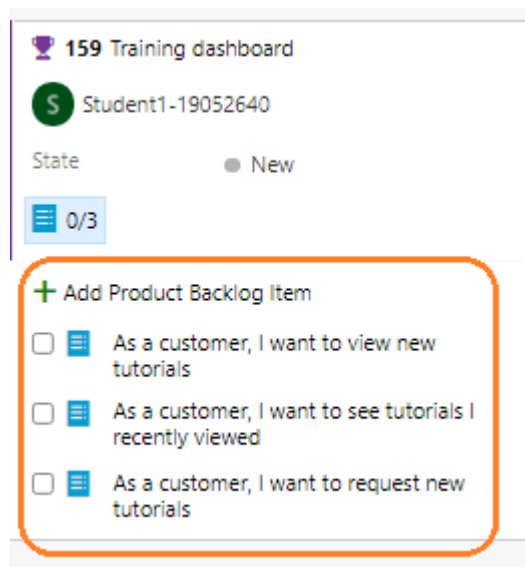
5. Name the first backlog item **As a customer, I want to view new tutorials** and press **Enter** to save. This creates a new Product Backlog Item (PBI) work item that is a child of the feature and shares its area and iteration.



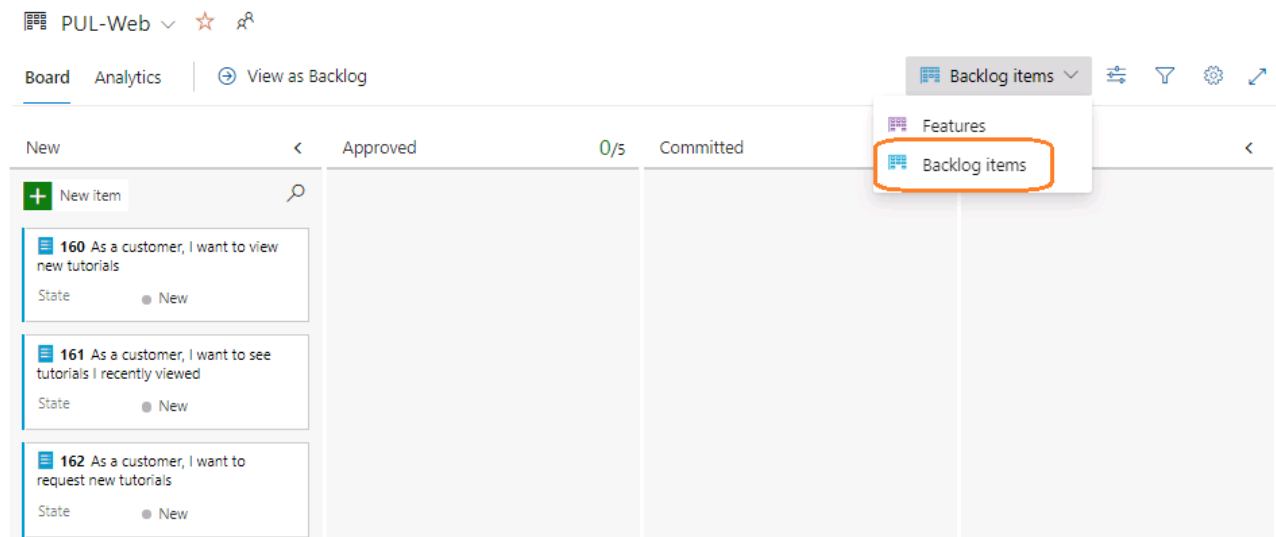
6. Add two more PBIs designed to enable the customer to see their **recently viewed tutorials** and **to request new tutorials**.

- **As a customer, I want to see tutorials I recently viewed**

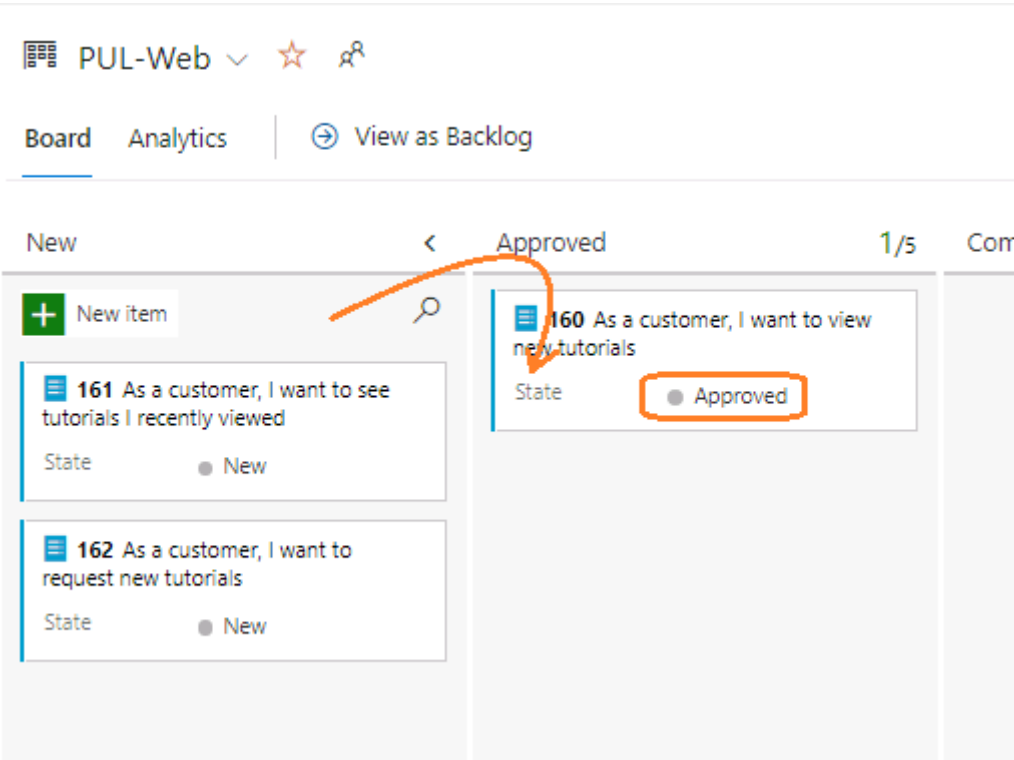
- **As a customer, I want to request new tutorials**



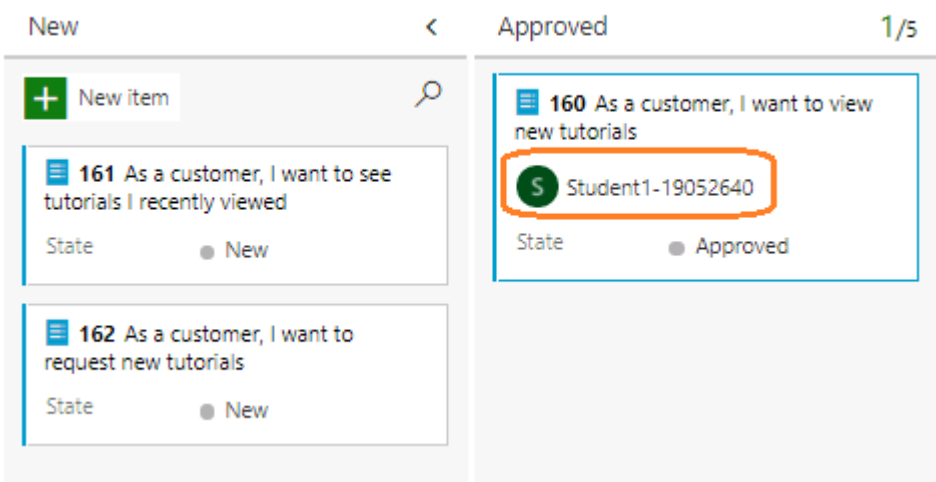
7. Switch the board view back to **Backlog items**.



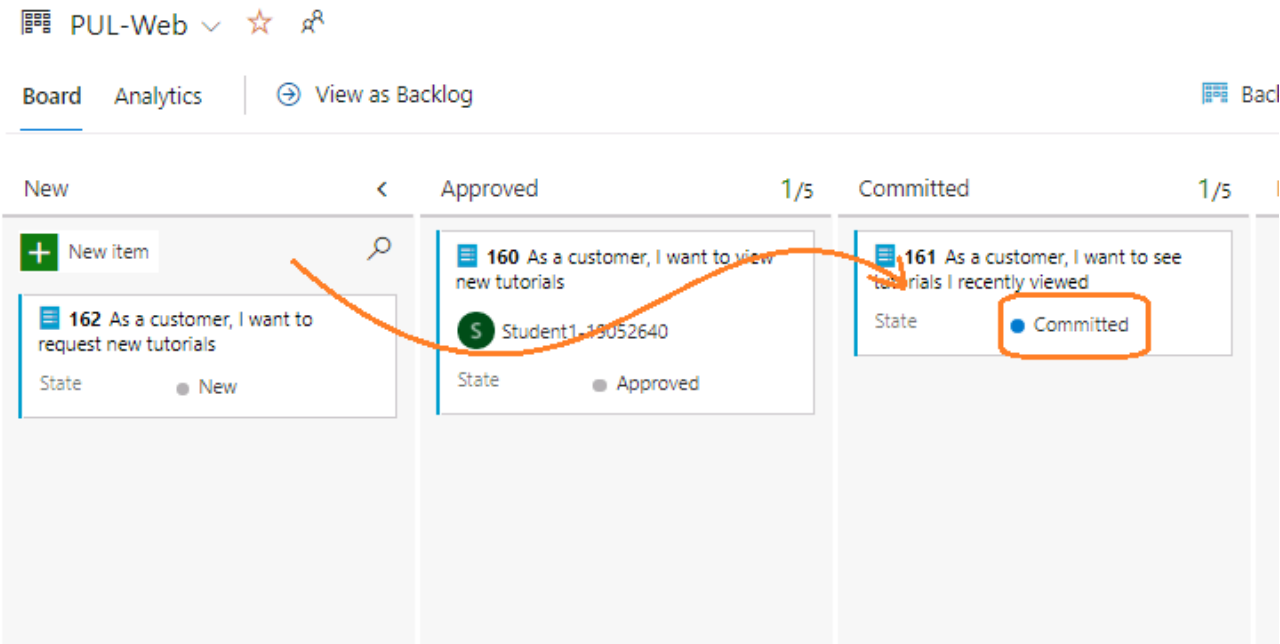
8. Backlog items have a state that defines where they are relative to being completed. While you could open and edit the work item using the form, it's easier to just drag cards on the board. Drag the first work item to **Approved**.



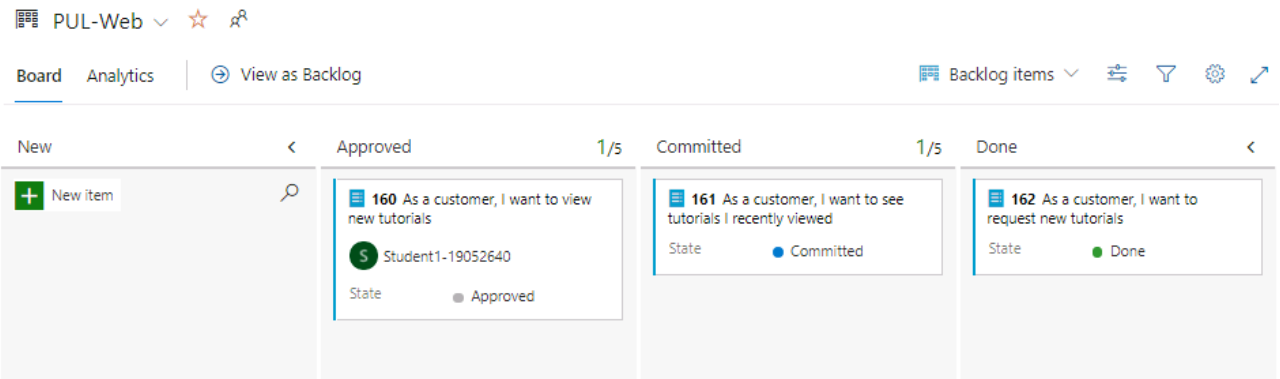
9. Assign the moved PBI to yourself.



10. Drag the second work item to the **Committed** stage.



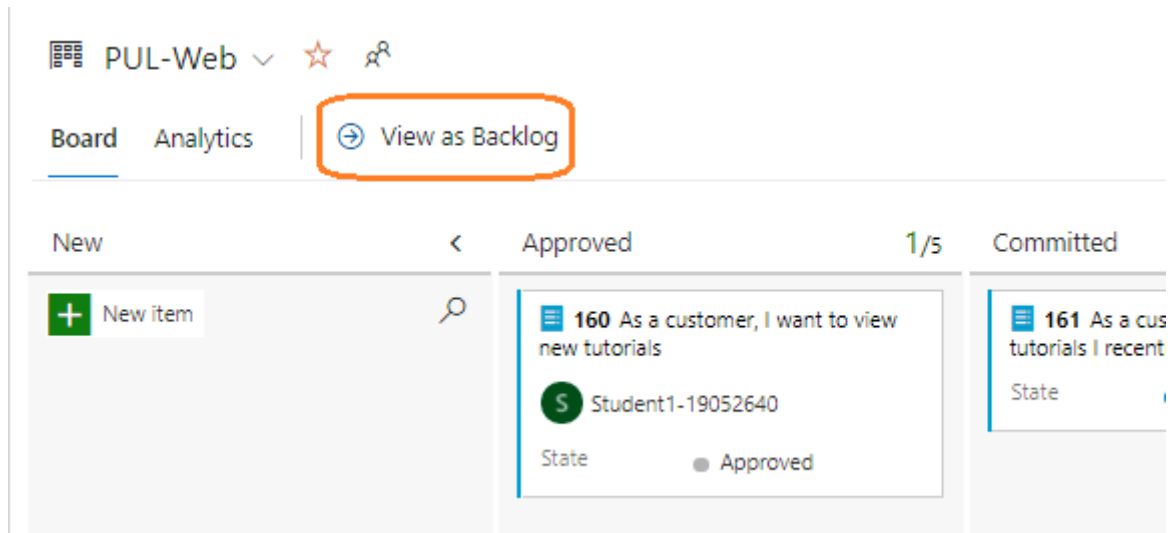
11. Drag the final PBI to the Done stage.



