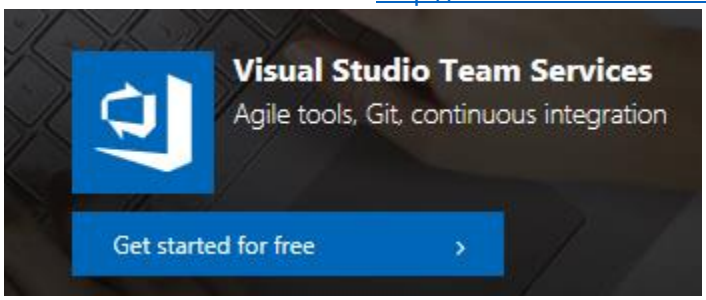
# Visual Studio Team Services (VSTS)

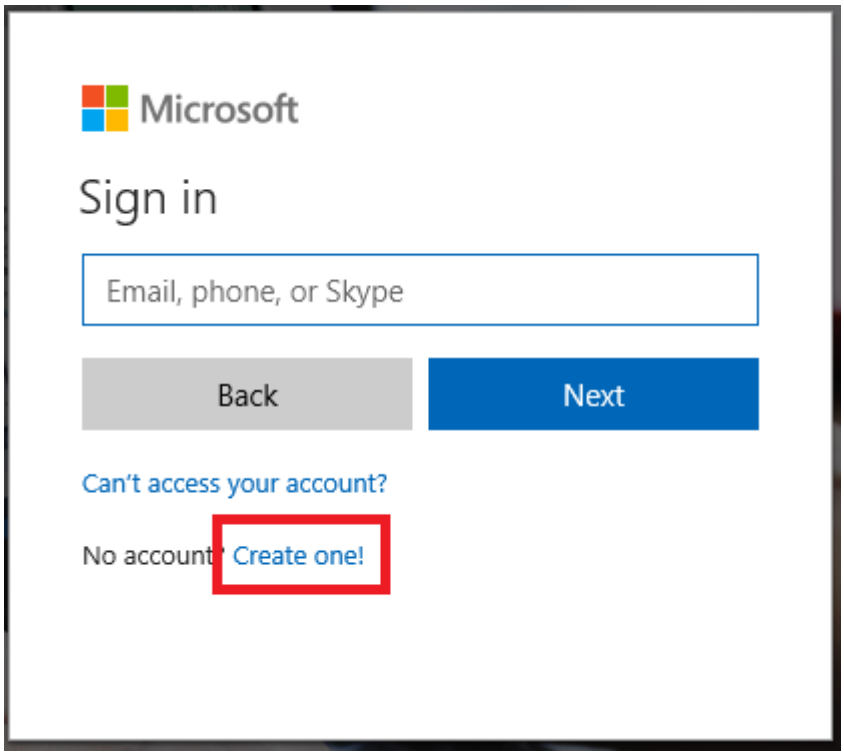
## Exercise: Create VSTS account and a Team Project in it, add team members

1. Start browser and enter URL http://www.visualstudio.com




2. Click on Visual Studio Team Services - Get Started for Free

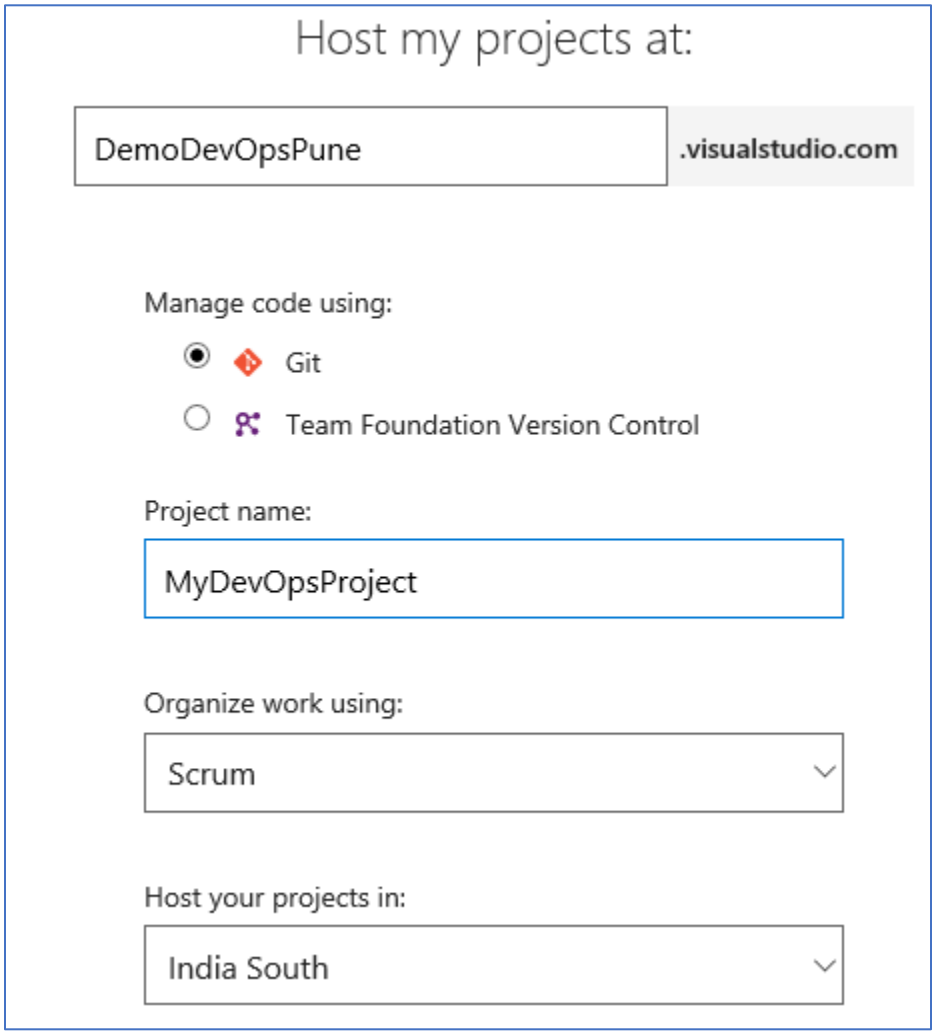
3. Sign in with any Microsoft Account (Please do not use your company id, use a personal one, preferably the one you used while creating Azure Account). If you do not have any id click on Create one!




Follow instruction for creating a new or enter email and password.

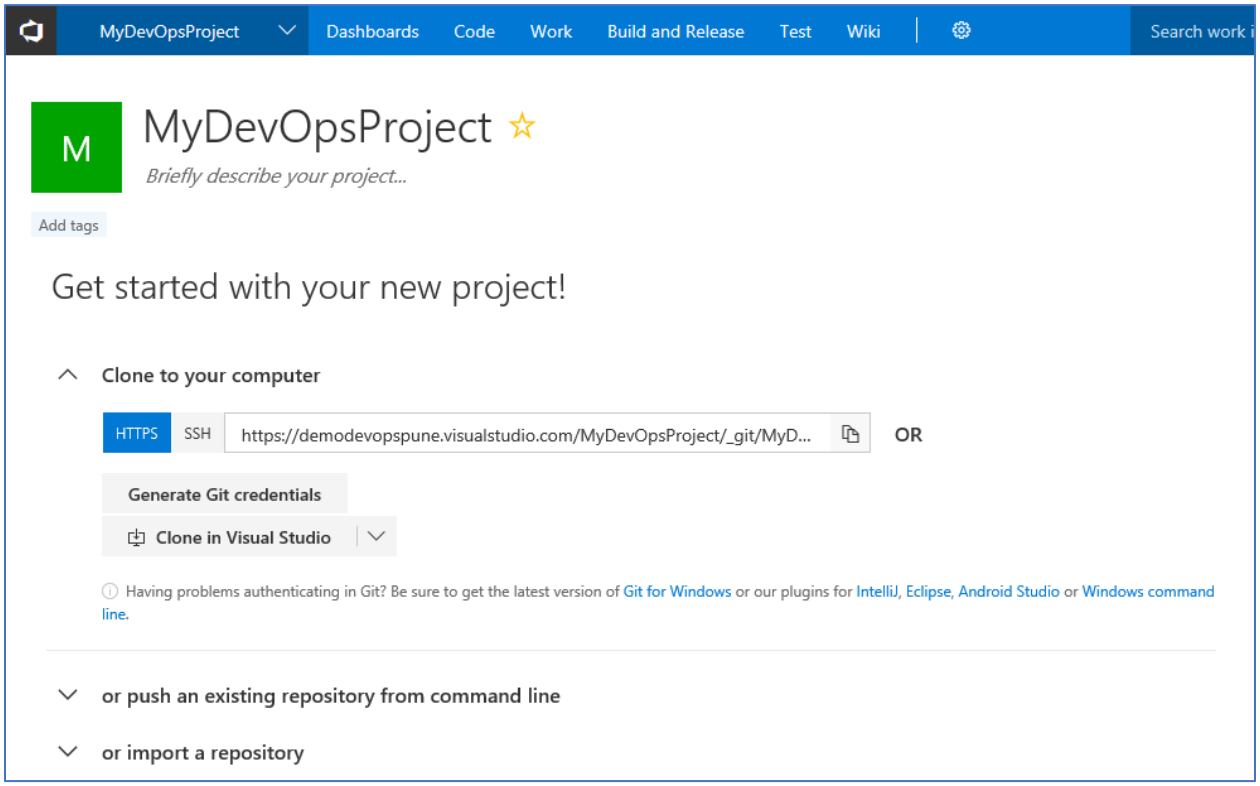
4. Click on Create new Account

5. Provide unique name for the VSTS account, provide any name of your choice. Click on change details. Make sure that you have selected Git as source control and Scrum as process template as follows. Provide name for the project



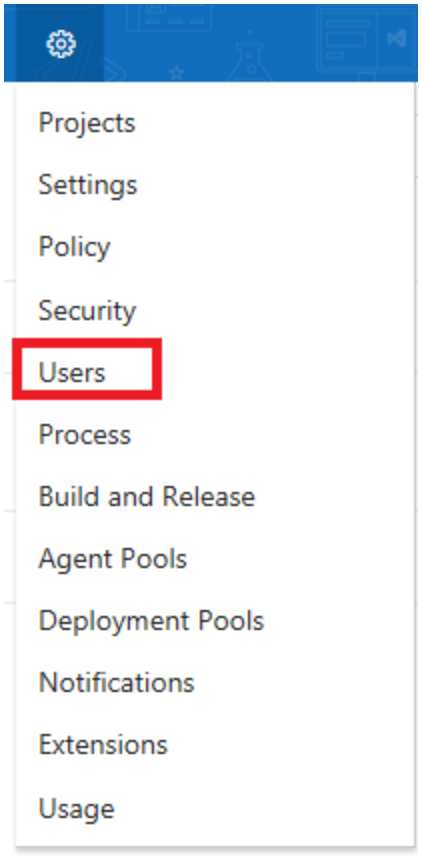

Click on Continue button. after a short while a new account with the specified project name will be created.

6. You can see following on the screen

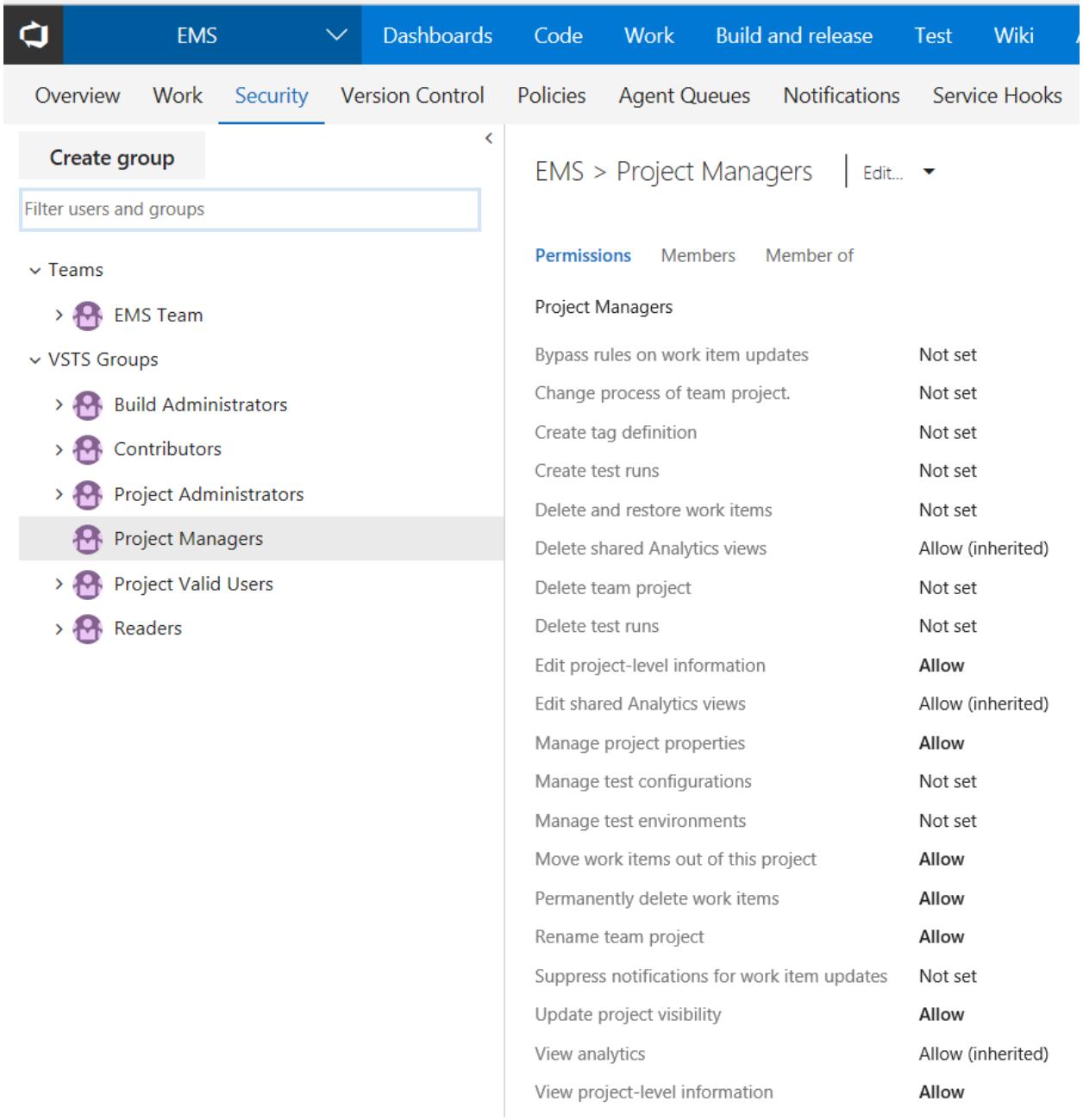



7. Let us add a couple of users to out new account. go to home for account by clicking on left most icon 

8. Select Users from Gear icon




9. Provide user name, select that he/she has access to the new project created and click on add. You can add multiple users at a time by separating the list with ;
   You can see the users added and their access levels. we can add up to 5 users to the account, Browse to the project name
10. On project settings select Security. All the groups of the project will be shown. Click Create Group button and add a group named Project Managers. Set permissions to this group as shown:



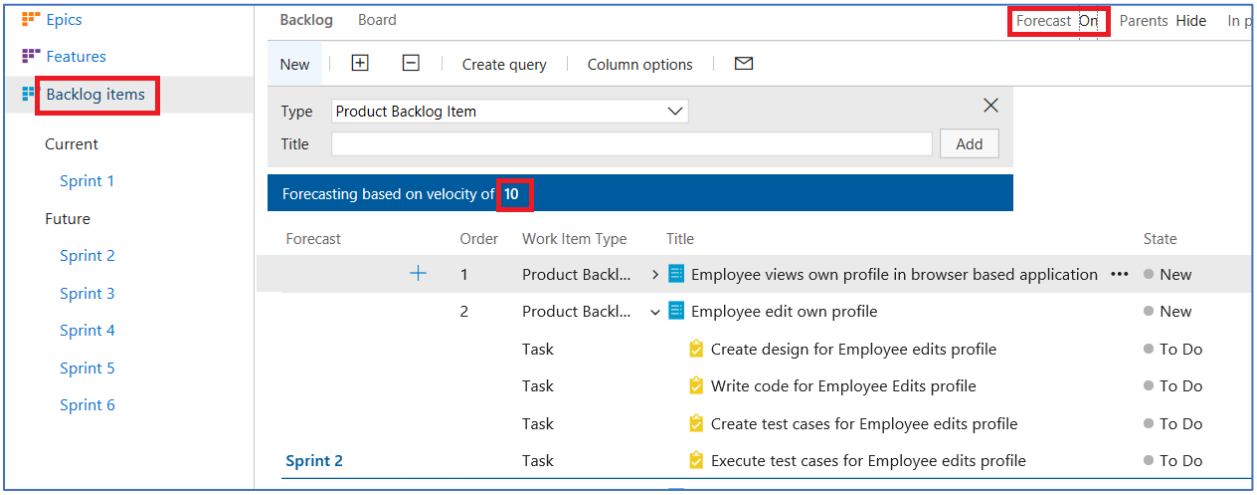

11. You may similarly create groups for Scrum Masters, Tech Leads, Developers etc. and give appropriate permissions to them. You will also be able to give permissions at the levels of Work Item Queries, Backlogs, Code etc.