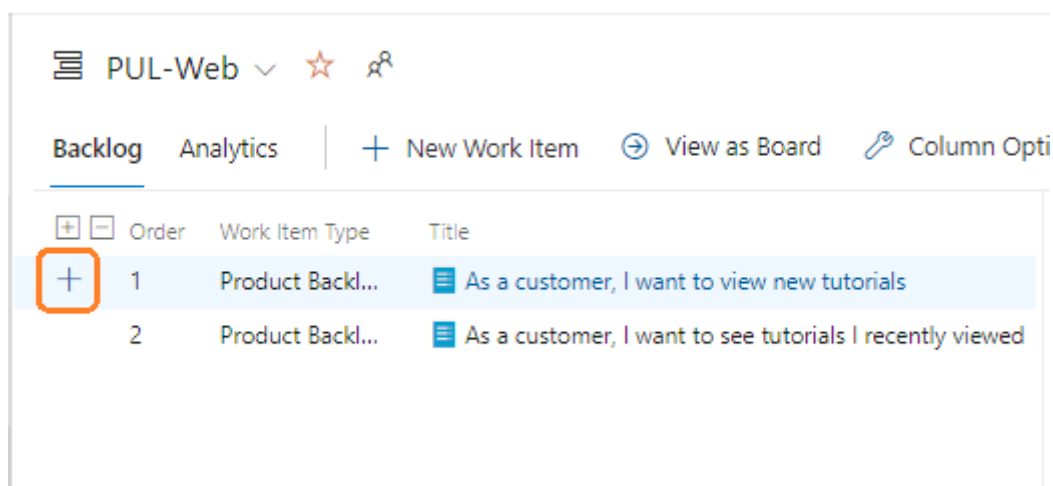
Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 2: Create Work Items

Task 4: Create a new Task Work Item

1. Click on **View as Backlog**. The board is one view, you can switch to the backlog view easily.



2. Another easy way to create work items is using the **Add** button on the backlog. Click it to add a **new task** to the first backlog item.



3. Create the task with following details:
 - Title: **Add page for most recent tutorials**
 - Remaining Work: **5**
 - Activity: **Development**
 - Click **Save & Close**

NEW TASK *

Add page for most recent tutorials

Unassigned 0 comments Add tag Save & Close

State: To Do Area: PartsUnlimited\PUL-Web Reason: New task Iteration: PartsUnlimited\Sprint 2 Details (1)

Description
Click to add Description

Discussion
Add a comment. Use # to link a work item, ! to link a pull request, or @ to mention a person.

Details
Priority: 2
Remaining Work: 5
Activity: Development
Blocked

Deployment
To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development
+ Add link

Related Work
+ Add link
Parent
160 As a customer, I want to view new...
Updated 23 minutes ago, Approved

4. Add another task with following details:

- Title: **Optimize data query for most recent tutorials**
- Remaining Work: **3**
- Activity: **Design**
- Click **Save & Close**

NEW TASK *

Optimize data query for most recent tutorials

Unassigned 0 comments Add tag Save & Close

State: To Do Area: PartsUnlimited\PUL-Web Reason: New task Iteration: PartsUnlimited\Sprint 2 Details (1)

Description
Click to add Description

Discussion
Add a comment. Use # to link a work item, ! to link a pull request, or @ to mention a person.

Details
Priority: 2
Remaining Work: 3
Activity: Design
Blocked

Deployment
To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development
+ Add link

PUL-Web

Backlog Analytics + New Work Item View as Board Column Options ...

Backlog items

Order	Work Item Type	Title
1	Product Backlog Item	As a customer, I want to view new tutorials
	Task	Add page for most recent tutorials
	Task	Optimize data query for most recent tutorials
2	Product Backlog Item	As a customer, I want to see tutorials I recently viewed

Planning

Drag and drop work items to include them in a sprint.

PUL-Web Backlog

Sprint 2

Planned Effort: -

3 2

Current 9/15/2021 - 10/6/2021

16 working days

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 3: Create a Work Item Query

Exercise 3: Create a Work Item Query

Objectives

After completing this exercise, you will be able to:

- Create and edit work item queries.

Scenario

At times, you might want to view the work items you created. For example:

- You may want to view only the tasks that are assigned to you.
- When testing the application, you may want to view only the test cases that are assigned to you.
- You may also want to see a varying degree of details of the work item at a glance.

You will create work item queries to retrieve work items with the criteria we want.

Prerequisites

Complete [Exercise 2](#).

Tasks

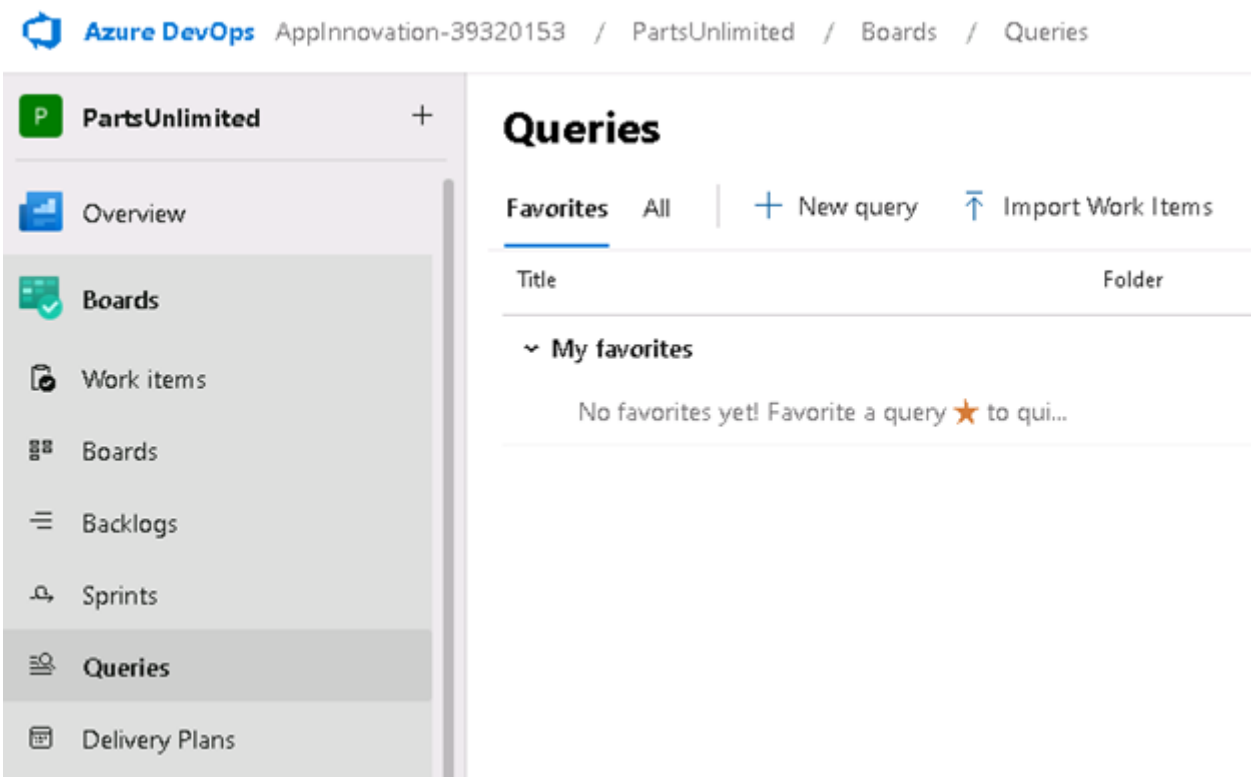
- [Task 1: Show all Work Items assigned to You](#)
- [Task 2: Add Columns to Query](#)
- [Task 3: Change the List Layout](#)
- [Task 4: Run a Query](#)

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 3: Create a Work Item Query

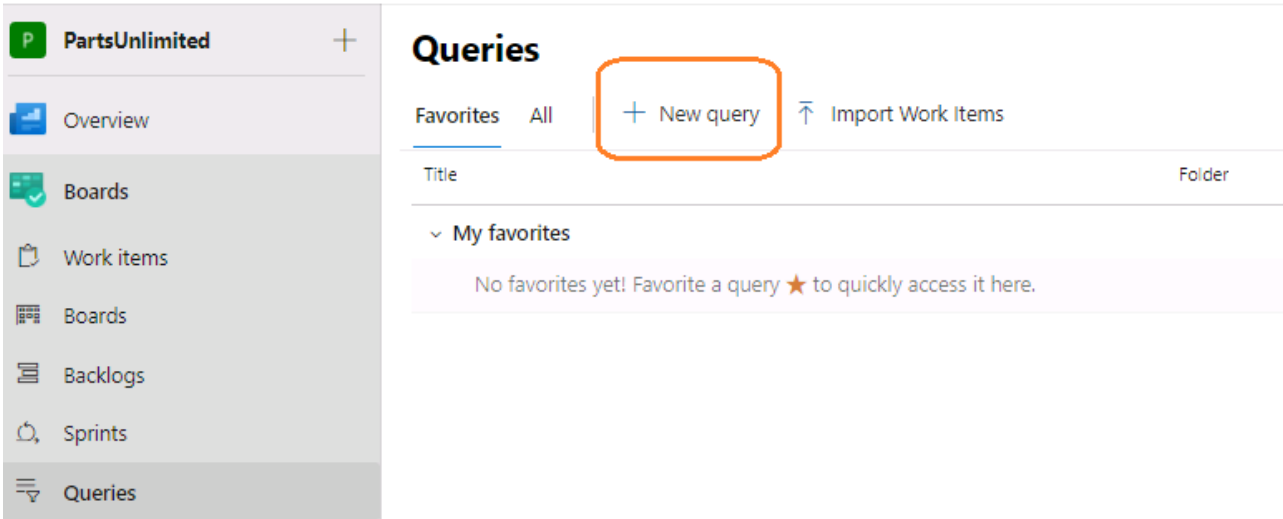
Task 1: Show all Work Items assigned to You

You will create a work item query that displays all the work items assigned to you in the current iteration. A work item query is made up of filter(s) and column(s). A filter specifies which work items should be included in the result by specifying a value for each column that you want to filter. A work item’s column that does not contain the value you specify will not be included in the results. A column shows the details for the work items that you want to see in the results.

1. In the web browser, make sure you have logged into Azure DevOps Services and are within the **PartsUnlimited** project. Select **Boards | Queries**.



2. Click on **New query**.



By default, the query already includes three default filters: **Work Item Type**, **State** and **Team Project** (hidden).

3. **Remove** the **Work Item Type** and **State** filters. To delete a filter, click the Remove button for each filter.

The screenshot shows the 'Queries > My Queries' interface. The 'Editor' tab is active. The 'Type of query' is set to 'Flat list of work items'. The 'Filters for top level work items' section shows two filters: 'Work Item Type' and 'State'. Both filters have a red 'X' icon in the first column, indicating they are selected for removal. The 'Operator' column shows '=' and the 'Value' column shows '[Any]' for both filters. The 'Add new clause' button is visible at the bottom left.

4. Click the first row and add a filter that will contain the field **Assigned To**, and set its value to **@Me**.

The screenshot shows the 'Queries > My Queries' interface. The 'Editor' tab is active. The 'Type of query' is set to 'Flat list of work items'. The 'Filters for top level work items' section shows two filters: 'Assigned To' and 'State'. The 'Assigned To' filter has a red 'X' icon in the first column, indicating it is selected for removal. The 'Operator' column shows '=' and the 'Value' column shows '@Me' for the 'Assigned To' filter. The 'Add new clause' button is visible at the bottom left.

5. To add a new filter, click **Add new clause**.

6. Set the field to **Iteration Path** and the value to **@CurrentIteration**. This filter also requires the **Team filter**, and in the last row that has been populated for the team, select **[Parts Unlimited]\PUL-Web**.

The screenshot shows the 'Queries > My Queries' interface. The 'Editor' tab is active. The 'Type of query' is set to 'Flat list of work items'. The 'Filters for top level work items' section shows three filters: 'Assigned To', 'Iteration Path', and 'Team'. The 'Assigned To' filter has a red 'X' icon in the first column, indicating it is selected for removal. The 'Iteration Path' filter has a red 'X' icon in the first column, indicating it is selected for removal. The 'Operator' column shows '=' and the 'Value' column shows '@CurrentIteration' for the 'Iteration Path' filter. The 'Add new clause' button is visible at the bottom left.

7. Add another filter for **Area Path**. Set the operator to **Under** and the value to **PartsUnlimited**. That means work items having the Area Path *PUL*, *PUL-DB* or *PUL-Web* will be included in the results.