## Exercise: Iteration Planning Board (All User Stories View)

1. We need to ensure that we have assigned various work items to various team members. Please do the needful if you have not done already by following the steps below

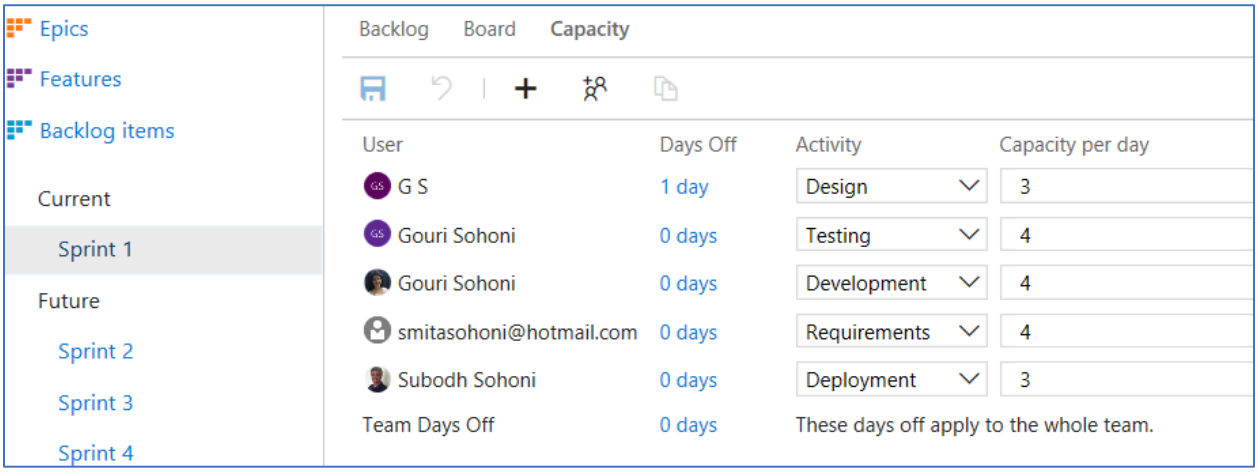
2. Create a query for all work items, under shared folder and name it suitably. Open Excel, connect to the Team Project using Team tab – New List and get all work items using query
3. Add column for Activity. For all tasks provide activity and Publish. Provide Assigned To for each work item.

4. Click on Forecast: On for Backlog items

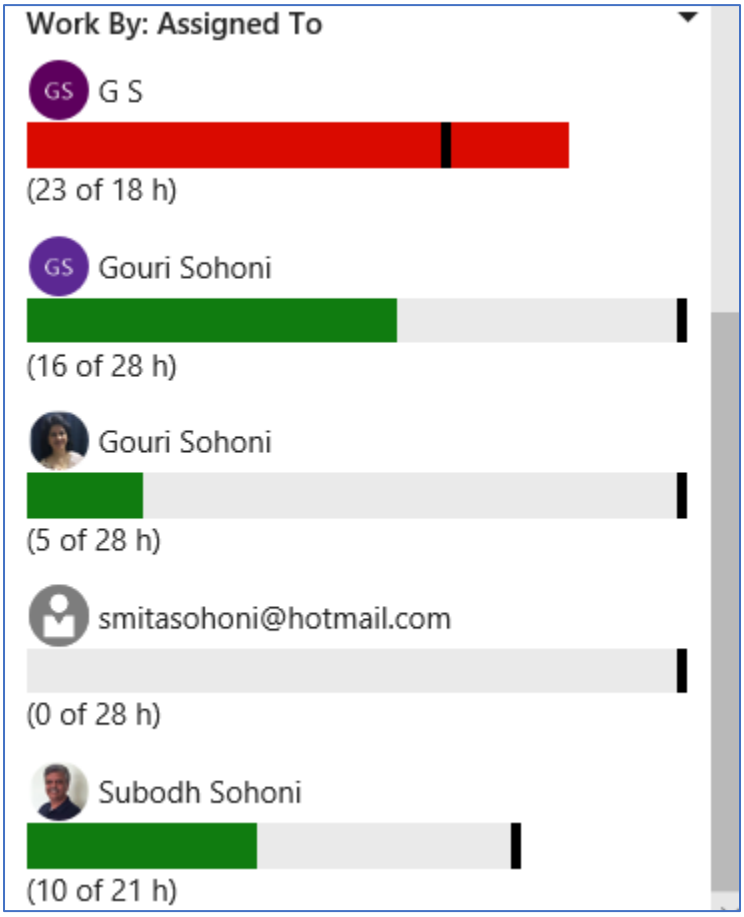



With the value of Velocity set to 10 we see that first 2 PBIs are considered for Sprint 1

5. Drag and drop these PBIs to Sprint 1
6. Set date for Sprint 1 so as to have 7 working days in it.
7. Select Capacity and set the capacity for the team

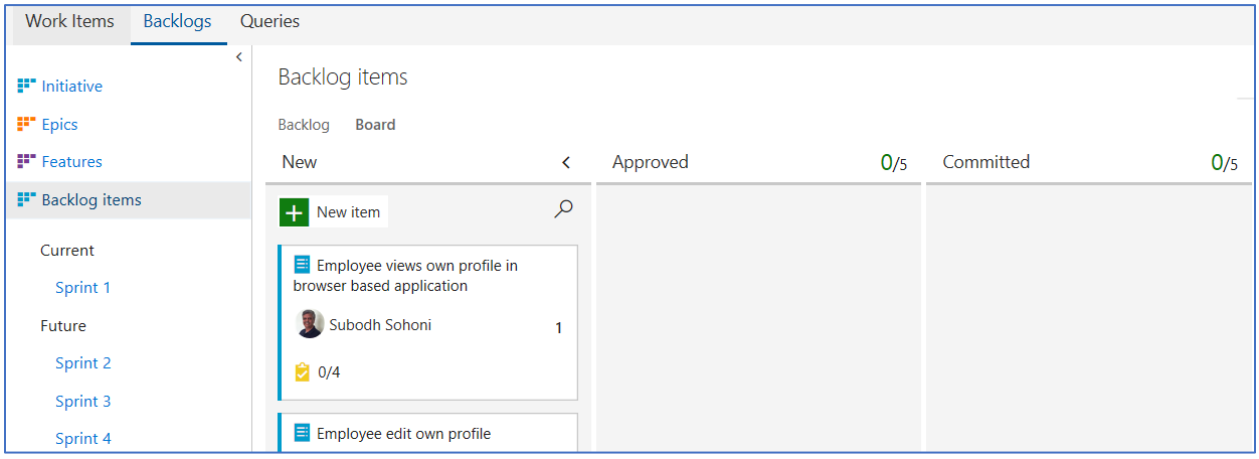


8. We can automatically find the work details on the right hand side.

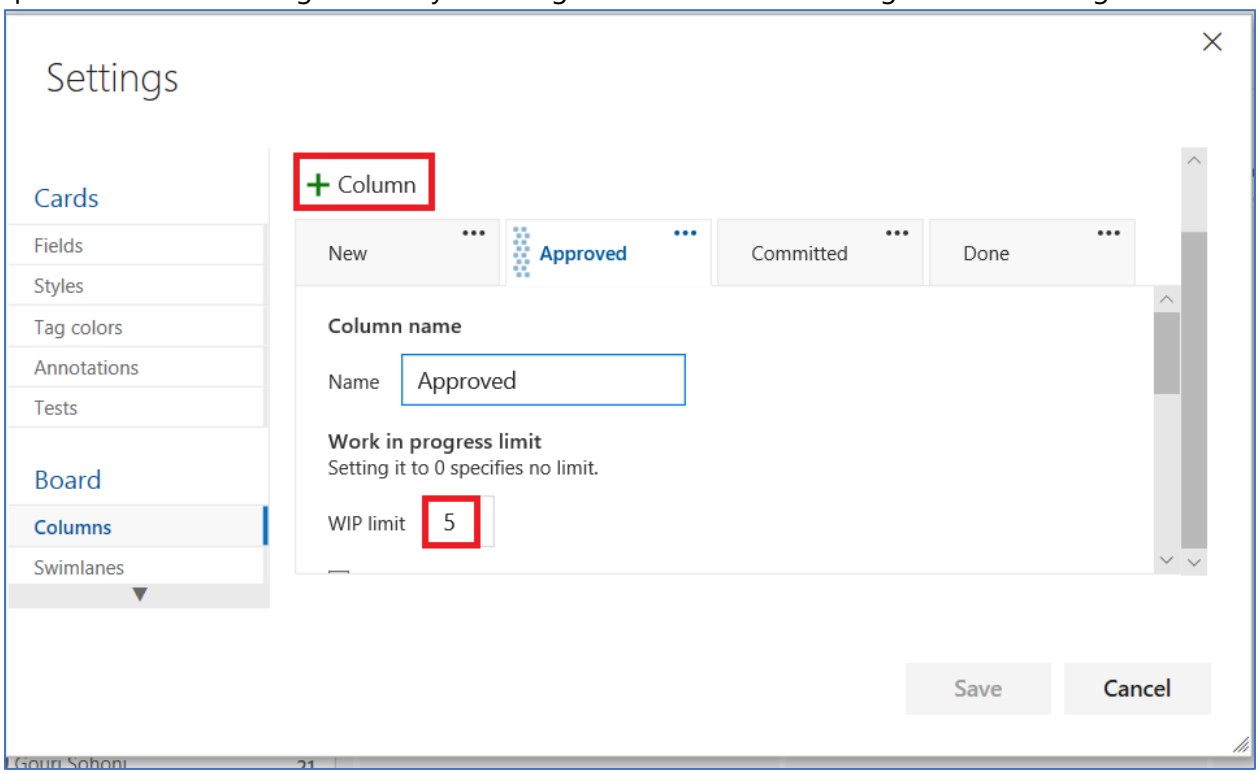



   we can observe that the team members have not been assigned work properly. As one team member is overworked and some are working very leisurely. It is not advisable to have red lines here.
9. Re-assign work to remove imbalance.
10. Select Sprint 1 – Backlog. Click the filter icon in the top left corner.
11. Set the filters for Work Item Type = Task and Assigned To = @Me. Results will show you the list of tasks that are assigned to you.
12. Select board.
13. Move some of the tasks that are assigned to you to Active. Set their Remaining hours within the card.
14. Close some of the tasks so that we will be able to view burndown on the next day.

    **Kanban Board**
15. Select Product Backlog (Backlog Items) and Board tab under that. Discover that you can change the state of each items just by drag and drop from one column to another
16. You can Group by either Backlog items or persons

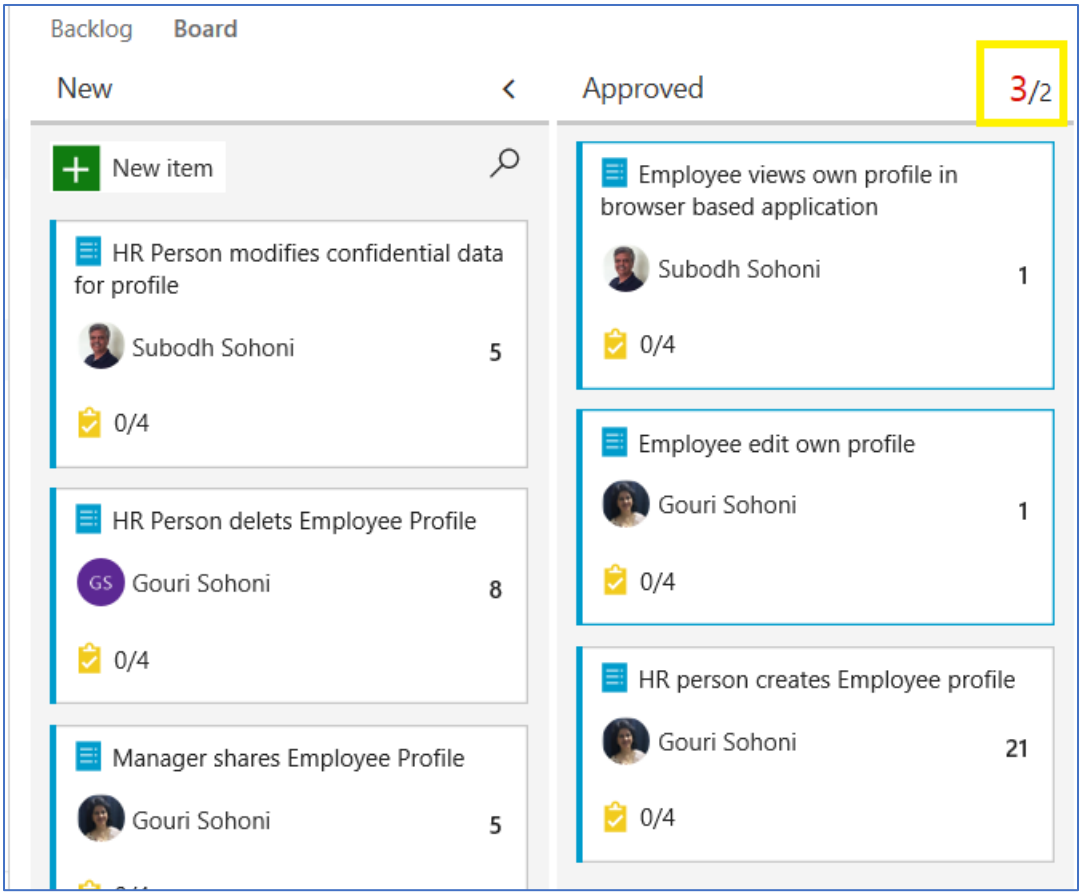



Observe that each state has a set limit for number of work items. Also, the state names are specified. We can change these by selecting the wheel icon for configure team settings




we can change the limit for Work items as well as add more columns

17. Let us set the limit for approve to 2 and add 3 work items to the list =. We see the data as follows




Observe the red color 3 appearing. This is just indication.

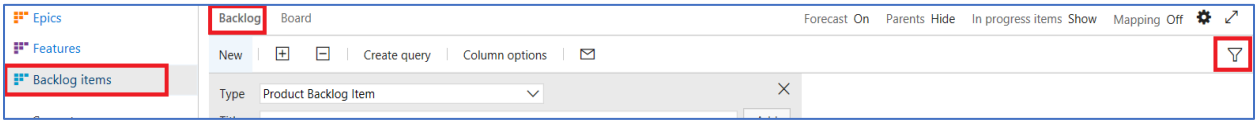
18. Explore remaining options for configuration

## Exercise: Aggregation of field data in VSTS and Team Status

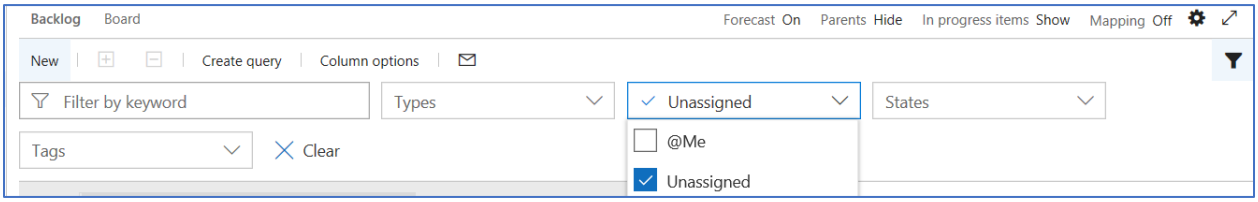
1. Add 2 PBIs in the Sprint 1 by drag and drop from product backlog.
2. Open the sprint backlog by clicking on the Sprint 1 node. Select the Backlog view if it is not already selected.
3. If Remaining Work column is not present, add that column to the view.
4. You will be able to see that the remaining work of all children tasks is rolled up and shown aggregated for the parent PBI.
5. Open the board view (Task board).
6. Move some tasks to other than New field.
7. You will see that aggregation of Remaining Work for tasks of each state is shown at the top of the column for that state.
8. When you collapse each row that is for the PBI, the aggregated value of remaining hours for that row (PBI) is also shown in the board view.
9. At the top of the Task Board, you will find a selector for “Group By” which by default is set to Stories. Change the selection to “People”. You will see the rows change to assignees.

## Exercise: Backlog view - User Stories not assigned to any team (PBIs)

1. Let us create a filter for this. Go to Backlog – Backlog items and click on Filter icon on the right-hand side



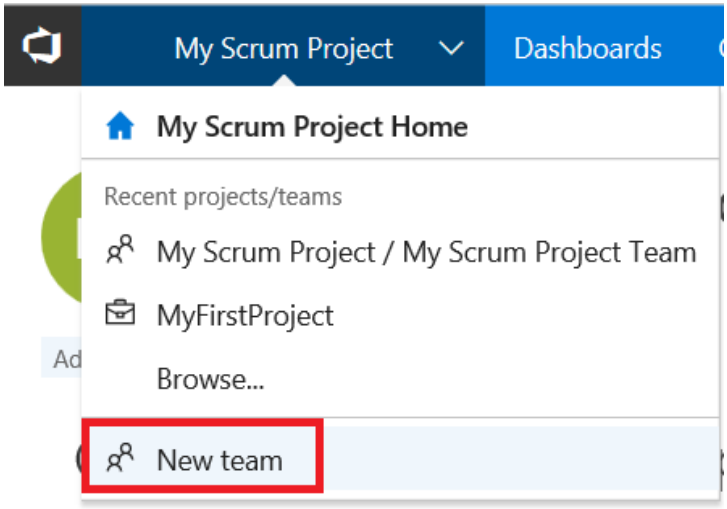

2. Select assigned to unassigned in the filter



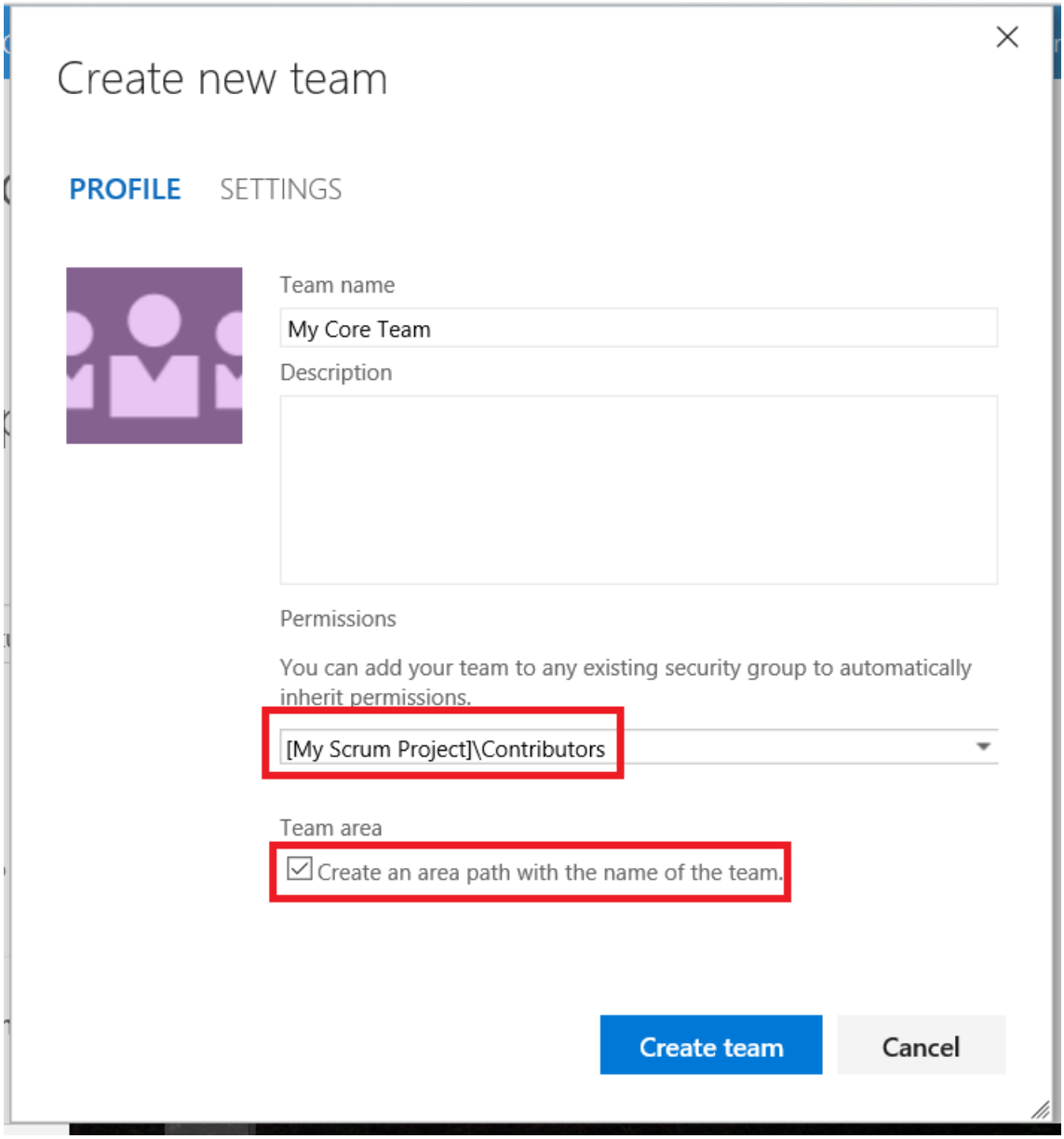

3. This will give result of all unassigned user stories (PBIs)

## Exercise: Release Planning Board - List of Features that will be part of the release (Planning Extension)

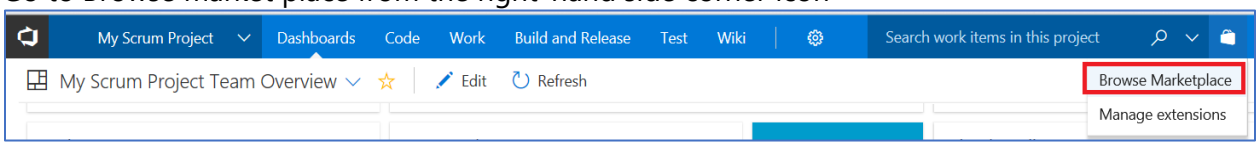
1. Let us create a New Team



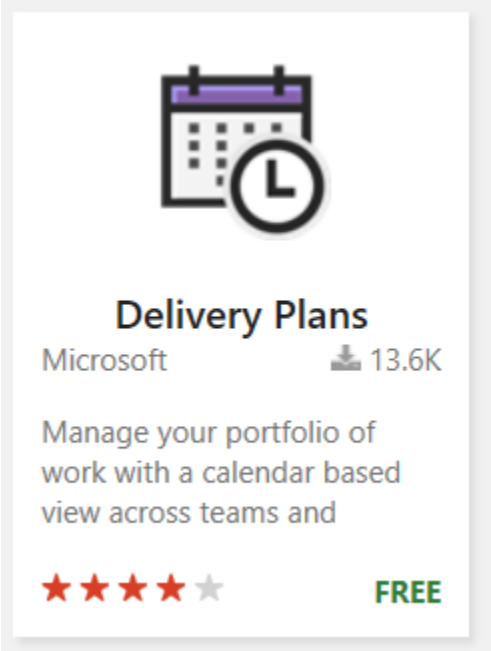
2. You can add the new team to the desired security group and create area path for the same name as team



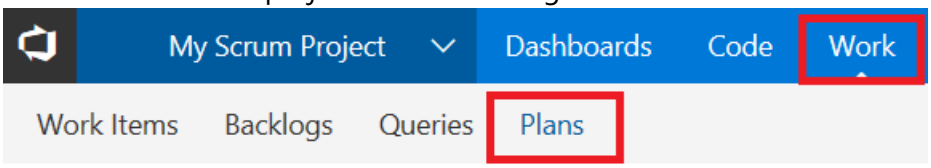

3. Let us add 1 team member to the Team
4. Go to Browse market place from the right-hand side corner icon



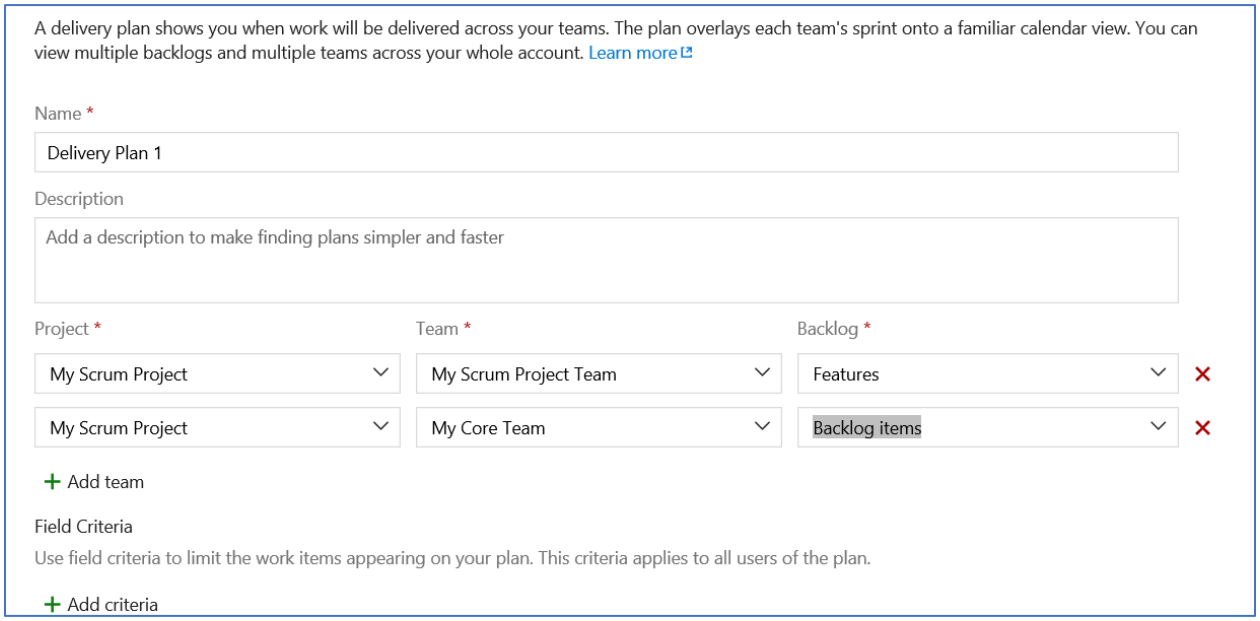
5. Search for Planning and you will see Delivery Plan



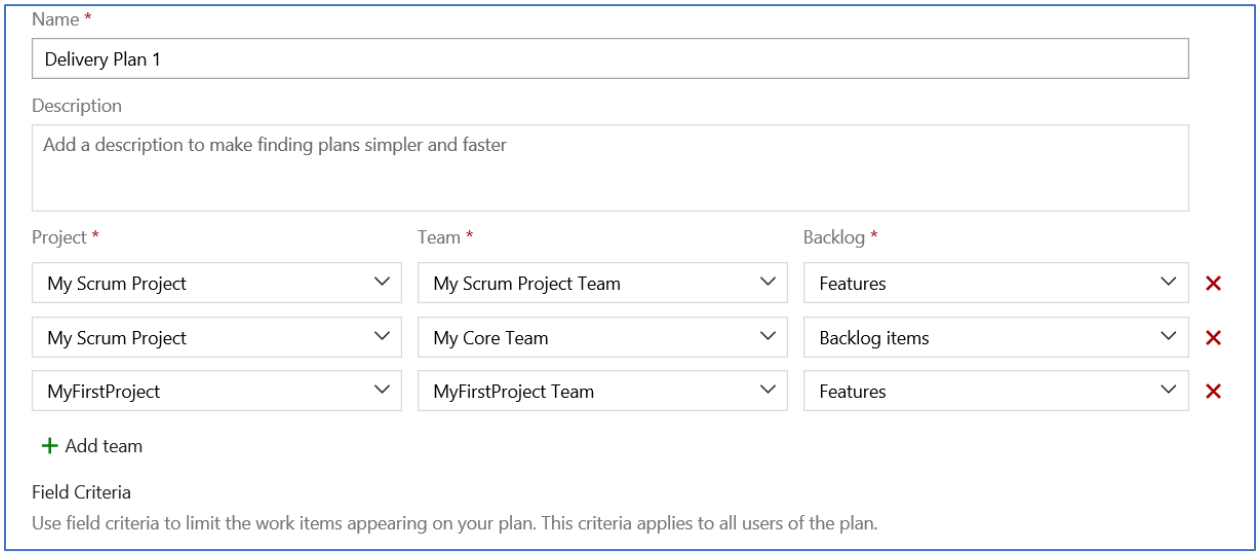

6. Select it, click on Get it free and Install it for the VSTS account. Click on Proceed to Account and select the team project we are working on. In Work one more tab for Plan is added