The screenshot shows the 'Queries > My Queries' interface. The 'Editor' tab is active. The 'Type of query' is set to 'Flat list of work items'. The 'Filters for top level work items' section shows four filters: 'Assigned To', 'Iteration Path', 'Team', and 'Area Path'. The 'Assigned To' filter has a red 'X' icon in the first column, indicating it is selected for removal. The 'Iteration Path' filter has a red 'X' icon in the first column, indicating it is selected for removal. The 'Operator' column shows '=' and the 'Value' column shows '@CurrentIteration' for the 'Iteration Path' filter. The 'Area Path' filter has a red 'X' icon in the first column, indicating it is selected for removal. The 'Operator' column shows 'Under' and the 'Value' column shows 'PartsUnlimited' for the 'Area Path' filter. The 'Add new clause' button is visible at the bottom left.

8. To test the query, click **Run query**. You will see the number of work items that match your criteria in the **top-right corner** of the screen.

Queries > My Queries

3 work items
1 selected

ResultsEditorCharts

Run queryNewSave queryRevert changesColumn optionsSave items

Type of queryFlat list of work itemsQuery across projects

Filters for top level work items

	And/Or	Field*	Operator	Value
+ X	<input type="checkbox"/>	Assigned To	=	@Me
+ X	<input type="checkbox"/> And	Iteration Path	=	@CurrentIteration
				[PartsUnlimited]PUL-Web
+ X	<input type="checkbox"/> And	Area Path	Under	PartsUnlimited
+ Add new clause				

ID	Work Item...	Title	Assigned To	State	Tags
158	Epic	Product training	Student1-19052640	New	
159	Feature	Training dashboard	Student1-19052640	New	
160	Product B...	As a customer, I want to view new tutorials	Student1-19052640	Approv...	

9. To save the query, click the **Save query** button at the top of the query editor. In the New Query dialog box, in the Name box, type **All Work Assigned To Me in This Iteration**, and select the folder **My Queries**. Then click **OK**.

New query

Name *
All Work Assigned To Me in This Iteration

Folder *
My Queries

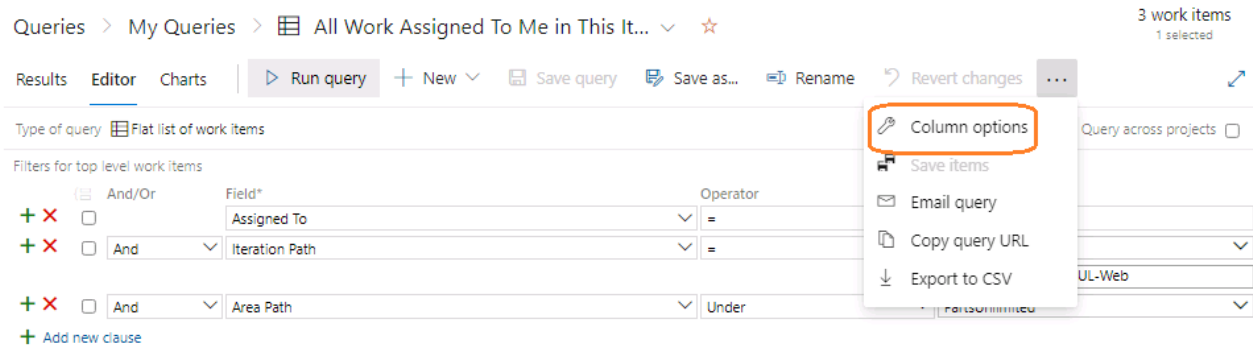
OKCancel

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 3: Create a Work Item Query

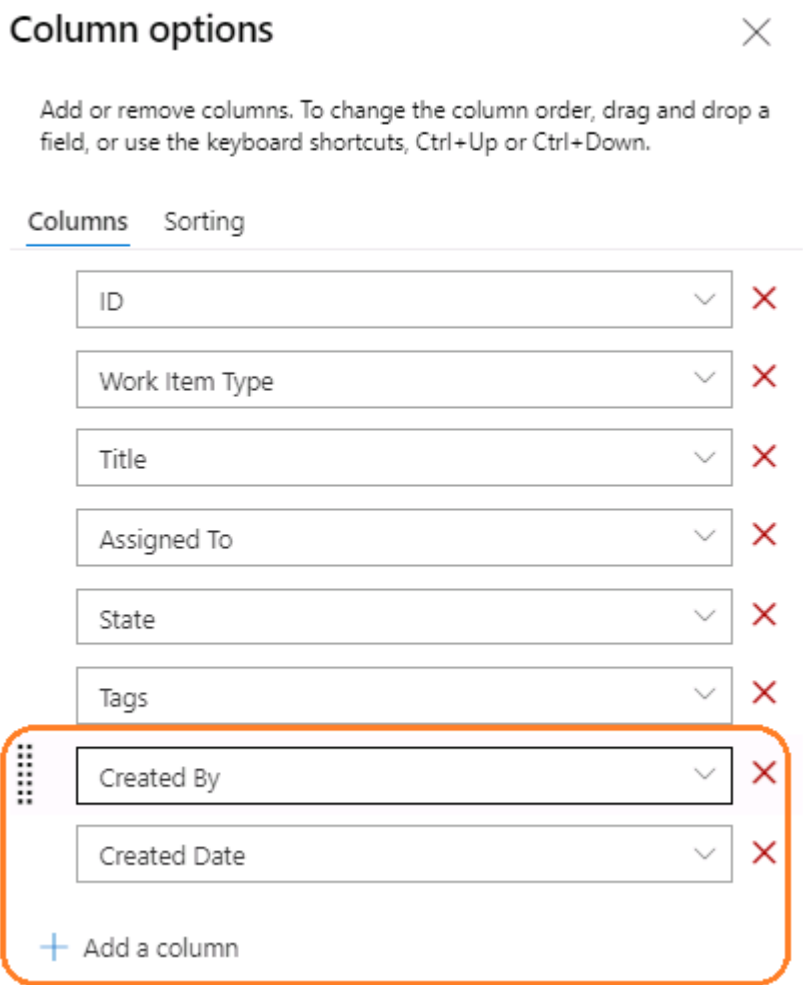
Task 2: Add Columns to Query

You are now getting the results you desired. However, you also want to see at a glance who created the work item and when.

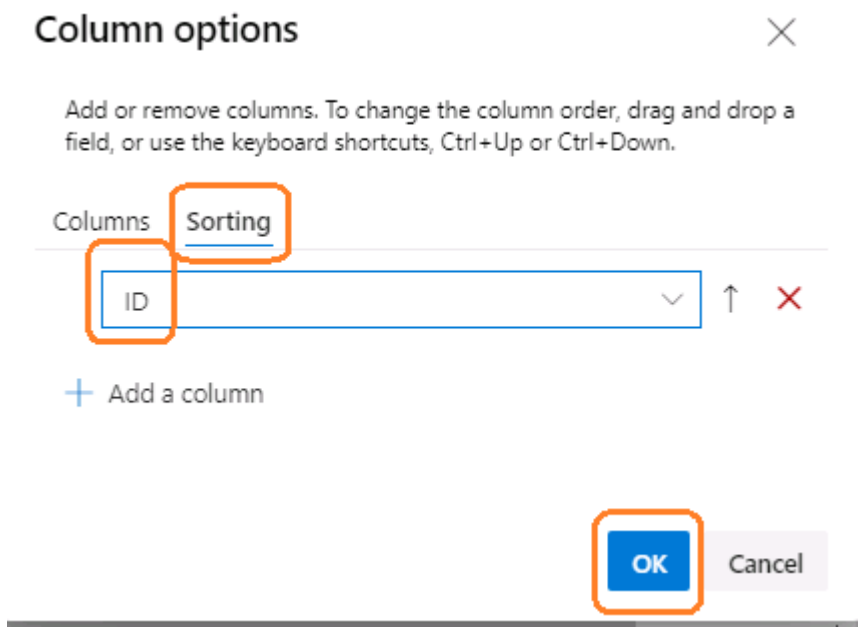
- 1. Click **More commands** and select **Column options** at the top of the query editor.



- 2. In the Column options dialog box, click **Add a column** and select **Created By**. Click once more to **Add a column** and select **Created Date**.



3. Having the Column options dialog box still open, click the **Sorting** tab to determine how you want the result to be sorted. Click **Add a column** and select **ID**. Then click **OK** to close the Column options dialog box.



4. The results will be refreshed. Click **Save query**.

ID ↑	Work Item...	Title	Assigned To	State	Tags	Created By	Created Date
158	Epic	👑 Product training	... Student1-19052640	● New		Student1-19052640	9/17/2021 1:53 AM
159	Feature	🎓 Training dashboard	Student1-19052640	● New		Student1-19052640	9/17/2021 2:27 AM
160	Product B...	📄 As a customer, I want to view new tutorials	Student1-19052640	● Approv...		Student1-19052640	9/17/2021 3:04 AM

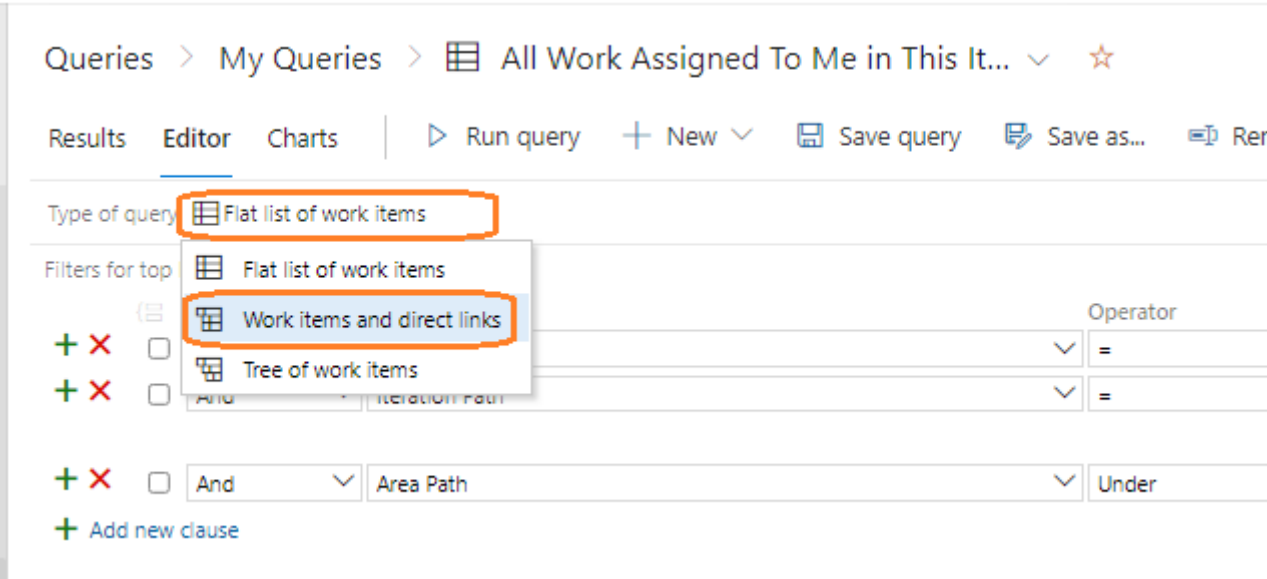
Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 3: Create a Work Item Query

Task 3: Change the List Layout

Though you are getting closer to achieving the results you want, the results are displaying in a flat list. You would like to see all the work items based on their relationship with other work items.

For example, for backlog items, you want to view the tasks and test cases associated with them. You need to display the results in a hierarchical form.

- 1. At the top of the query editor, in the Type of query field, click the **Flat list of work items** and change it to **Work items and direct links**.



- 2. You will now see **Filters for linked work items** section in the center of the query editor.
- 3. Click **Run query** to see the default behavior.

Queries > My Queries > All Work Assigned To Me in This It... ☆

11 work items
3 top level, 8 linked and 1 selected

ResultsEditorCharts▶ Run query+ NewSave querySave as...RenameRevert changes...

Type of query Work items and direct linksQuery across projects

+ X AndArea PathUnderPartsUnlimited

+ Add new clause

Filters for linked work items

+ X And/OrField*OperatorValue

Work Item Type= [Any]

+ Add new clause

Filter options

Only return items that have matching links

Types of links

☒ Return links of any type

☐ Return selected link types

☐ Affected By

☐ Affects

☐ Child

☐ Duplicate

☐ Duplicate Of

☐ Predecessor

ID	Work Item...	Title	Assigned To	State	Tags	Created By	Created Date
158	Epic	Product training	Student1-19052640	New		Student1-19052640	9/17/2021 1:53 AM
159	Feature	Training dashboard	Student1-19052640	New		Student1-19052640	9/17/2021 2:27 AM
159	Feature	Training dashboard	Student1-19052640	New		Student1-19052640	9/17/2021 2:27 AM
158	Epic	Product training	Student1-19052640	New		Student1-19052640	9/17/2021 1:53 AM
160	Product B...	As a customer, I want to view new tutorials	Student1-19052640	Approv...		Student1-19052640	9/17/2021 3:04 AM

4. Under Type of links, select **Return selected link types**. In the checkbox list, select **Child**, **Predecessor**, and **Tested By**.