7. Click on New Plan and enter name

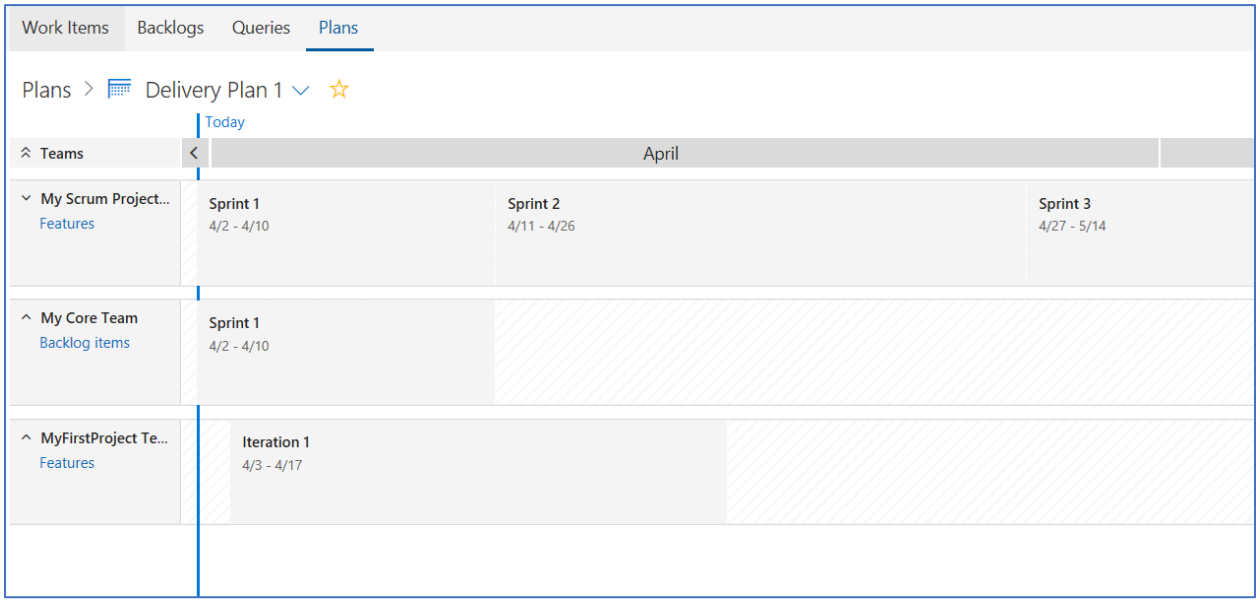



I have added Features level for first team and Backlog Items level for the second Team for the same project. This Plan can be across the projects as follows

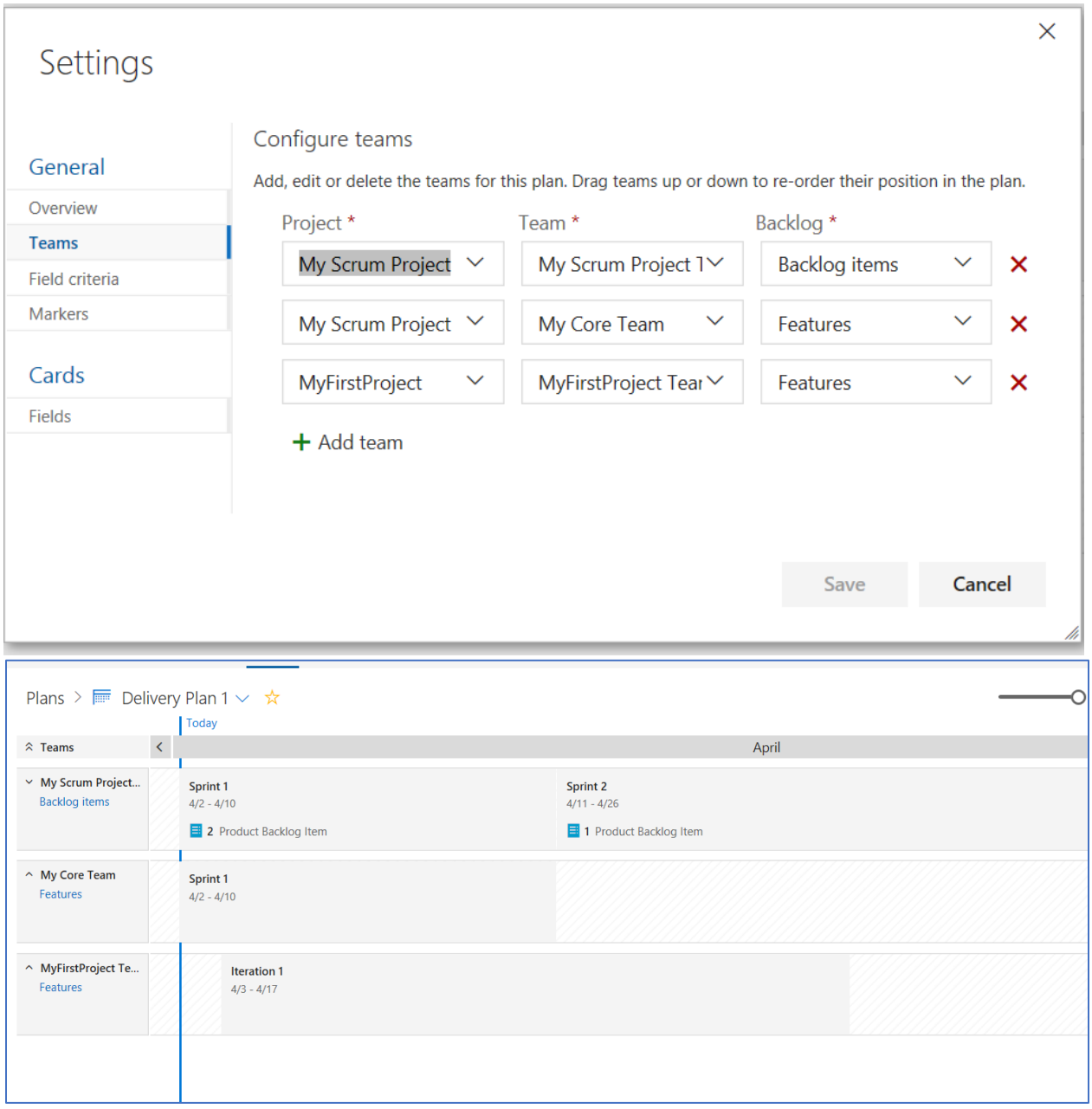



It is imperative to set the dates for iteration in case you want to get them into the delivery plan

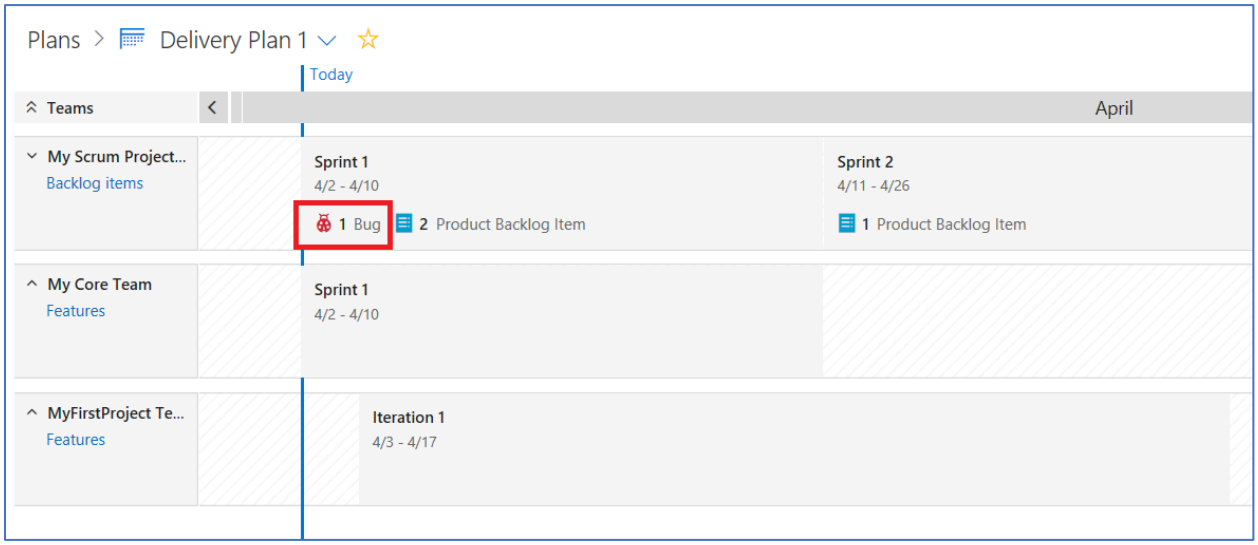
8. The plan view looks as follows




9. We can configure the settings. I have changed the level for first team to Backlog items and I get following plan

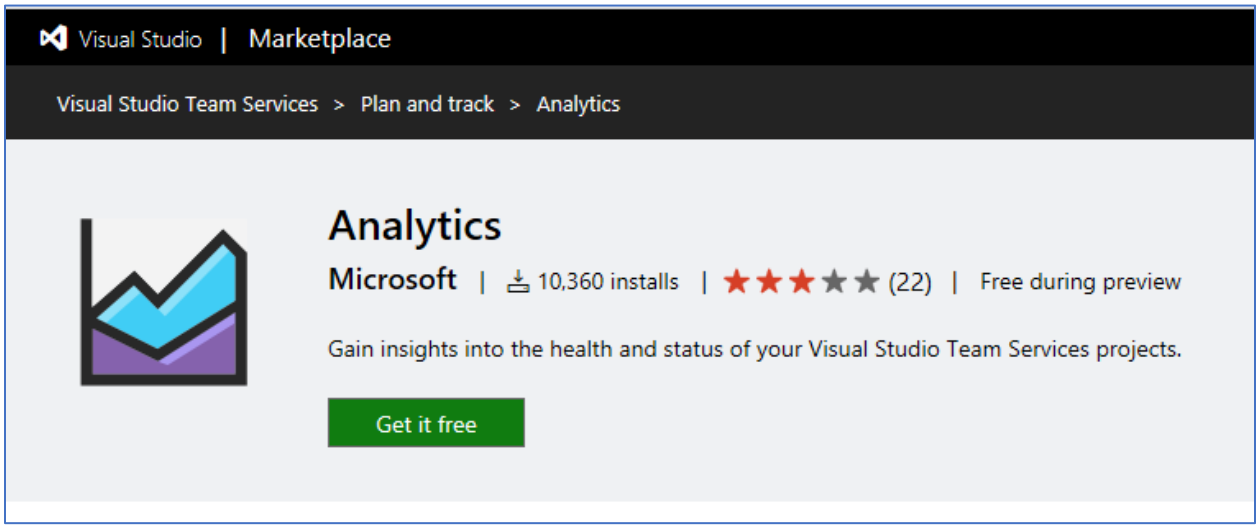

Settings
General
Overview
Teams
Field criteria
Markers
Cards
Fields
Configure teams
Add, edit or delete the teams for this plan. Drag teams up or down to re-order their position in the plan.
Project *
Team *
Backlog *
My Scrum Project
My Scrum Project T
Backlog items
My Scrum Project
My Core Team
Features
MyFirstProject
MyFirstProject Tear
Features
Add team
Save
Cancel
Plans
Delivery Plan 1
Today
Teams
April
My Scrum Project...
Backlog items
Sprint 1
4/2 - 4/10
2 Product Backlog Item
Sprint 2
4/11 - 4/26
1 Product Backlog Item
My Core Team
Features
Sprint 1
4/2 - 4/10
MyFirstProject Te...
Features
Iteration 1
4/3 - 4/17

10. Once the bugs are created you will observe they also appear in the delivery plan.

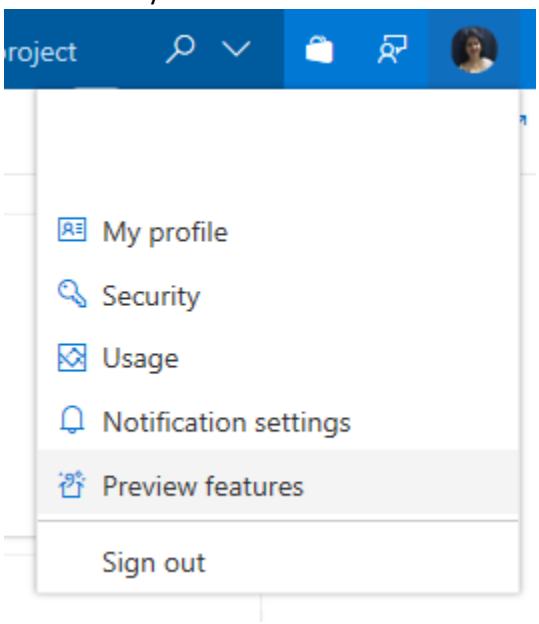



## Analytics

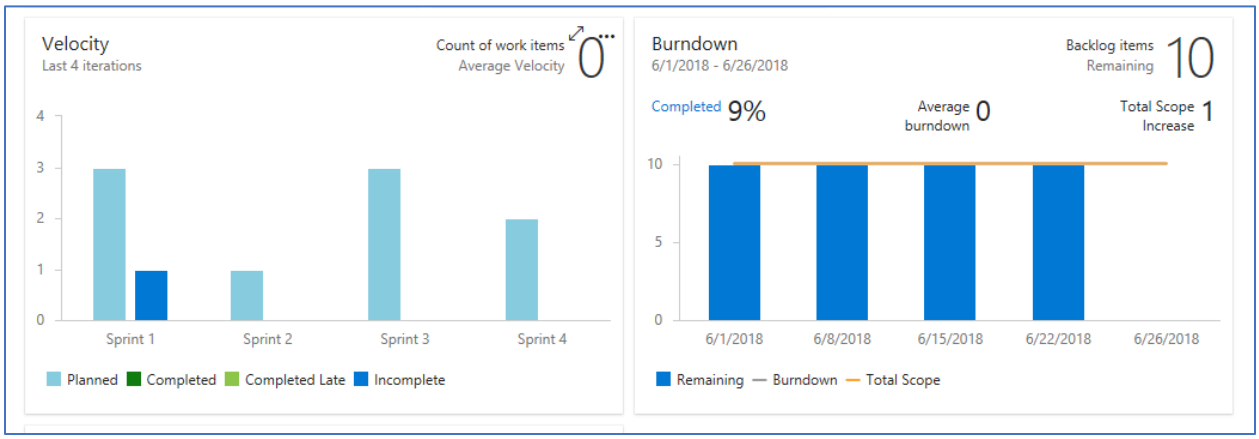
11. We can extend this further by adding support to analytics dashboard by using analytics extension Use Analytics to get visibility across teams with Widgets based on Analytics Service

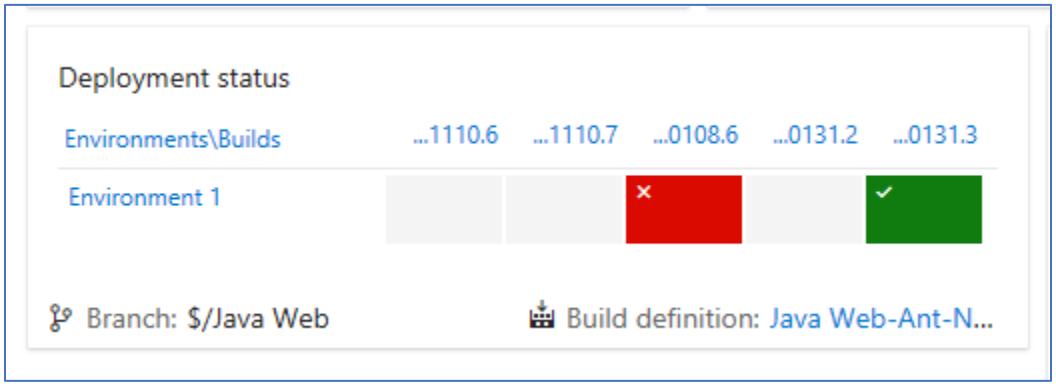


12. Ensure that you have enabled the new dashboard features, [Enable preview features]

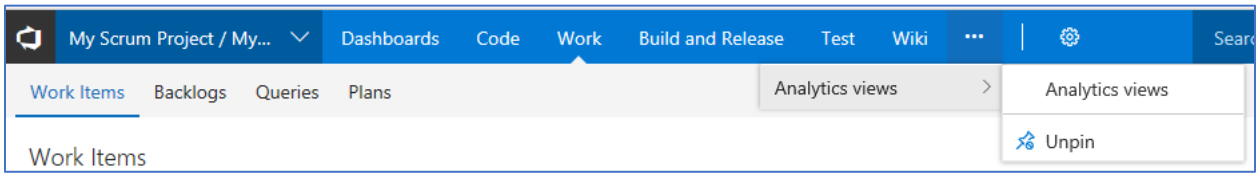



13. Once the extension is added you can add any of the following widgets to your Dashboard (Cumulative Stories, Lead, Cycle Time, Velocity, Burndown and Burnup)
14. I have added a few of the widgets



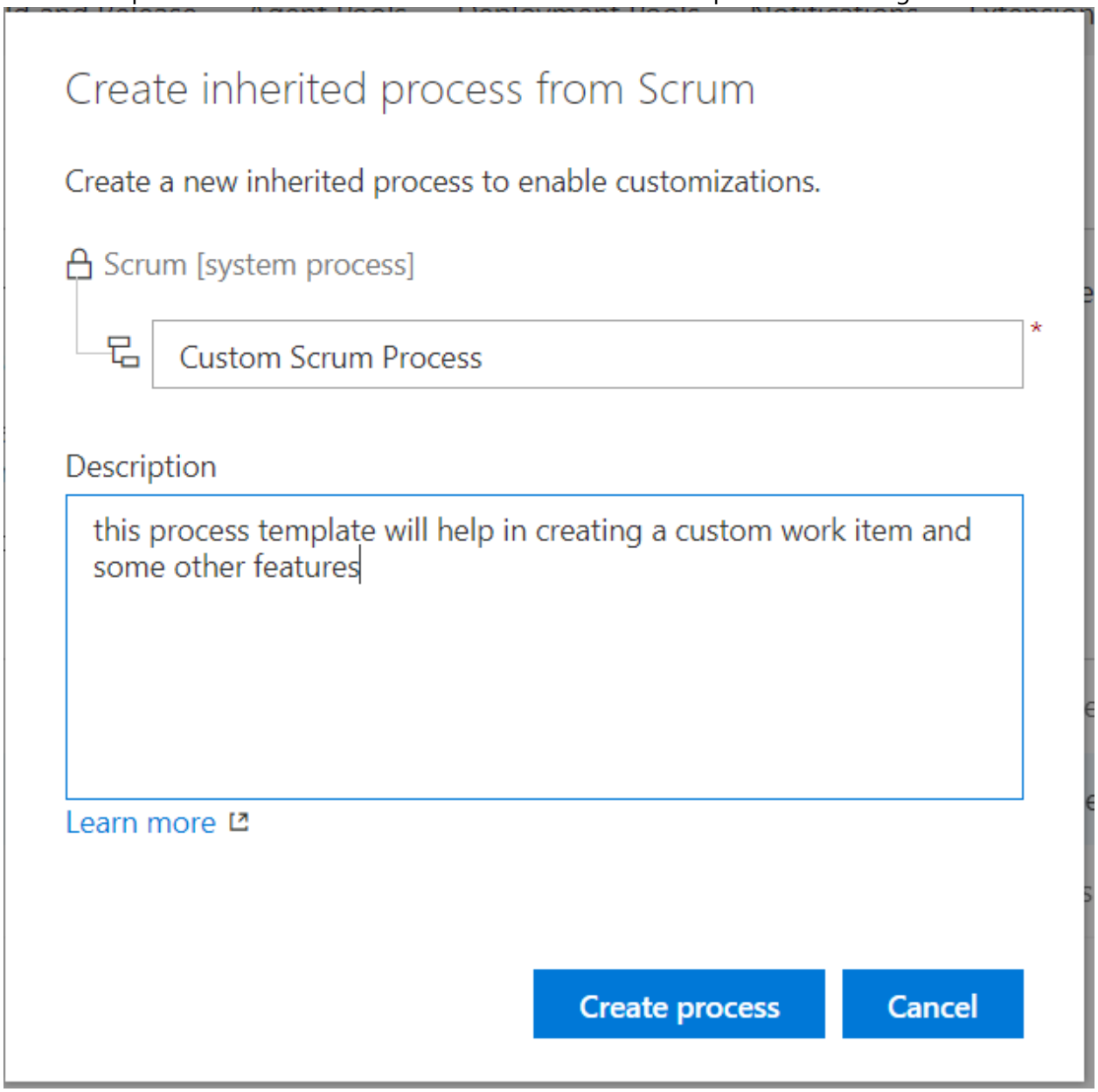



15. Analytics View automatically gets added with the extension



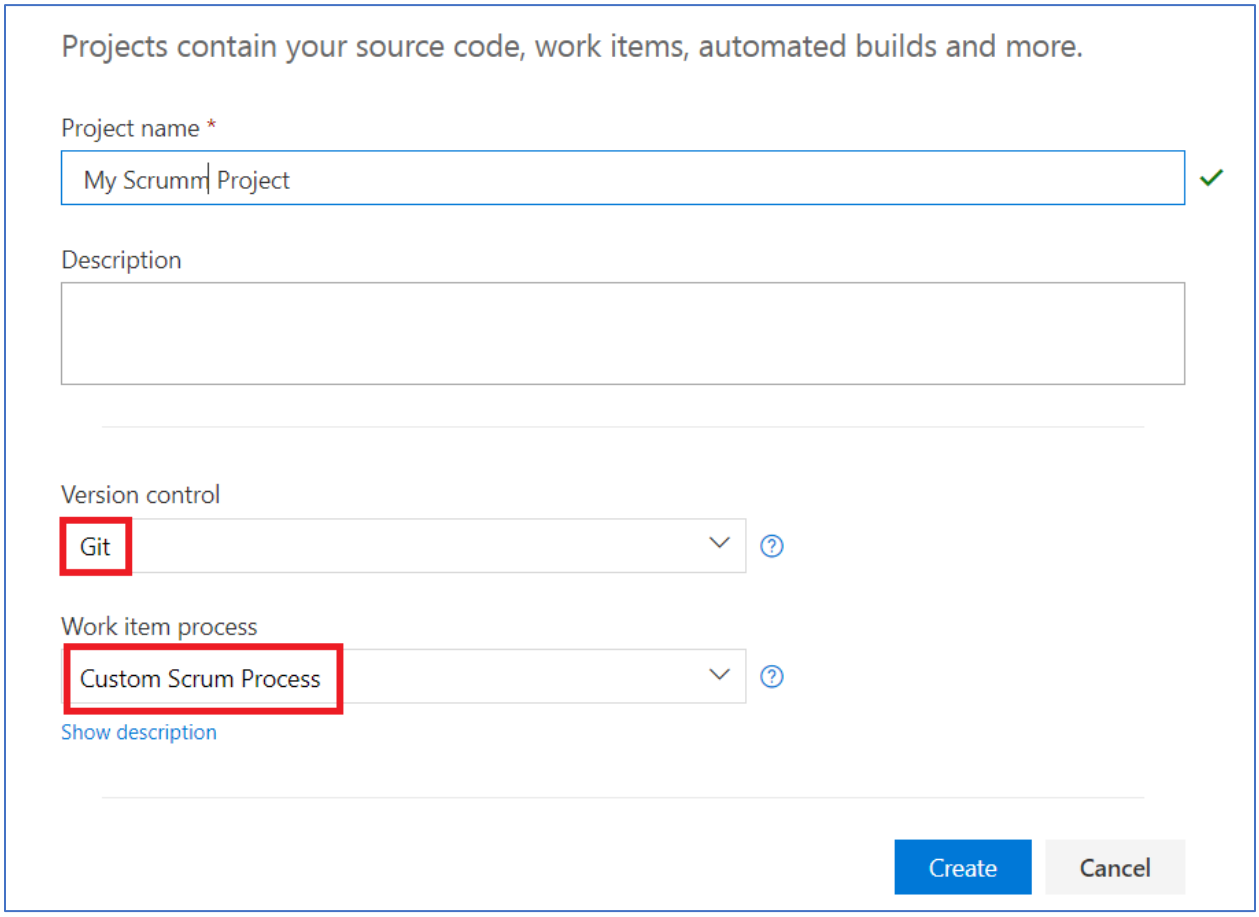
## Exercise: Create Custom Process, add work items to project

1. Click on  icon at the left-hand corner and go to Home for VSTS account
2. Select Process from wheel icon 
3. Click on ellipse button and select Create Inherited Process and provide following details



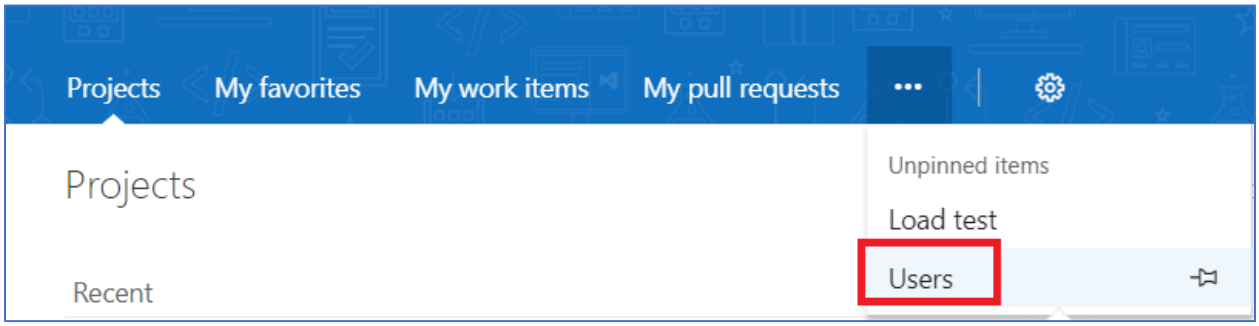

4. Click on Refresh to view the custom process

5. Create a new Scrum project for the custom process




Make sure that you have selected Git as Version Control.

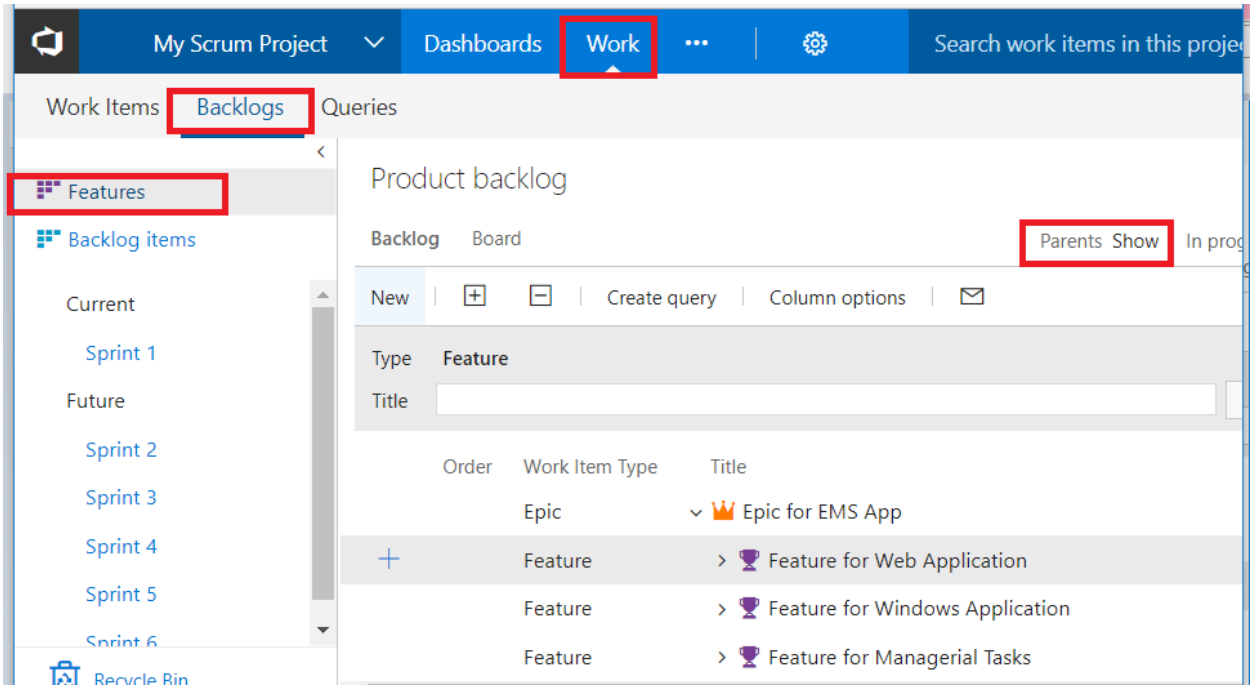
6. Go back to Home for account
7. Select Users from the ellipse to add more users




8. Click on Add new users and add 3 more users.
9. Provide them access to the newly created project
10. Start Excel and connect to VSTS instance using Team tab
11. Select Input List to create a list of new work items
12. Add 3 levels of Tree so as to have Title1, Title2, Title3 and Title4 (These will be used for Epic – Feature – Product Backlog Item – Task)

13. Add 3 more columns Efforts, Business Value and Remaining Work so that the list looks as follows

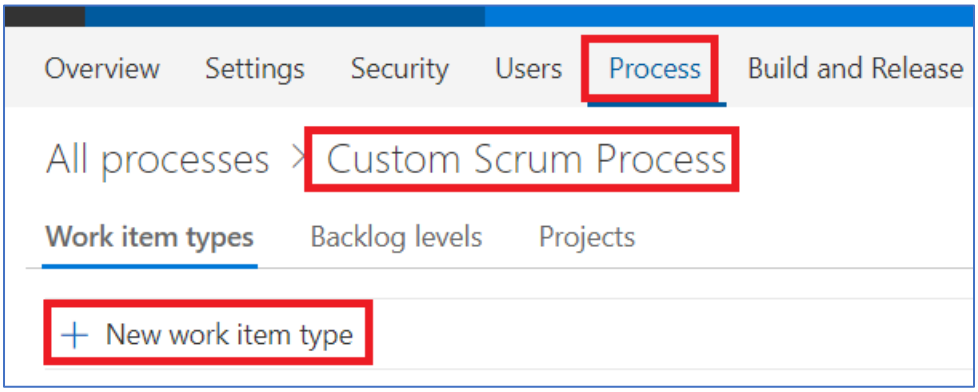

14. Copy the data from Sheet1 of Data.xlsx (You can cancel if any message is displayed)
15. Publish the work items so as to add them to the project
16. You can view all the work items by selecting Feature from Work – Backlogs and click on Parents: Show