ResultsEditorCharts▶ Run query+ NewSave querySave as...Ren

Type of query Work items and direct links

Filter options

Only return items that have matching links

Types of links

☐ Return links of any type

☒ Return selected link types

☐ Affected By

☐ Affects

☒ Child

☐ Duplicate

☐ Duplicate Of

☐ Parent

☒ Predecessor

☐ Referenced By

☐ References

☐ Related

☐ Shared Steps

☐ Successor

☐ Test Case

☒ Tested By

☐ Tests

5. To see the results, click **Run query**.

Filter options
Only return items that have matching links

Types of links
☐ Return links of any type
☒ Return selected link types
☐ Affected By
☐ Affects
☒ Child
☐ Duplicate
☐ Duplicate Of
☐ Parent
☒ Predecessor
☐ Referenced By
☐ References
☐ Related
☐ Shared Steps
☐ Successor
☐ Test Case
☒ Tested By
☐ Tests

ID ↑	Work Item...	Title	Assigned To	State	Tags	Created By	Created Date
160	Product B...	As a customer, I want to view new tutorials	Student1-19052640	Approv...		Student1-19052640	9/17/2021 3:04 AM
161	Product B...	As a customer, I want to see tutorials I recently vie...		Comm...		Student1-19052640	9/17/2021 3:07 AM
162	Product B...	As a customer, I want to request new tutorials		Done		Student1-19052640	9/17/2021 3:07 AM
160	Product B...	As a customer, I want to view new tutorials	Student1-19052640	Approv...		Student1-19052640	9/17/2021 3:04 AM
163	Task	Add page for most recent tutorials		To Do		Student1-19052640	9/17/2021 3:53 AM
164	Task	Optimize data query for most recent tutorials		To Do		Student1-19052640	9/17/2021 3:56 AM

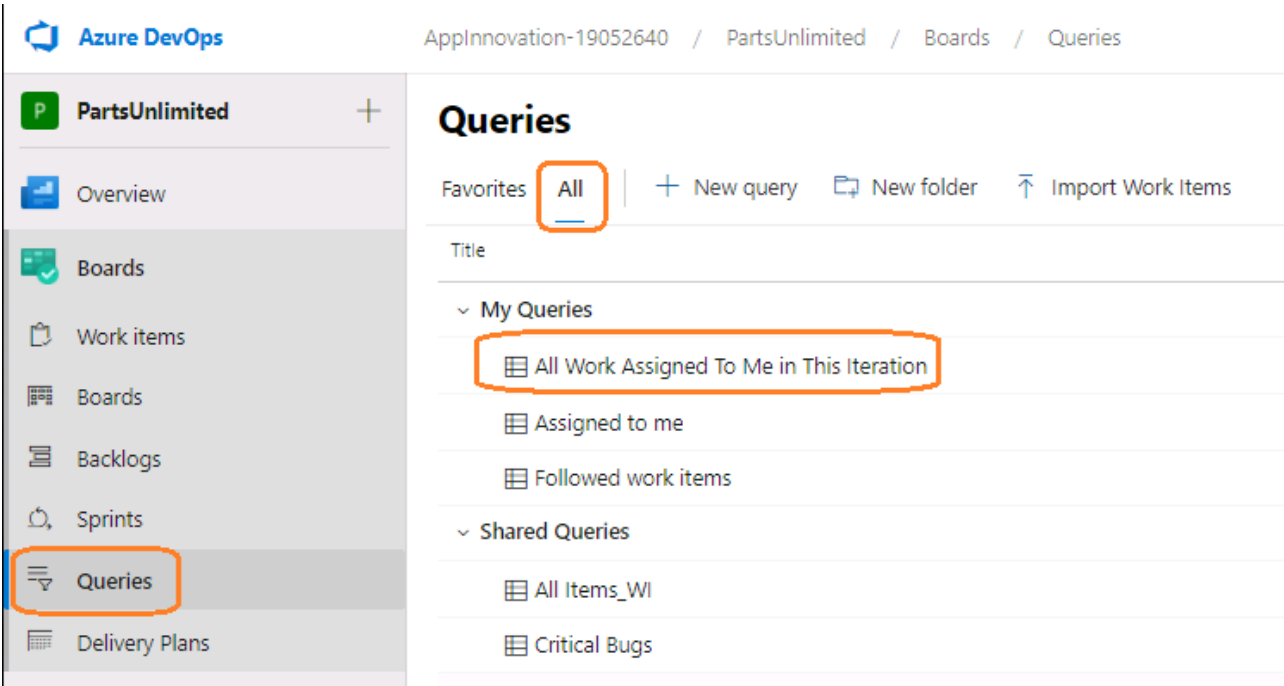
6. Click **Save query**.

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 3: Create a Work Item Query

Task 4: Re-run the Query

You can re-run your newly created queries from Board -> Queries. The query you just created is displayed in the **My Queries** folder.

- 1. Click on **Queries** under **Boards**. Click on **All** to see all the queries.



- 2. Click on **All Work Assiged To Me in This Iteration** query to see the query you worked on in the previous tasks.

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 4: Working with Azure DevOps using Excel

##Exercise 4: Working with Azure DevOps using Excel

Objectives

After completing this exercise, you will be able to:

- Import work items into Excel.
- Edit work items in Excel.
- Push updates made in Excel back to Azure DevOps.

Scenario

In this exercise, you will be importing work items into Excel, modify them, and then publish your changes back to Azure DevOps. Working with Azure DevOps using Excel enables business analysts and project managers to use Azure DevOps effectively without having to use an Integrated Development Environment (IDE) such as Visual Studio. A business analyst or project manager would be more comfortable using Microsoft Excel or Microsoft Project than Visual Studio or the web browser.

Prerequisites

- Office Excel 2010 or later version, including Office 365
- Azure DevOps Office Integration 2019: <https://go.microsoft.com/fwlink/?linkid=2076587&clid=0x409>

These prerequisites should be already installed in your lab environment. You can verify it by opening Microsoft Excel and confirming that you see the **Team** tab in the ribbon menu.

Tasks

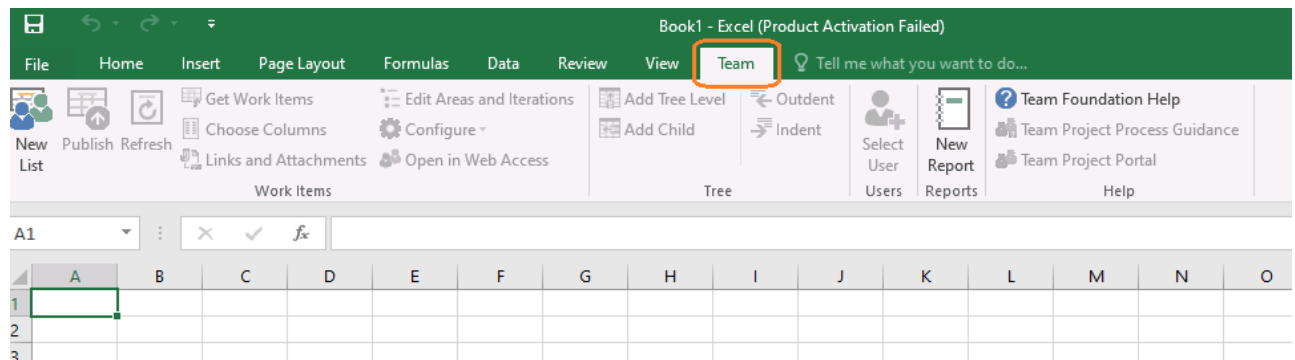
- [Task 1: Import Work Items into Excel](#)
- [Task 2: Add a new Task in Microsoft Excel](#)
- [Task 3: Publishing Changes back to Azure DevOps Services](#)
- [Task 4: Verifying Changes in Azure DevOps Services](#)

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 4: Working with Azure DevOps using Excel

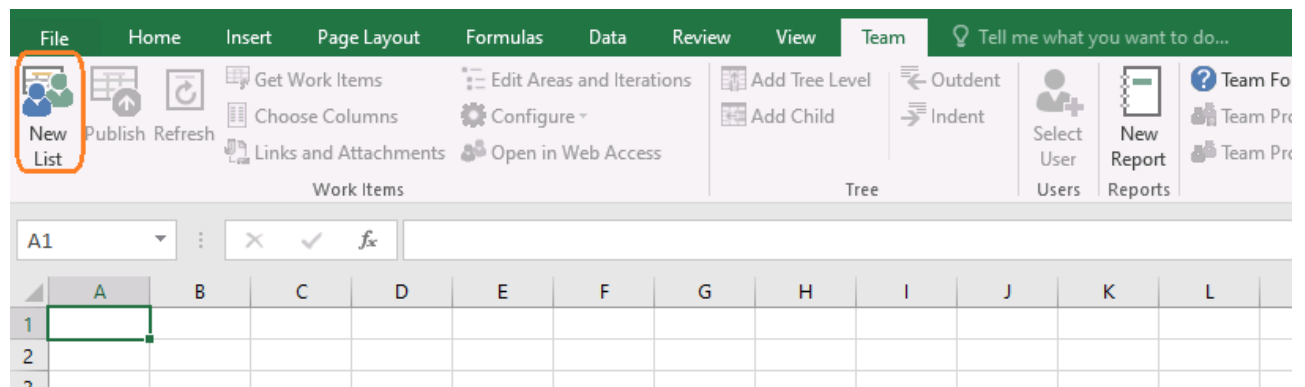
Task 1: Import Work Items into Excel

1. Open **Excel** and create a blank workbook, and click the **Team** tab at the top.

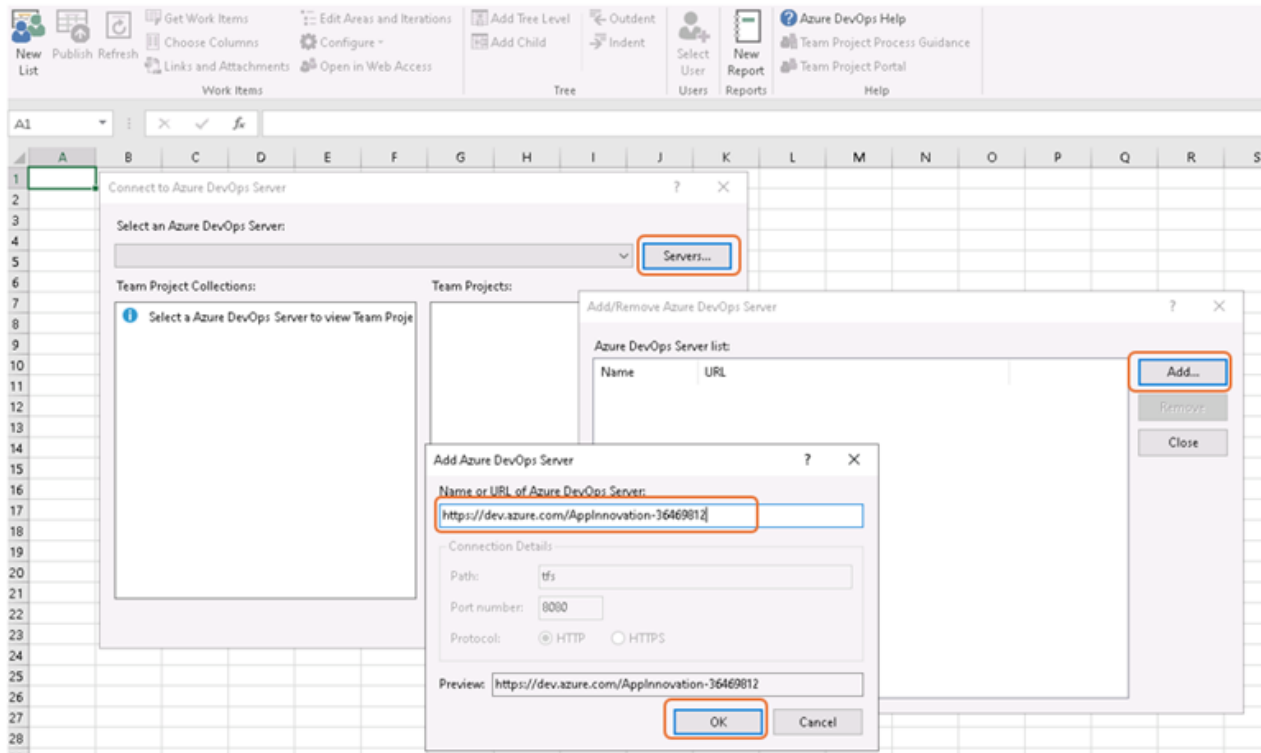
If you don't see the **Team** tab, make sure you have Azure DevOps Office Integration 2019 installed from here: <https://go.microsoft.com/fwlink/?linkid=2076587&clcid=0x409>