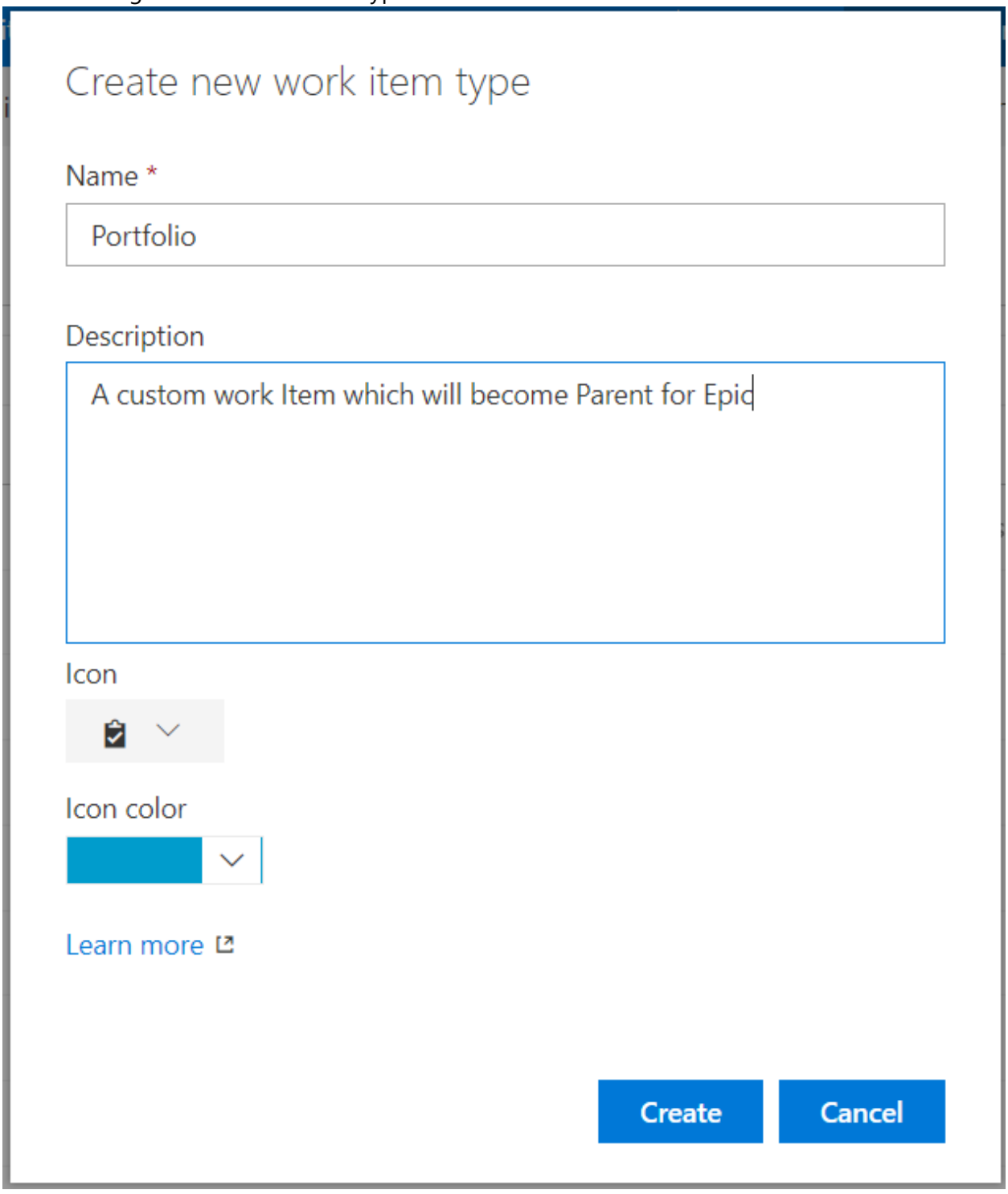

17. Assign the work items to different team members you have added.

## Exercise: New Portfolio Item Creation

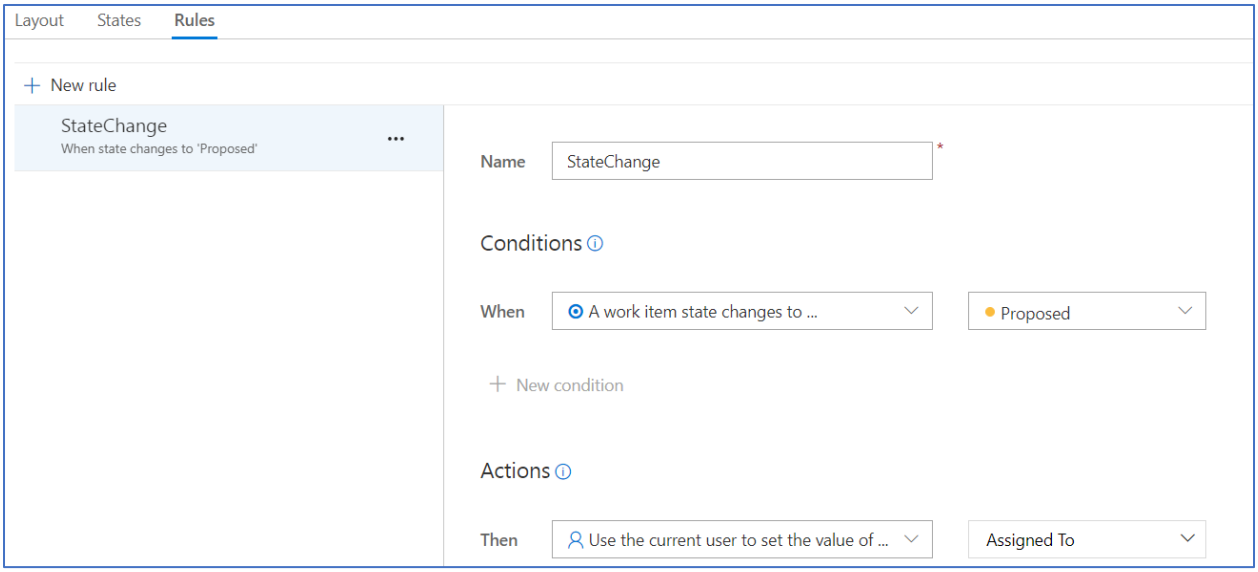
1. Let us add a custom work item
2. Select the Process tab and select the custom process template we have already created



3. Click on + sign for New work item type




4. Add a custom State after New as Proposed, add a rule which states that when the state is set to Proposed the assigned To fields should take the name of current user

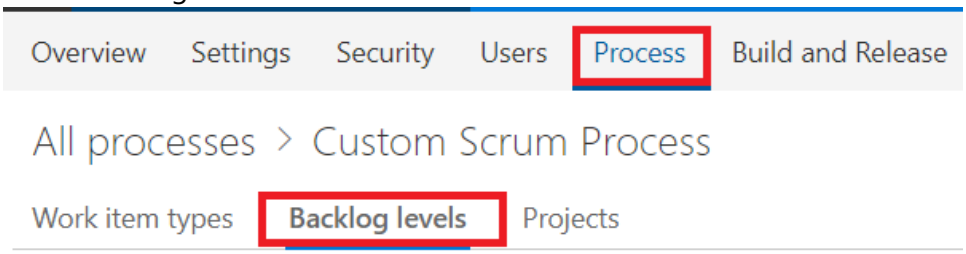



5. Create a new Portfolio and change the state to Proposed and find out if the current user gets assigned to the field

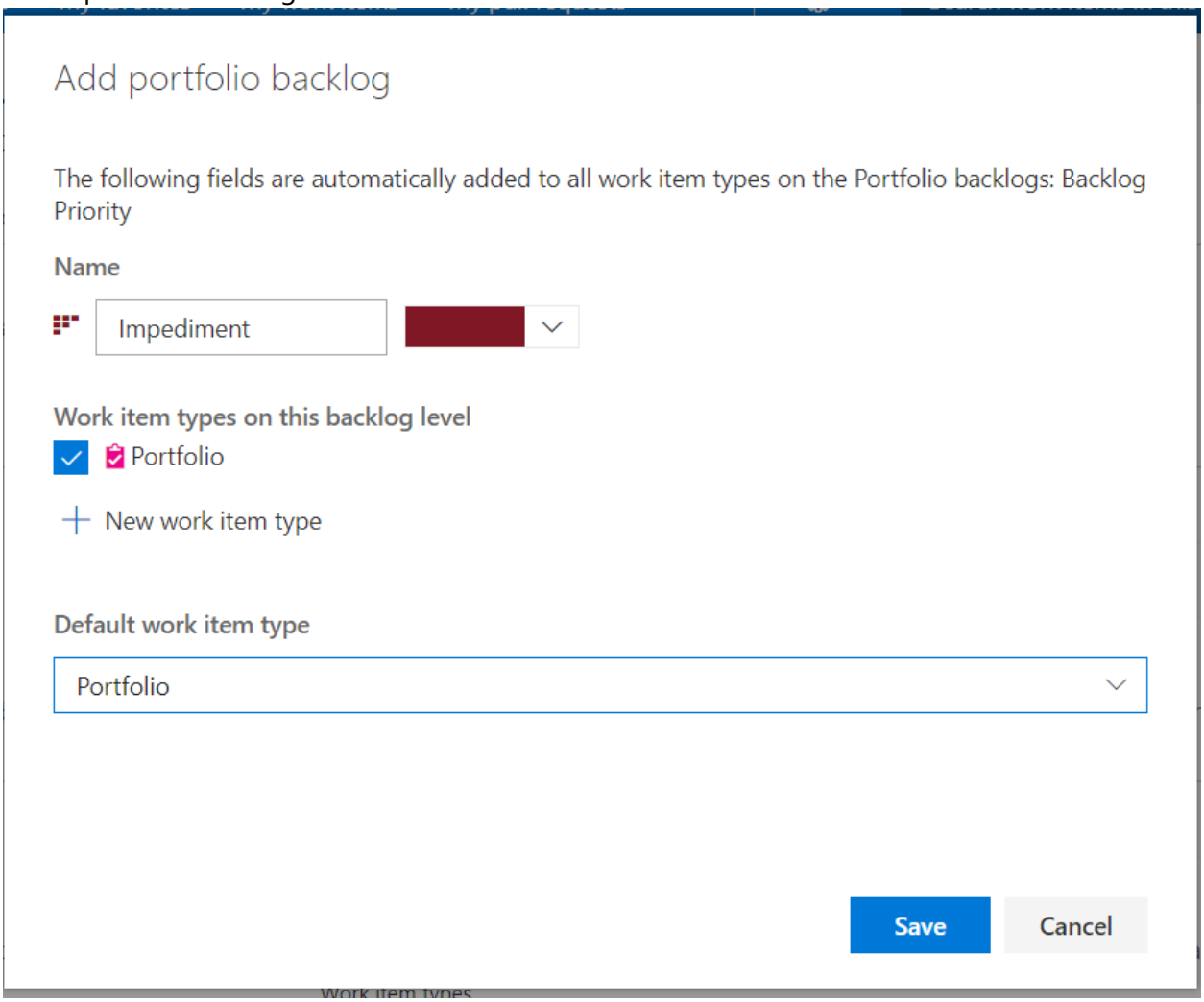
6. Add link as child to Epic

## Exercise: Customize Backlog

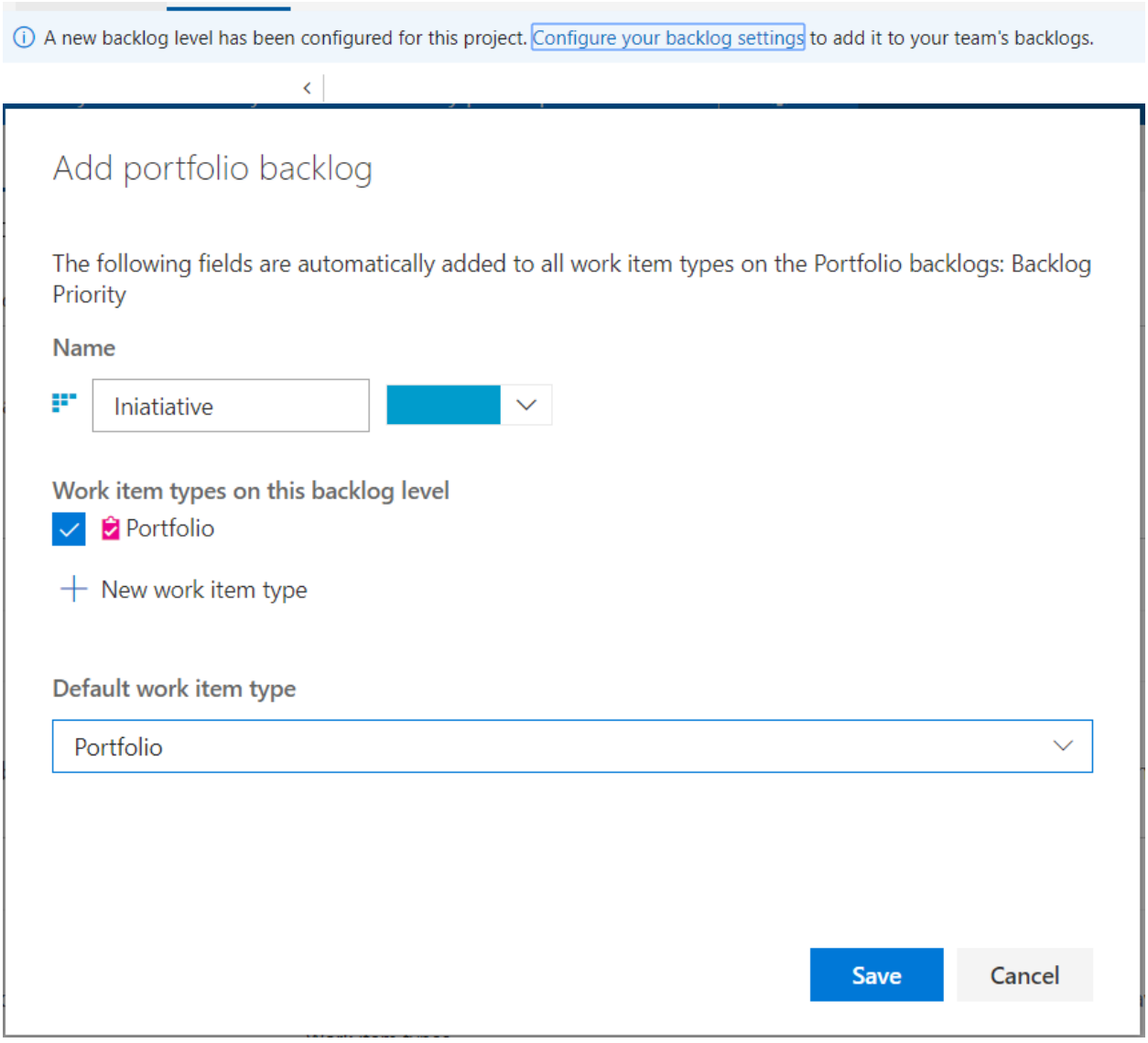
1. Select Backlog levels tab from Process