2. Make sure that you have selected the cell **A1**. Click **New List** in the ribbon.

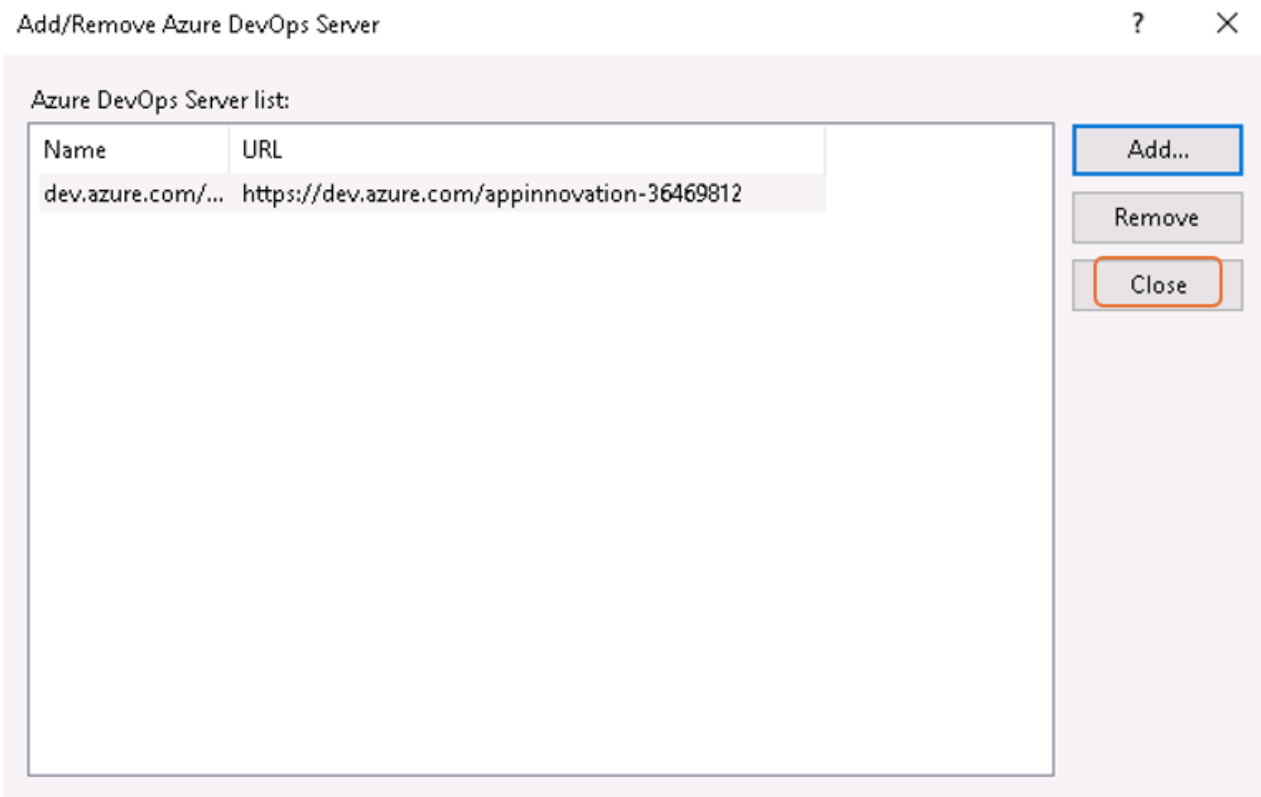


3. In the Connect to Azure DevOps Server dialog box, click **Servers**. Click **Add** in the Add/Remove Azure DevOps Server dialog box. In the Add Azure DevOps Server dialog box, type [https://dev.azure.com/AppInnovation-\[YourName\]](https://dev.azure.com/AppInnovation-[YourName]) in the **Name or URL of Azure DevOps Server**. Click **OK**.

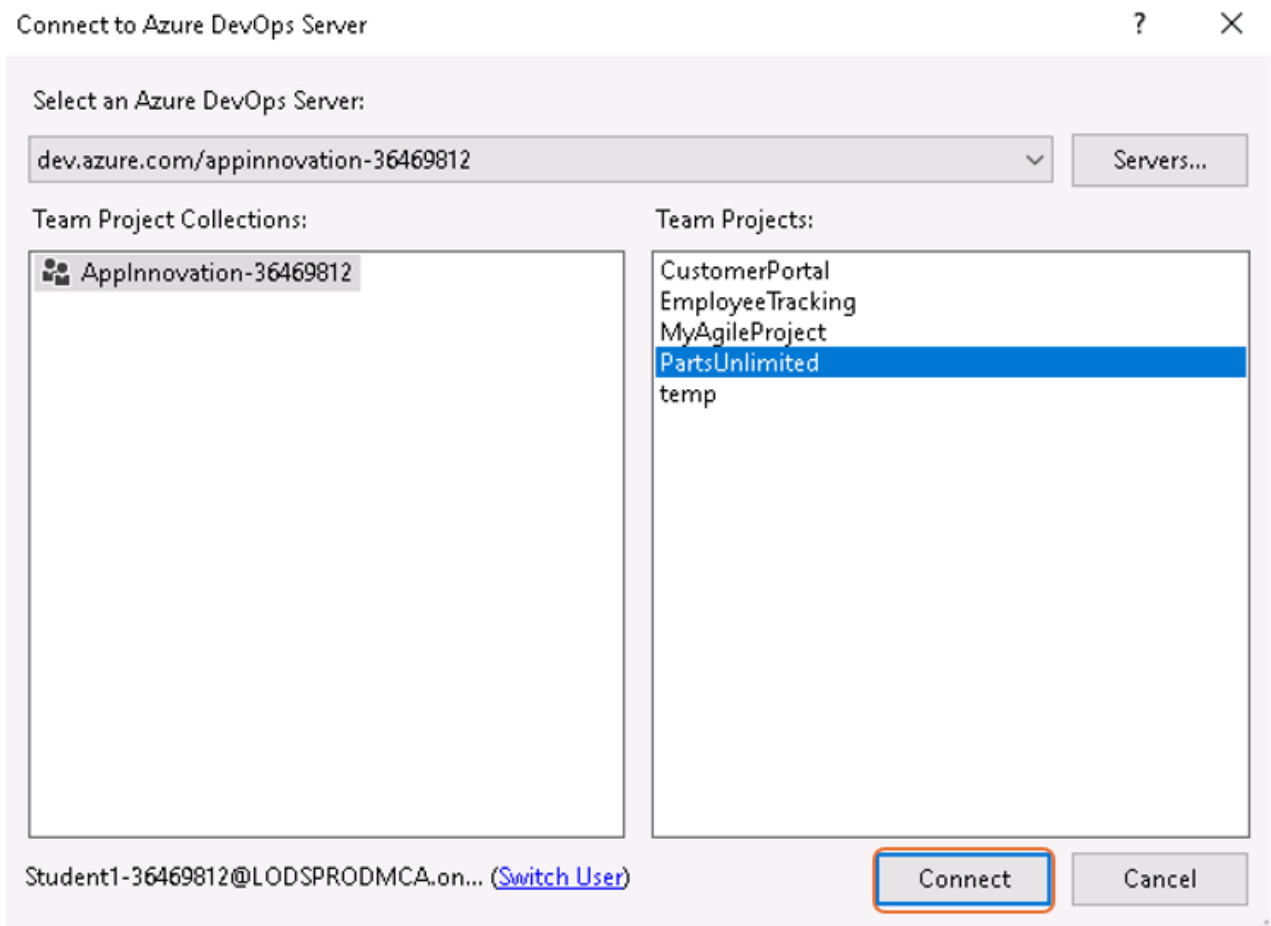


If asked to sign in, enter the credentials.

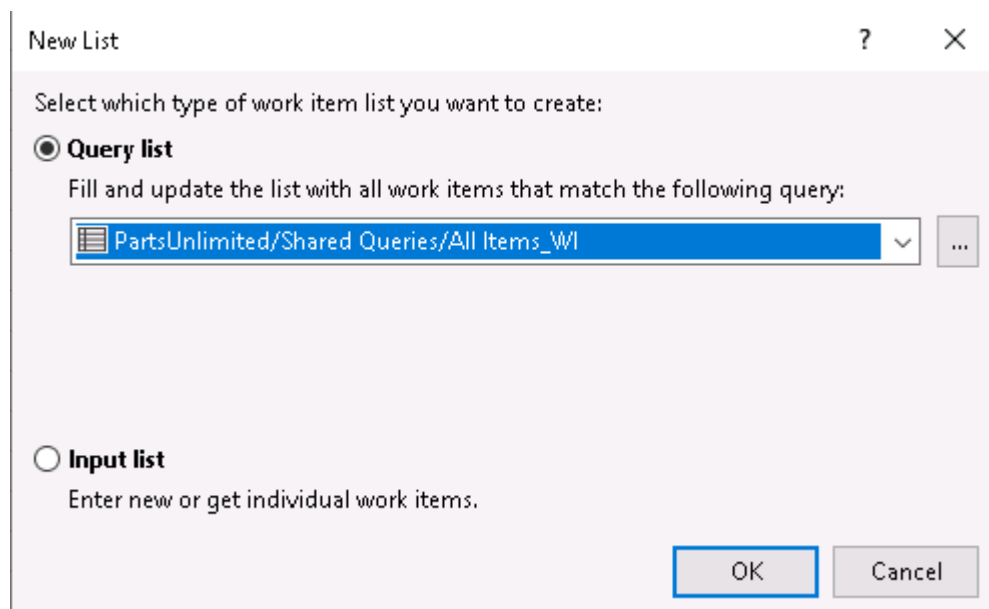
- 4. Click **Close** to close the Add/Remove Azure DevOps Server dialog box.



- 5. Select **AppInnovation-[YourName]** from the *Team Project Collections* and **PartsUnlimited** from *Team Projects*. Click **Connect**.



6. When prompted for the **Query list**, expand **PartsUnlimited > Shared Queries**, and then click **All Items_WI**. Click **OK**.



7. All the work items will be displayed in Excel.

File Home Insert Page Layout Formulas Data Review View Team Design Tell me what you want to do... Sign in Share						
Table Name: VSTS_3b171a66_	Summarize with PivotTable	Remove Duplicates	Convert to Range	Insert Slicer	Export Refresh	Open in Browser
Resize Table						Unlink
Properties	Tools			External Table Data	Table Style Options	Table Styles
B3						
Product Backlog Item						
ID	Work Item Type	Title	State	Area Path	Iteration Path	
160	Product Backlog Item	a customer, I want to view new tutorials	Approved	\PUL-Web	\Sprint 2	
159	Feature	Training dashboard	New	\PUL-Web	\Sprint 2	
158	Epic	Product training	New	\PUL-Web	\Sprint 2	
157	Epic	As developer, I want to use Azure Machine Learning to provide a recommendations engine behind the website.	Done	\	\	
139	Test Case	Verify that the tentative date is displayed for shipping the product	Design	\	\	
138	Test Case	Verify that user is able to remove the item from cart	Design	\	\	
137	Test Case	Verify that user is able to add multiple items into the shopping cart	Design	\	\	
136	Test Case	Verify that Customer is able to add an item into the shopping cart	Design	\	\	
135	Test Case	Verify that Admin is able to change the price of the item	Design	\	\	
134	Test Case	Validate that customer is allowed to add an feedback to the item purchases	Design	\	\	
133	Test Case	Validate that customer is able to add an item to the wishlist	Design	\	\	
132	Test Case	Verify that customer is allowed to add address for shipping.	Design	\	\	
131	Test Case	Verify that as a customer, user should be able to print the purchase order	Design	\	\	
130	Test Case	Verify that user should be able to sort the products based on Price and Customer ratings	Design	\	\	
129	Test Case	Verify that user is allowed to edit and save his valid credit card details	Design	\	\	
128	Test Case	Verify that user is not allowed to save invalid credit card details	Design	\	\	
127	Test Case	Verify that user is allowed to save his credit card detail	Design	\	\	
126	Test Case	Verify that a notification is sent out to the user when there are changes to the order	Design	\	\	
125	Test Case	Verify that the items are displayed in the Frequently Bought section.	Design	\	\	

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 4: Working with Azure DevOps using Excel

Task 2: Add a new Task in Microsoft Excel

1. Select the **ID** column and scroll down to the first empty row after the last work item in the list. Press **Ctrl + D** to add another row in the table.

80	18 Feature	Ops needs the ability to quickly roll back to a known good state in the event of a critical problem in production.	Done	\	\Sprint 1
81					
82					

2. You will add another task. In the **Work Item Type** column, select **Task** from the drop-down for work item type. Type **Update orders page to include shipping link and last shipping status** in the **Title** box, and set the **State** to **To Do**.

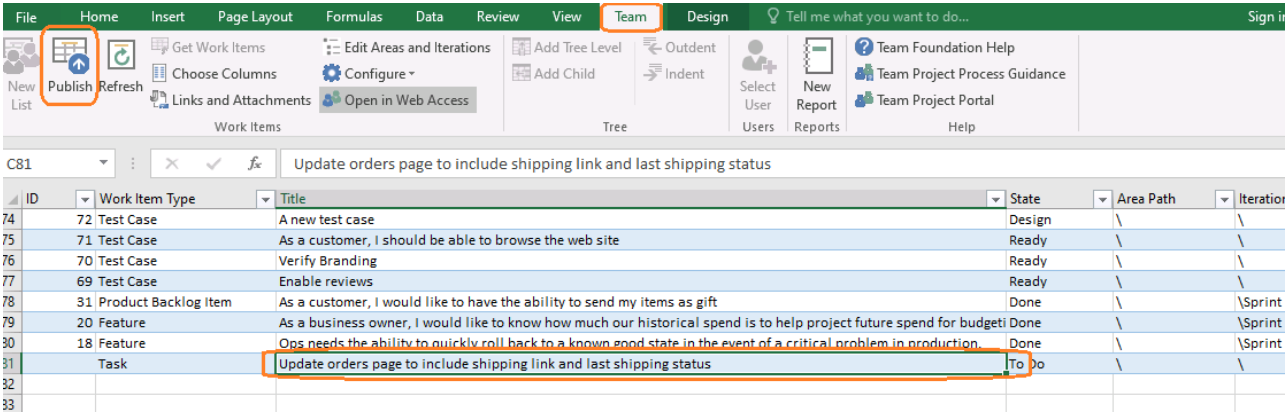
Leave the **ID** column **empty**, since it will be automatically generated, when we publish our changes back to Azure DevOps.

80	18 Feature	Ops needs the ability to quickly roll back to a known good state in the event of a critical problem in production.	Done	\	\Sprint 1
81	Task	Update orders page to include shipping link and last shipping status	To Do	\	\
82					

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 4: Working with Azure DevOps using Excel

Task 3: Publishing Changes back to Azure DevOps

1. You will now publish the changes back to Azure DevOps Services. Click on the **Team** ribbon and make sure you have selected the newly entered row. Click **Publish**.



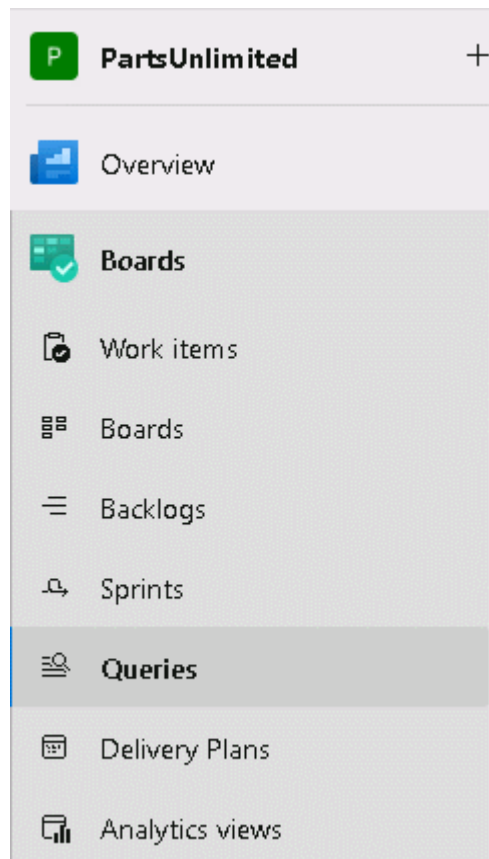
2. On the Microsoft Excel status bar to the bottom-left, you should see a message indicating that **the operation completed successfully**. When the publish operation has completed, your list in Microsoft Excel will be refreshed. Note that the ID for the new task is now populated. Make a note of the ID.

80	18 Feature	Ops needs the ability to quickly roll back to a known good state in the event of a critical problem in production.	Done	\	\Sprint 1
81	165 Task	Update orders page to include shipping link and last shipping status	To Do	\	\
82					

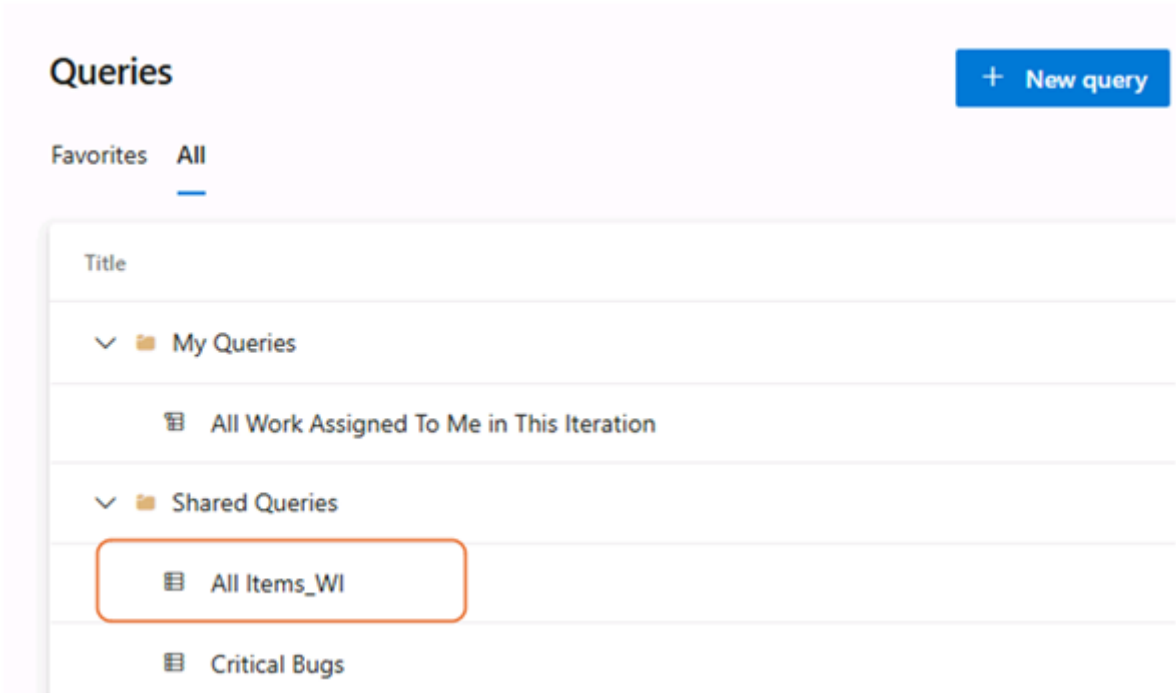
Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 4: Working with Azure DevOps using Excel

Task 4: Verifying Changes in Azure DevOps Services

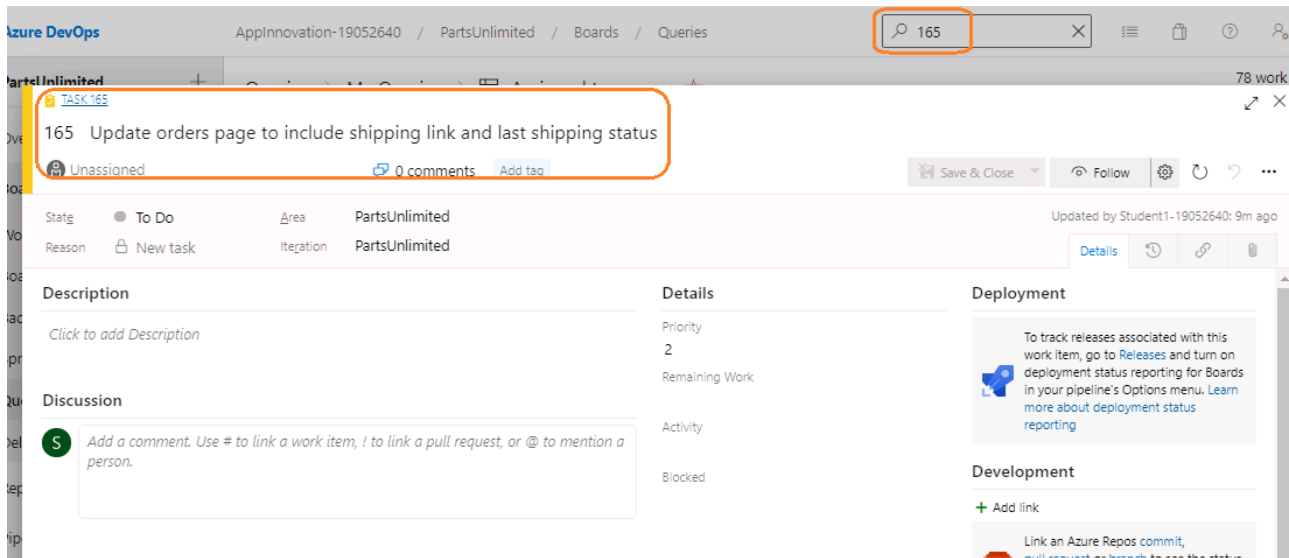
1. Go back to the **PartsUnlimited** project in Azure DevOps Service in the web browser. Navigate to **Boards | Queries**.



2. Switch to **All** tab and click **All Items_WI** under Shared Queries.



3. You will notice that the Task you have just created in Excel is at the bottom of the list. To see the details of the Task, you can click on the Title, or in the **Search** field, type the **ID** that you have noted at the end of Task 3, and hit **Enter**.



4. The task will open. Close the task without any modifications.

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 5: Create a Work Item Template

Exercise 5: Create a Work Item Template

Objectives

After completing this exercise, you will be able to:

- Create a new work item template.
- Create a PBI by using a template.

Scenario

In this exercise, you will be creating a work item template. You can use work item templates to reduce the number of fields that you must key in for a new work item. The fields are automatically populated from the values you specify in the template. For example, you can create a task template that will set the area and iteration path whenever you use it to create a new task.

Prerequisites

None

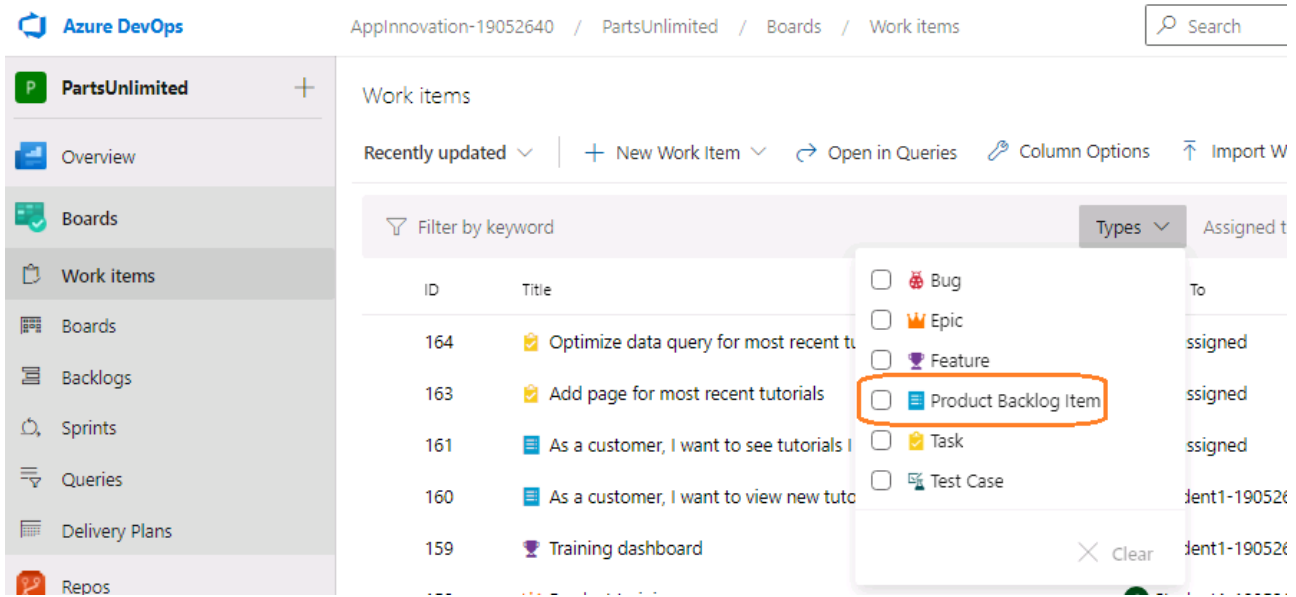
Tasks

- [Task 1: Create a new Work Item Template](#)
- [Task 2: Create a PBI using the Template](#)
- [Task 3: Add a Template Link to the Database](#)

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 5: Create a Work Item Template

Task 1: Create a new Work Item Template

- 1. In the browser with Azure DevOps Services open with **PartsUnlimited** project, select **Boards | Work Items**.
- 2. Click on **Types** in the filter area and select **Product Backlog Item**.



- 3. Open the **Product Backlog Item** with the title *As a customer, I want to see tutorials I recently viewed*.
If the work item does not exist, choose a different Product Backlog Item from the list.
- 4. Add the text in the description: **Customer requirements** and add a tag **temp**
Assume that **Customer requirements** is the description that is always needed in all the PBIs.

PRODUCT BACKLOG ITEM 161*

161 As a customer, I want to see tutorials I recently viewed

Unassigned 0 comments temp X +

State Committed Area PartsUnlimited\PUL-Web

Reason Commitment ... Iteration PartsUnlimited\Sprint 2

Description

Customer requirements

Details

Priority 2

Effort

Business Value

Value area Business

Acceptance Criteria

Click to add Acceptance Criteria

Discussion

Add a comment. Use # to link a work item, ! to link a pull request, or @ to

5. Click the **Actions (...)** menu and click **Templates - > Capture**.

Recently updated | Back to Work Items 1 of 17

PRODUCT BACKLOG ITEM 161

161 As a customer, I want to see tutorials I recently viewed

Unassigned 0 comments Add tag

State Committed Area PartsUnlimited\PUL-Web

Reason Commitment ... Iteration PartsUnlimited\Sprint 2

Description

Click to add Description

Acceptance Criteria

Click to add Acceptance Criteria

Discussion

Add a comment. Use # to link a work item, ! to link a pull request, or @ to

Save Follow Settings Refresh Help ...

Updated

Detail

Deployment

To track this work item

pipelines

more reports

Development

+ Add link

Link an Azure DevOps commit

New linked work item

Change type...

Move to team project

Create copy of work item...

Email work item

Delete

Capture...

Templates >

New branch...

Request feedback

Customize

Keyboard shortcuts

6. In the Capture Template dialog box, make sure you have following details:

- Team: **PUL-Web**
- Name: **Web PBI – Business**
- Description: **Template for PBIs in Business Area for PUL-Web team**
- Area Path: **PartsUnlimited\PUL-Web**
- Description: **< div>Customer requirements< /div>**
- Remove **State**, **Reason** and **Title**
- Tags (Add): **temp**
- Click **Save**
- Do not close the dialog box yet.

The Template should look like this now:

Capture Template

Team

PUL-Web

Name

Web PBI – Business

Description

Template for PBIs in Business Area for PUL-Web team

+ Add new field

✖ Remove unmodified fields

	Field*		Value
+ ✖	Area Path	=	PartsUnlimited\PUL-Web
+ ✖	Description	=	<div>Customer requirements</div>
+ ✖	Iteration Path	=	PartsUnlimited\Sprint 2
+ ✖	Priority	=	2
+ ✖	Tags (Add)	=	temp
+ ✖	Value Area	=	Business

Add a comment

Copy link

Save the template in order to enable Copy link.