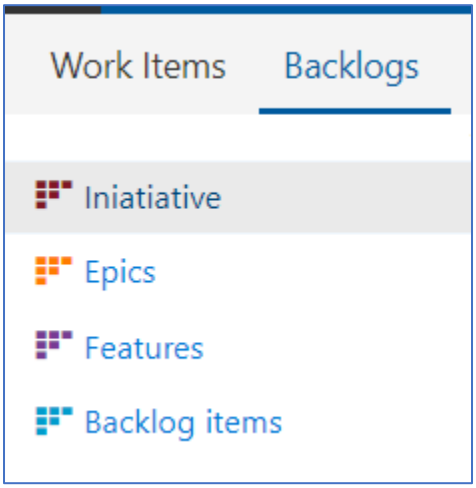
2. Add a portfolio backlog as follows



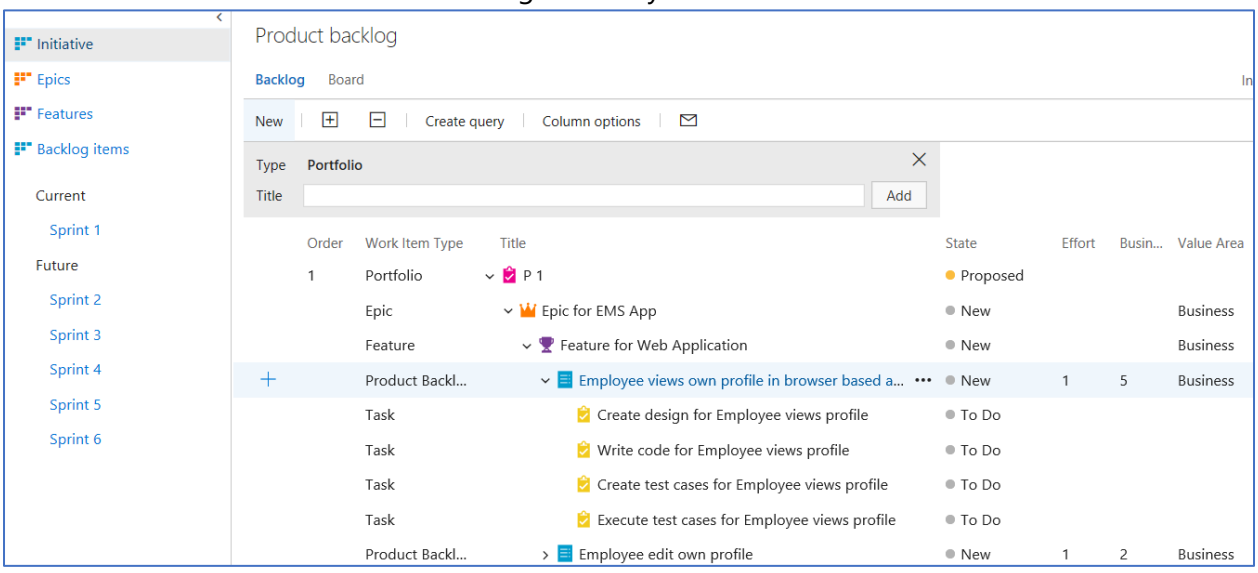
3. Go to Backlogs and you will see this message



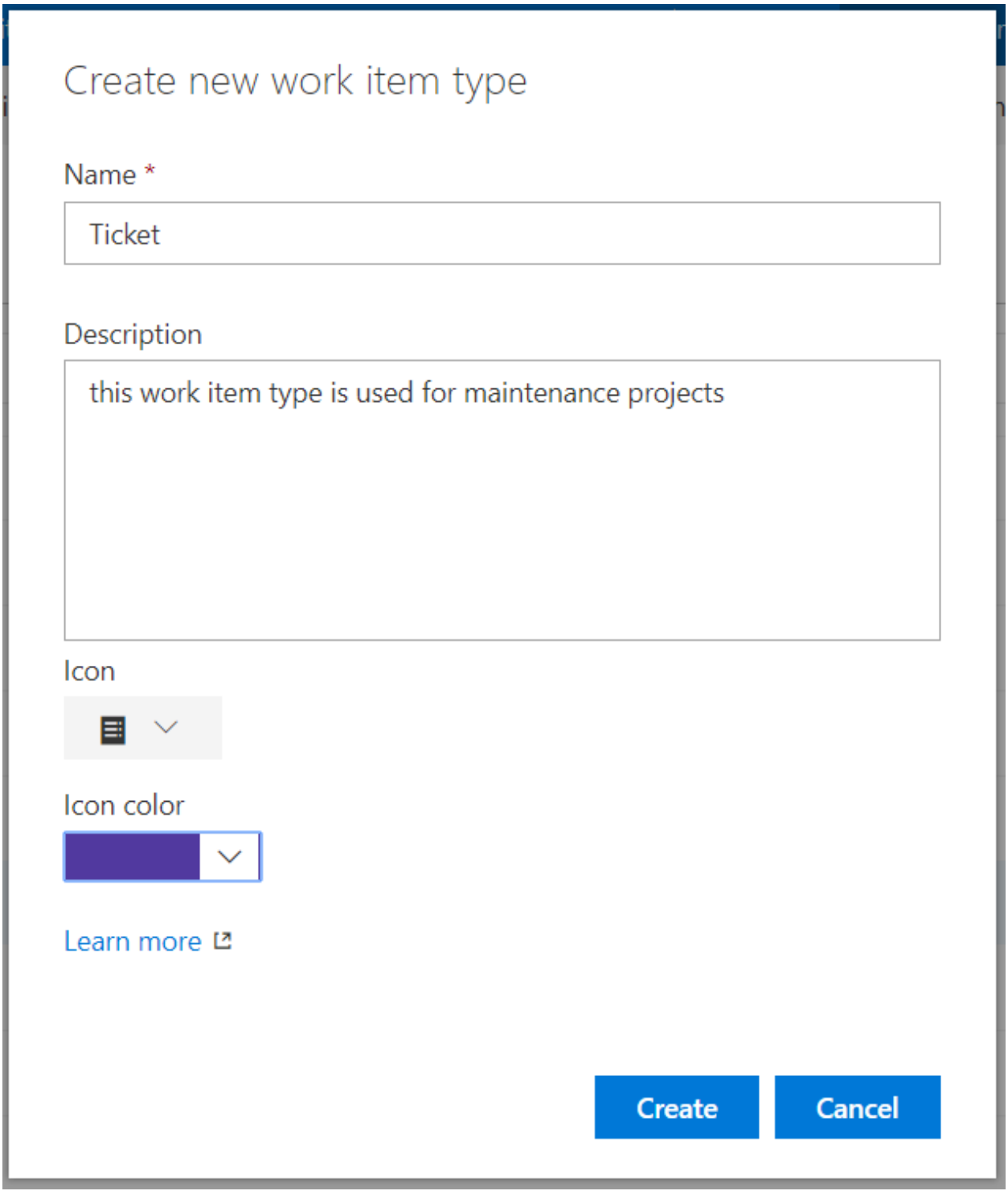
4. Click on Configure your backlog settings and select the required work item(s) and now the entries are shown as below

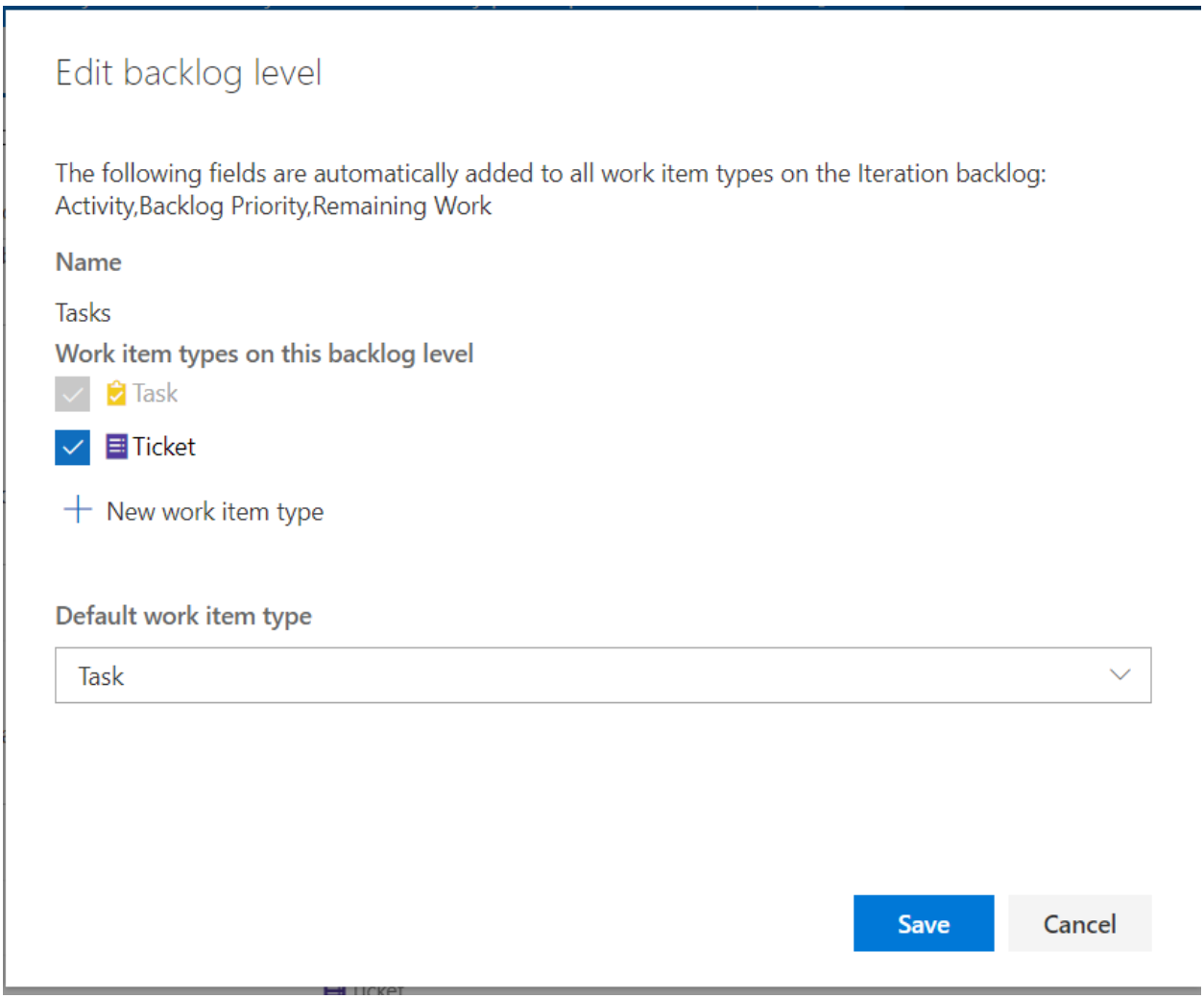



5. If we select Initiative tab we see following hierarchy




6. Let us add one more Custom work item type named Ticket and add it to iteration backlog


Create new work item type
Name *
Ticket
Description
this work item type is used for maintenance projects
Icon
Icon color
Learn more
Create
Cancel

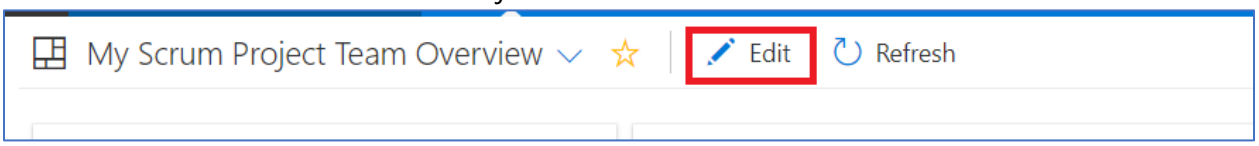



7. Add a rule so that when the work item is created it automatically assigned to current user.

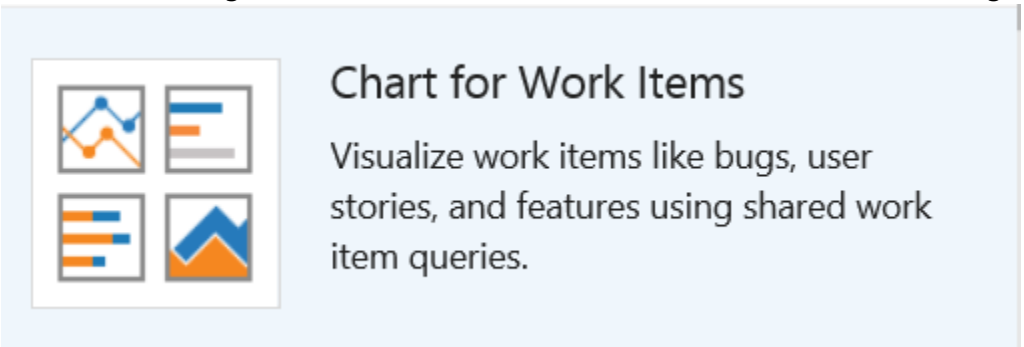
## Exercise: Add a Dashboard Widget

This can be done just by adding required existing widgets to the Dashboard or creating a custom extension. Let us try both

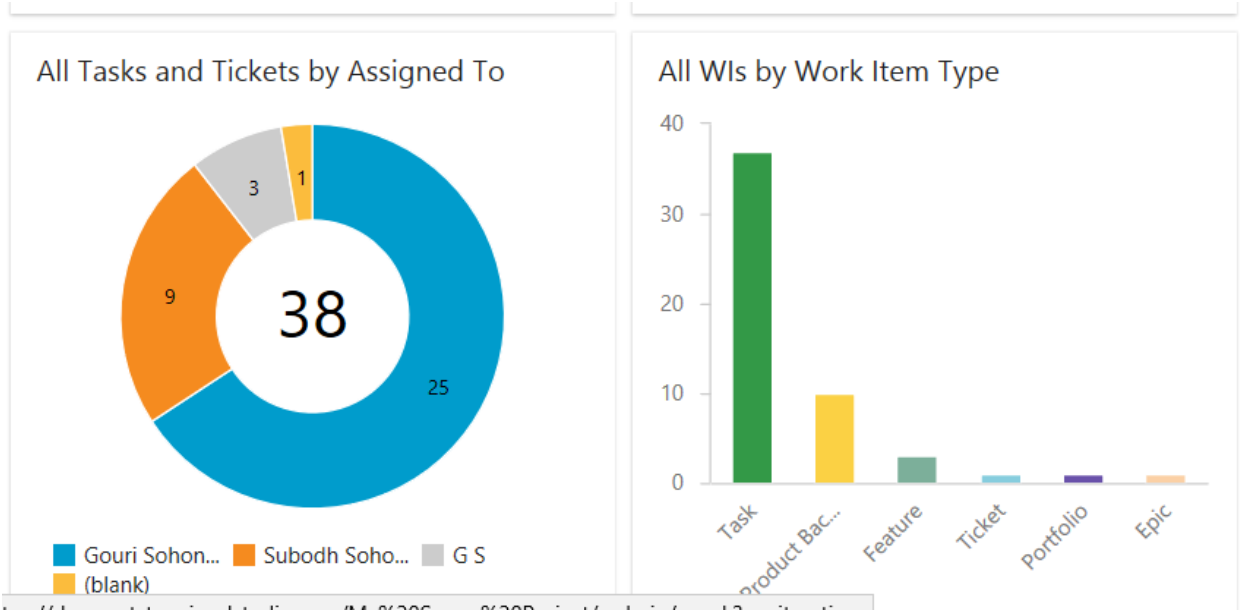
1. Create 2 queries in Shared folder named All WIs and All Tasks and Tickets with respective work item
2. Go to Dashboard tab for the Team Project and select Edit