Save

Close

7. Now, **Copy link** should be enabled. Click this link and copy it in Notepad/Notepad++. We will use it in the next task.

Capture Template ×

Team


Name

Description

[+ Add new field](#)

	Field*		Value
+ X	Area Path <input type="text" value=""/>	=	<input type="text" value="PartsUnlimited\PUL-Web"/>
+ X	Description <input type="text" value=""/>	=	<input type="text" value="<div>Customer requirements</div>"/>
+ X	Iteration Path <input type="text" value=""/>	=	<input type="text" value="PartsUnlimited\Sprint 2"/>
+ X	Priority <input type="text" value=""/>	=	<input type="text" value="2"/>
+ X	Tags (Add) <input type="text" value=""/>	=	<input type="text" value="temp"/>
+ X	Value Area <input type="text" value=""/>	=	<input type="text" value="Business"/>

Add a comment

 [Copy link](#)

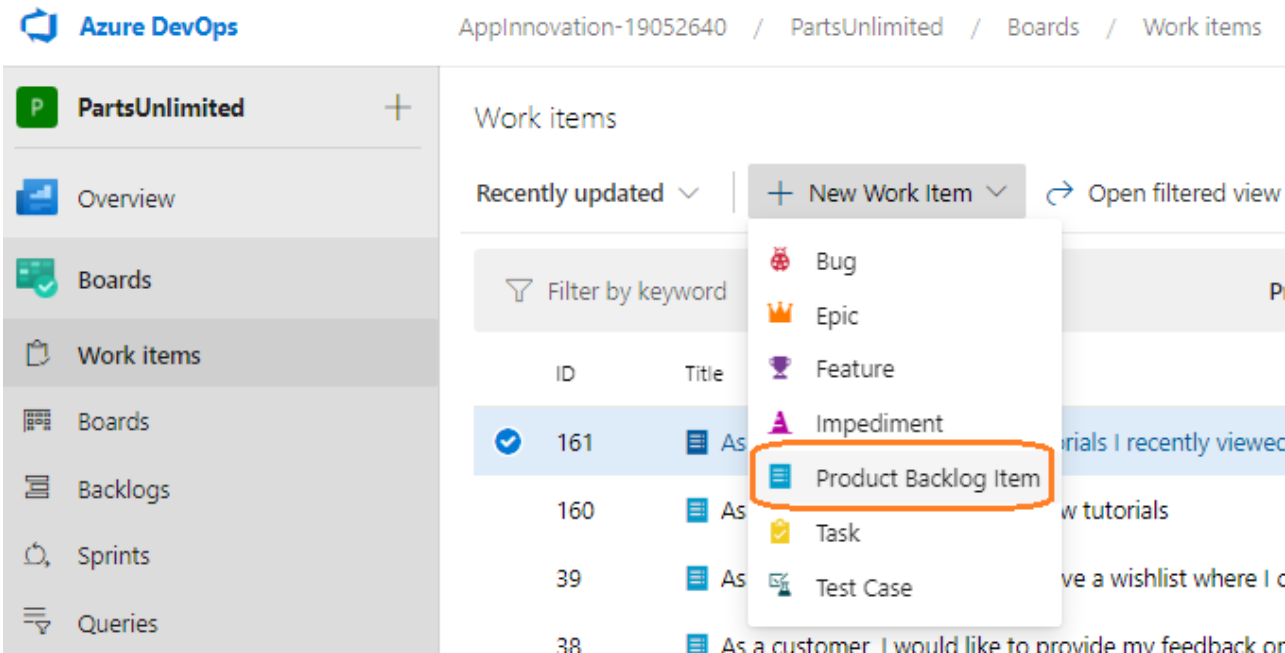
Copy the URL to add a work item using this template.

8. **Close** the Capture Template dialog box.

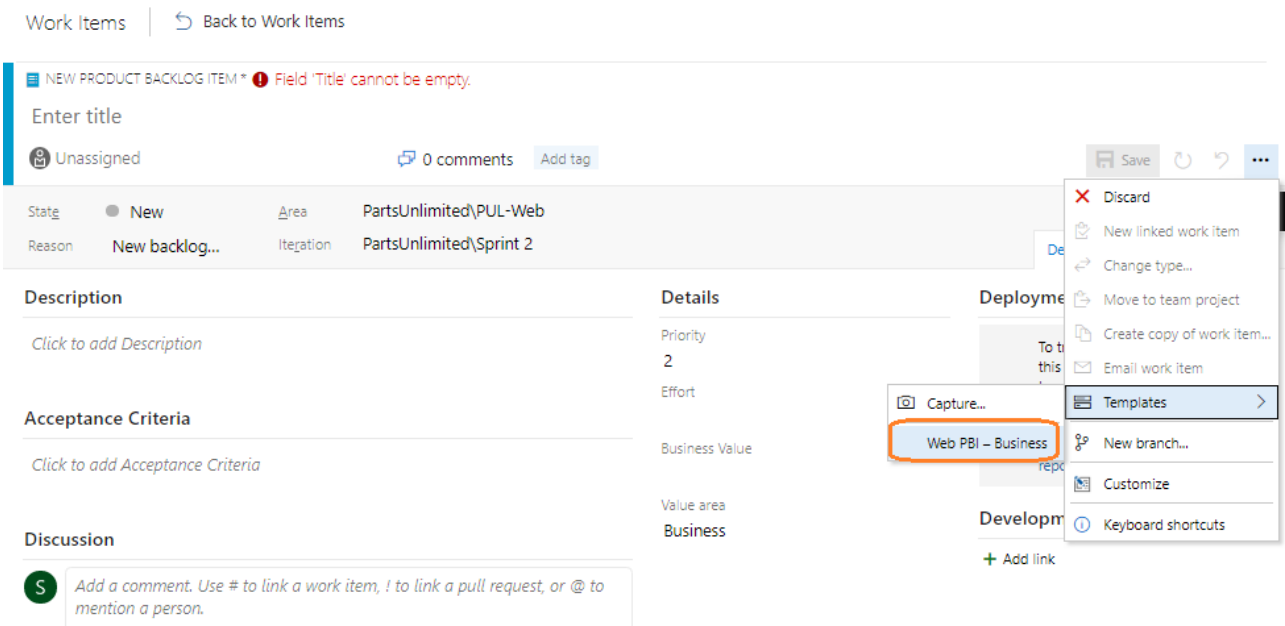
Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 5: Create a Work Item Template

Task 2: Create a PBI using the Template

- 1. Select **Boards | Work Items**. Discard the changes for the previous Work Item.
- 2. Click on **New Work Item**, select **Product Backlog Item**.



- 3. Click the **Action (...)*** menu and click **Templates -> Web PBI – Business**



- 4. Note that the **Description** field has **Customer requirements** is automatically added. So is the **temp** tag.

Work Items

Back to Work Items

NEW PRODUCT BACKLOG ITEM *

Field 'Title' cannot be empty.

Enter title

Unassigned

0 comments

temp X +

State

New

Area

PartsUnlimited\PUL-Web

Reason

New backlog...

Iteration

PartsUnlimited\Sprint 2

Description

Customer requirements

Acceptance Criteria

Click to add Acceptance Criteria

Discussion

Details

Priority

2

Effort

Business Value

Value area

Business

5. Click the **Actions (...)** menu and click **Discard**. Confirm the discard.

Save

...

X Discard

New linked work item

Change type...

Move to team project

Create copy of work item...

Email work item

Templates

New branch...

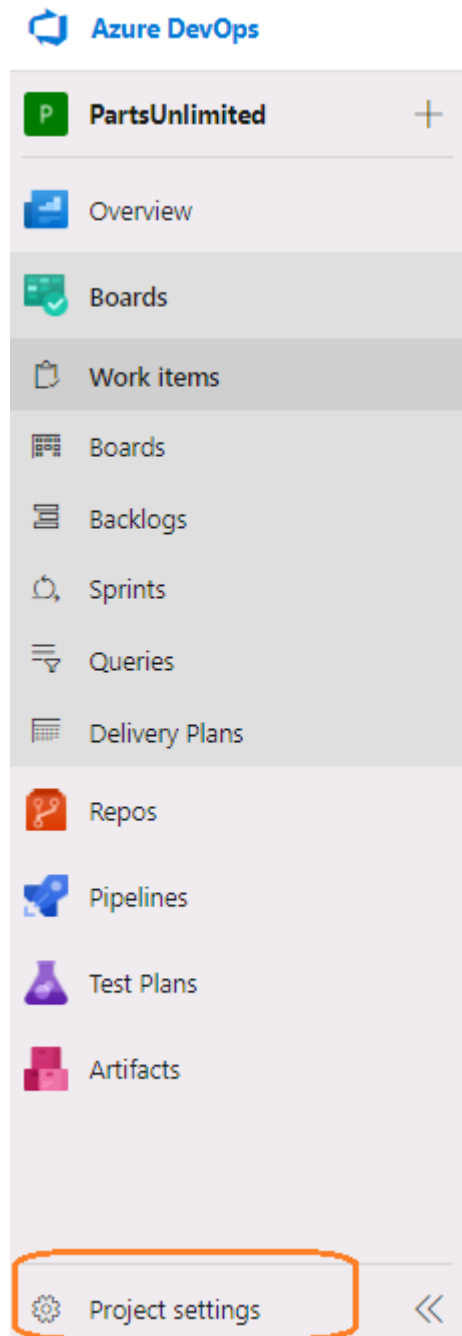
Customize

Keyboard shortcuts

Module 6: Azure Boards - Work Items, Lab 1: Work Items, Exercise 5: Create a Work Item Template

Task 3: Add a Template Link to the Dashboard

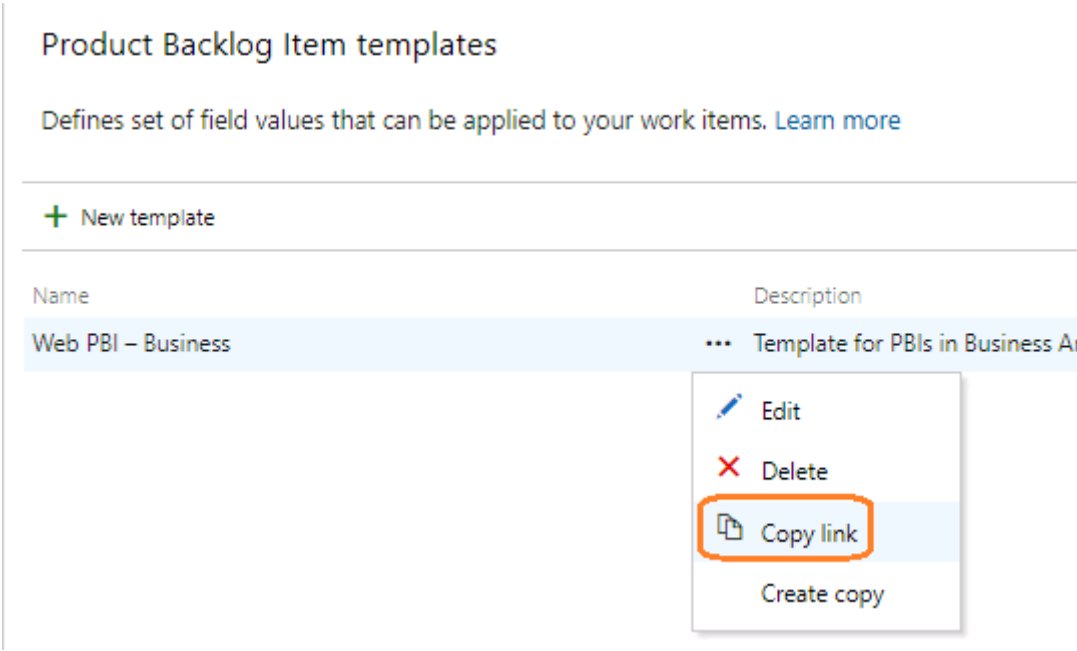
1. If you have the template URL you have copied or pasted in the notepad, make sure you copy it in the clipboard and skip to **Step 5**. Otherwise, navigate to **Project Settings**.



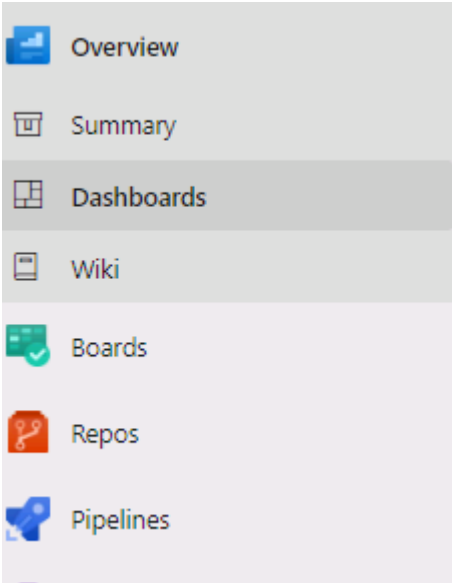
2. Under **Boards** and choose **Team Configuration** for **PUL-Web team**.

3. Click the **Templates** tab and click **Product Backlog Item** to list the Product Backlog Item templates.

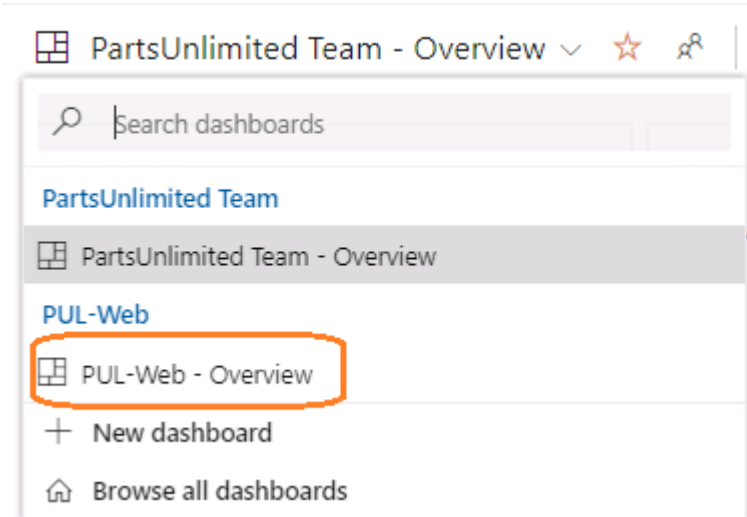
4. Click the **Actions (...)** menu of **Web PBI - Business** and click **Copy link**.



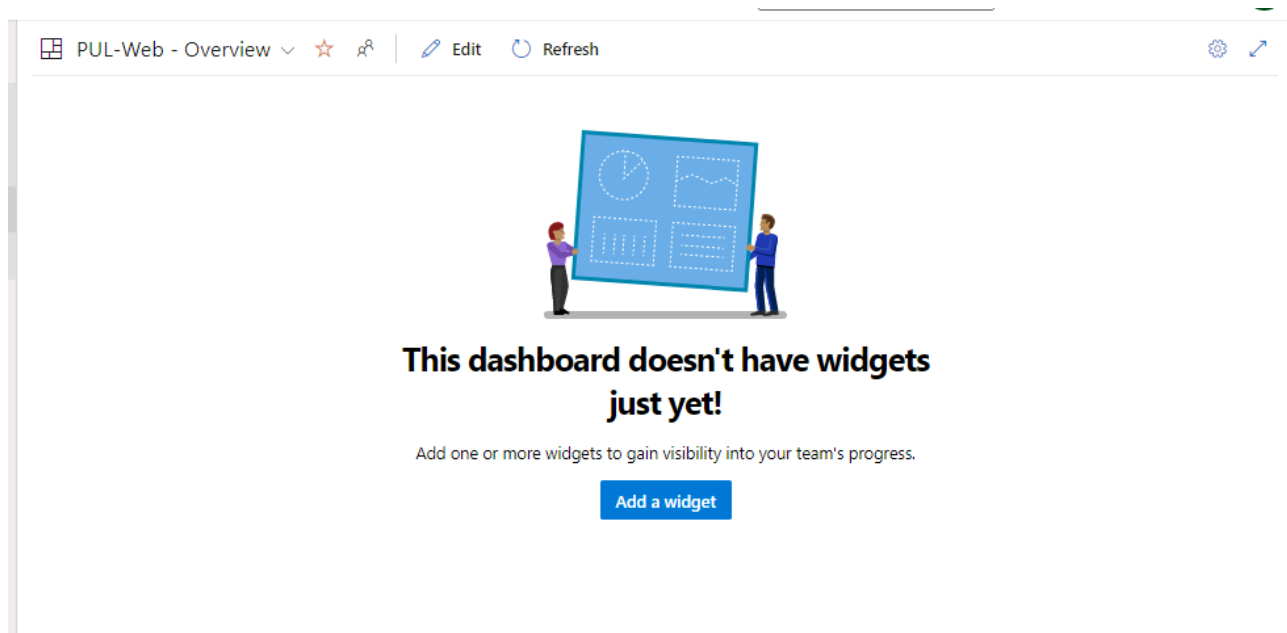
5. Select **Overview | Dashboards**.



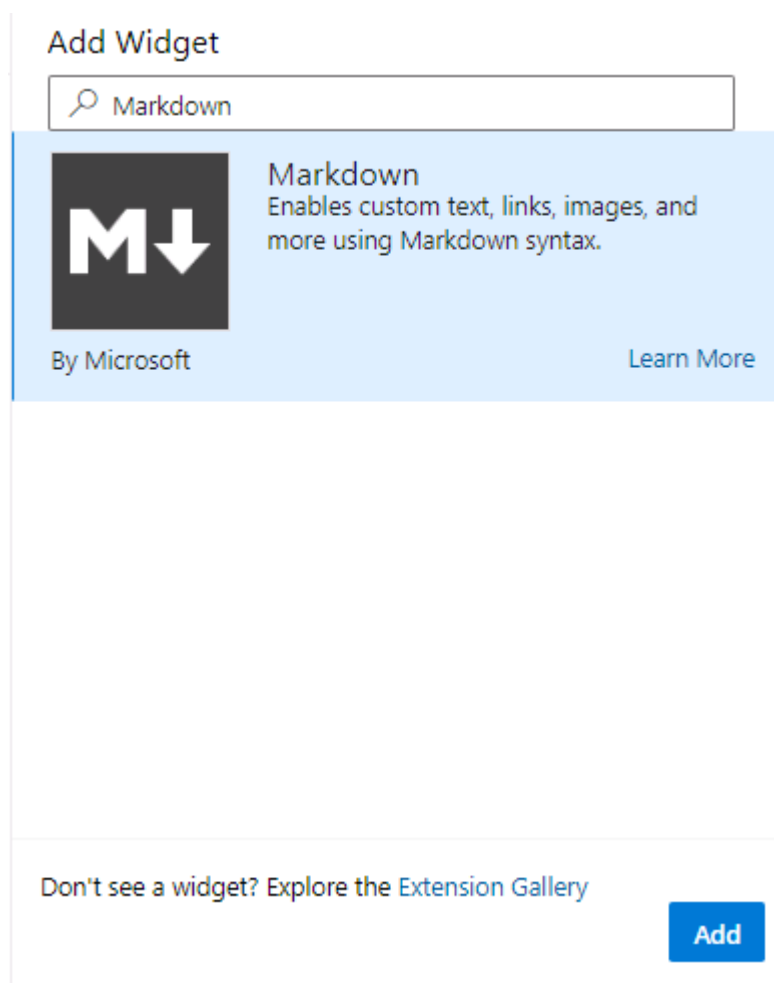
6. Select the **PUL-Web - Overview** dashboard.



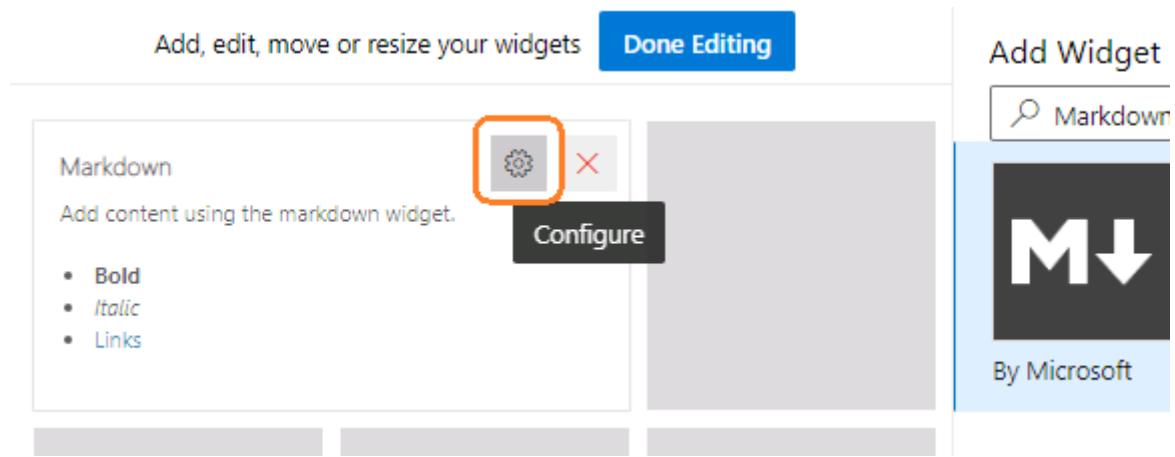
7. Click on **Add a widget** button.



8. In the Add Widget dialog box, search for **Markdown** and click **Add**.

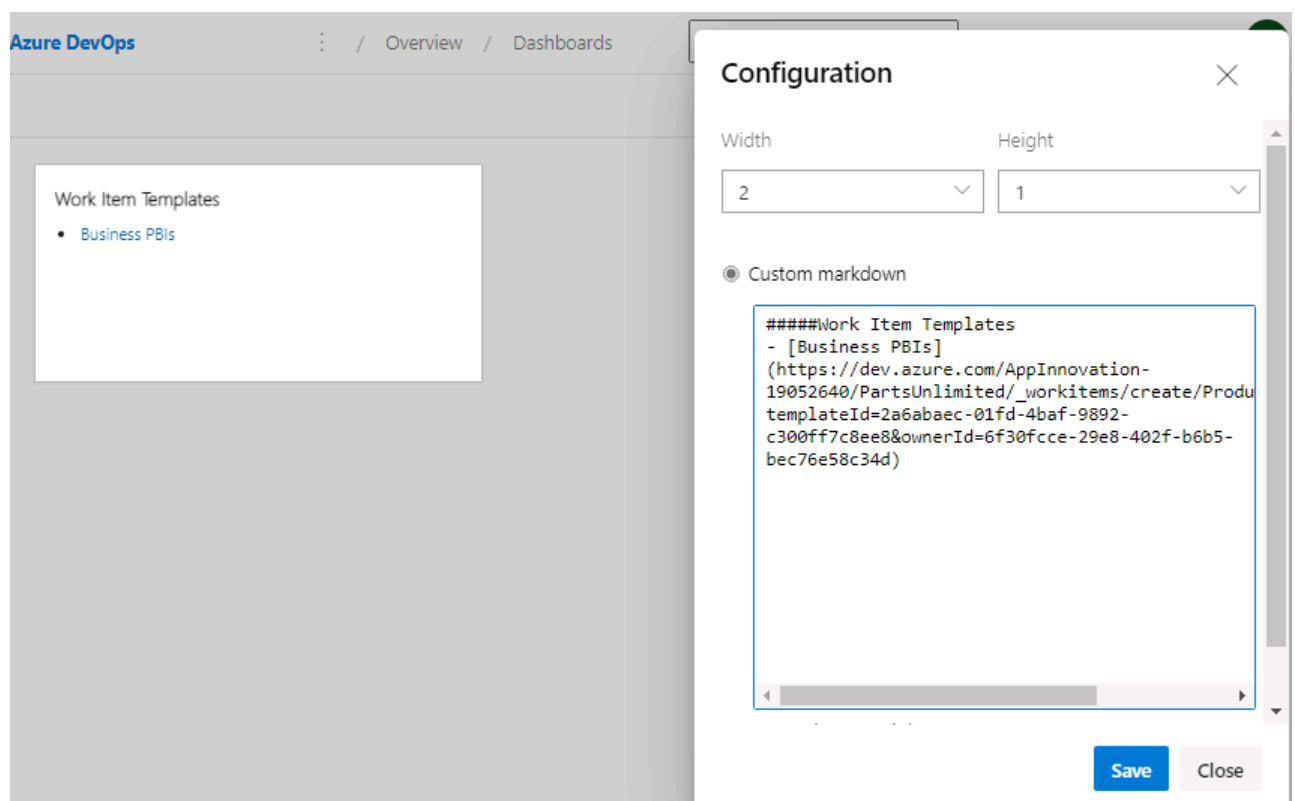


9. When the widget appears on the dashboard, click **Configure**.

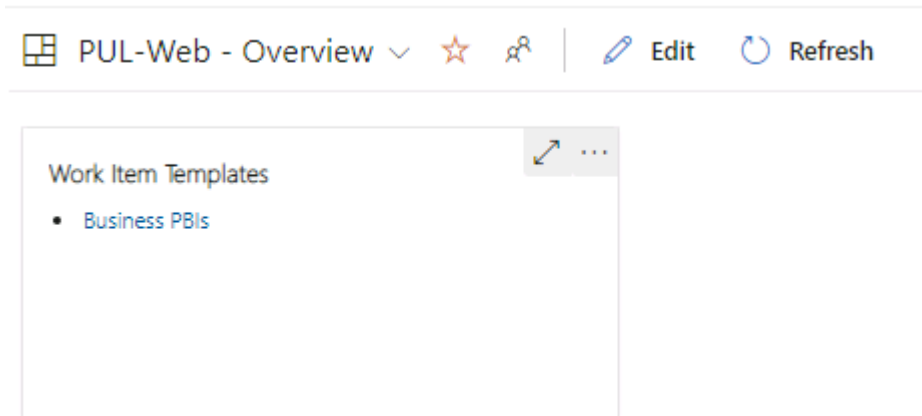


10. In the Configuration screen, in the Custom Markdown field, type the following text. Do not forget to replace `LINK_TO_YOUR_TEMPLATE` with the link you copied in **Step #4**. Click **Save**.

```
#####Work Item Templates
- [Business PBIs](LINK_TO_YOUR_TEMPLATE)
```



11. Click **Done Editing** button to exit dashboard editing.
12. Now you have the **Work Item Templates** widget on your Overview dashboard, using which you can create PBIs.



13. Click the **Business PBIs** link in the widget to open the Product Backlog Item work item form with populated values. You can discard this PBI.