3. Click on Add Widget for ‘Chart for Work Item’ twice and click on Done Editing

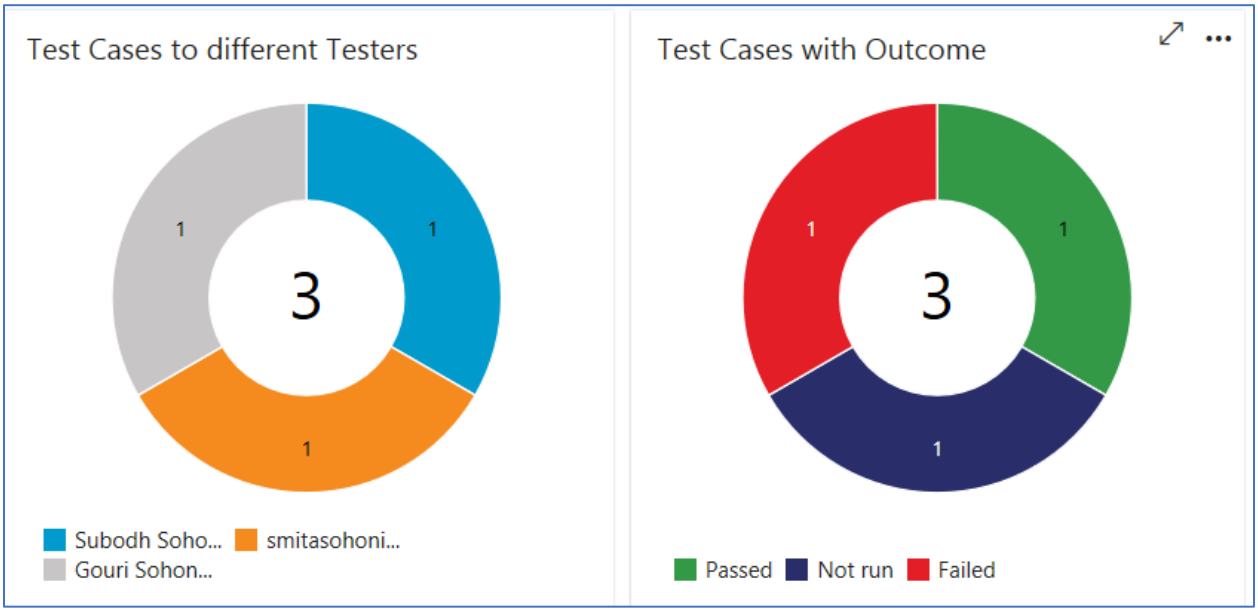



4. Select Configure for each widget and configure for the 2 queries we have created in step 1. Choose the chart of you type and the result will be displayed as follows




5. First Pie chart shows all work items to whom they are assigned and the second one shows work items for each category

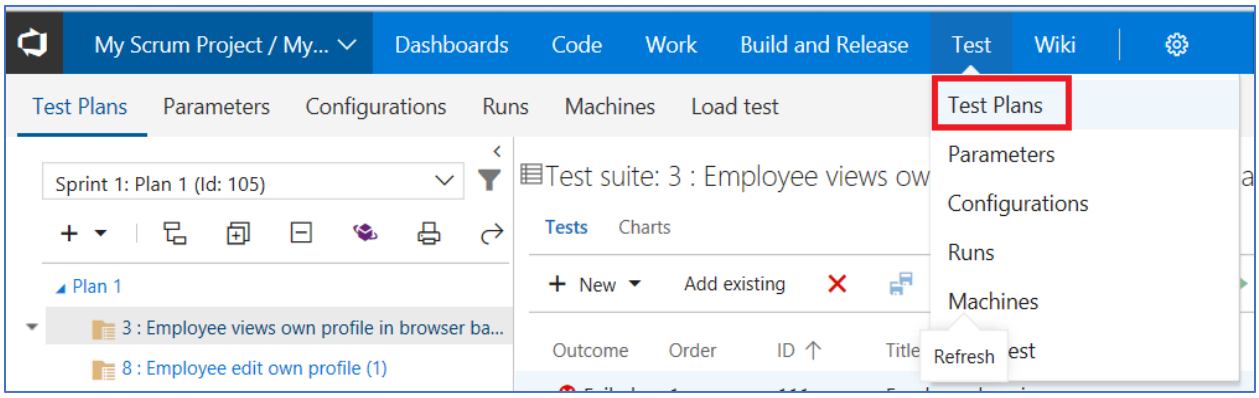
6. For more widgets you can add some data related to Test Plan, Test Suits, Test Cases. Create Test Plan related chart and add it.




## Exercise: Manage Defects (Test and bug creation, exploratory testing, create test plan chart, bug related chart)

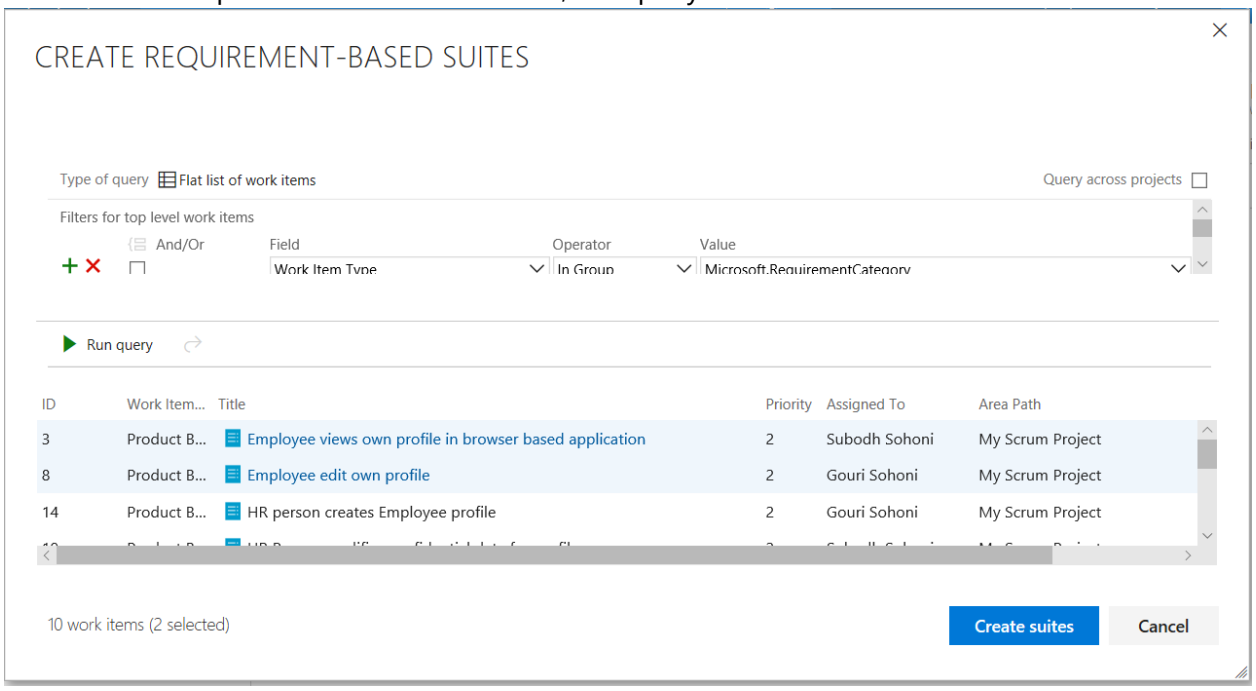
In this exercise we will discuss Test hub, exploratory testing with Chrome and how to create charts for tests.

1. Select Test Plans from Test hub

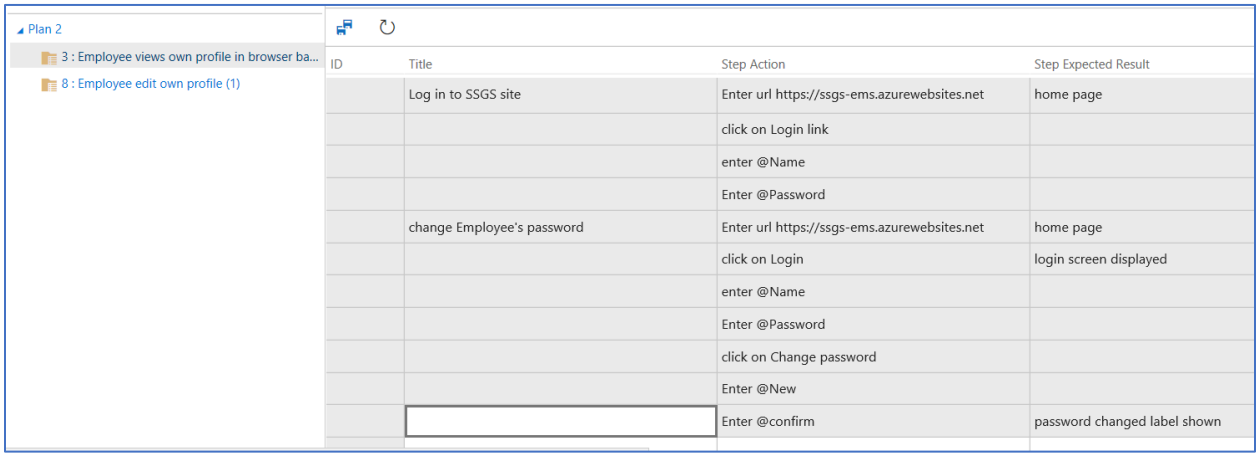



2. Add a new Test Plan for the default team and name it

3. Create a new requirement-based Test Suite, run query and select 2 PBIs as follows



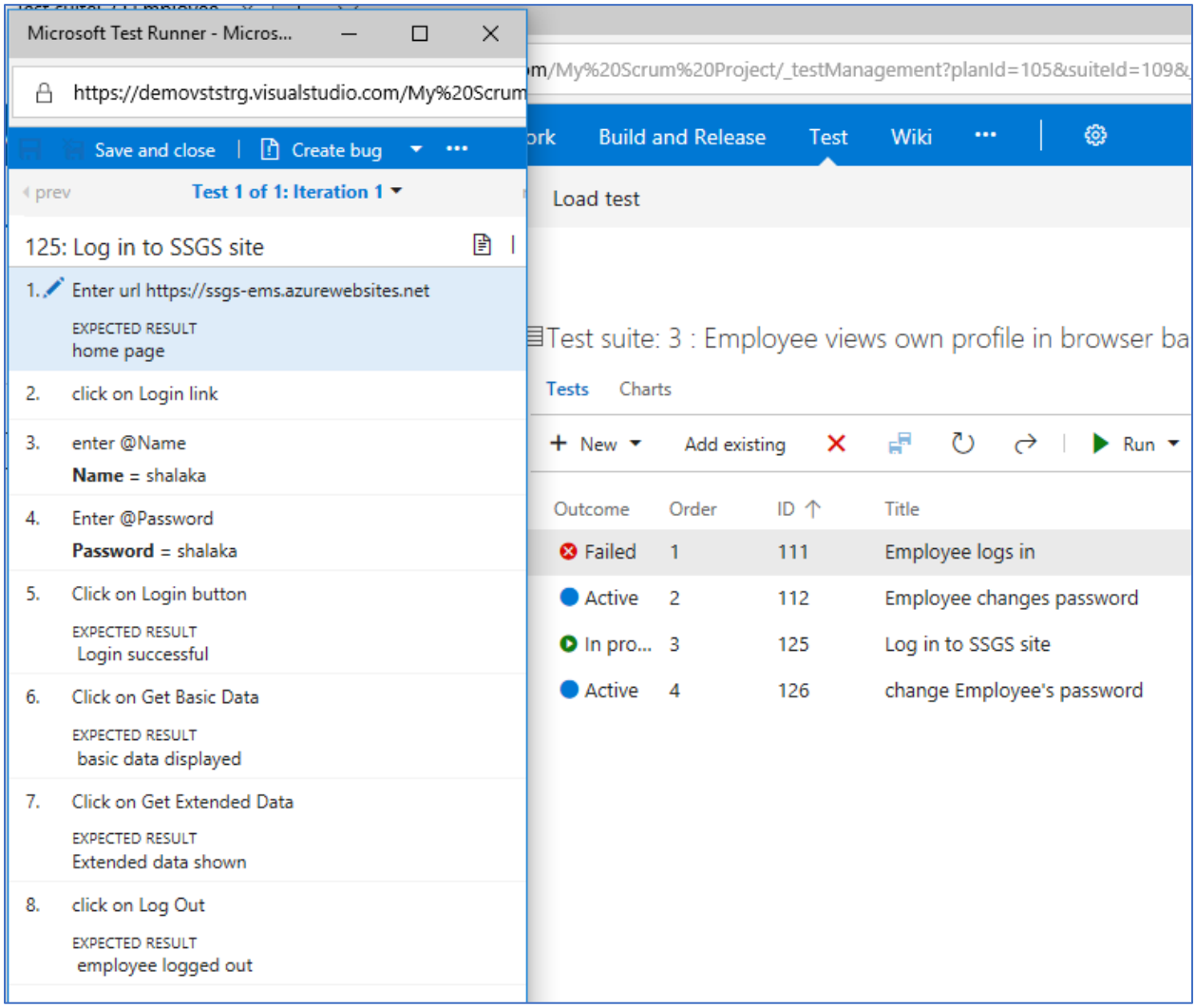

4. Click on Create suites
5. Click the first Suite and click on Tests – new Test Cases using grid
6. Open the Data.xlsx file and navigate to Sheet2
7. Copy the test cases with Title, Action and Expected result and paste for first 2 test cases




Save test cases

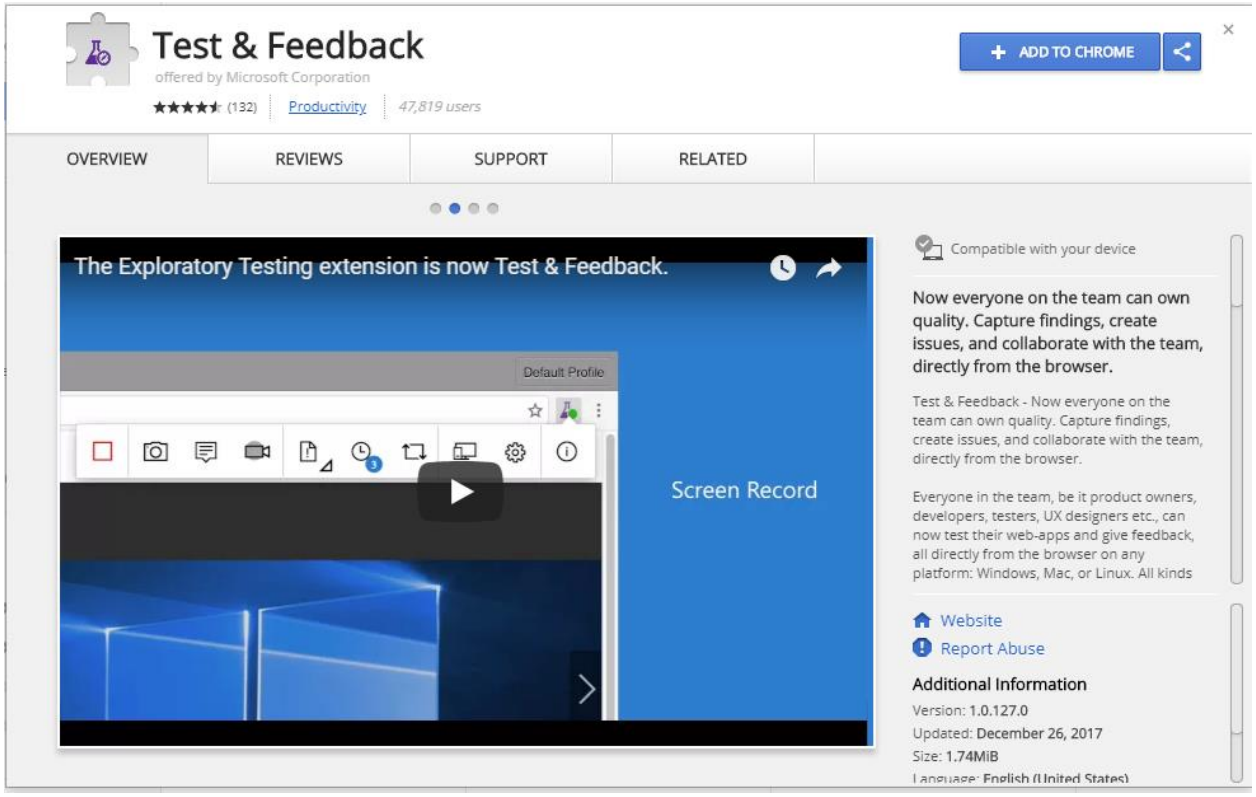
8. Add a new test case to second suite
9. Create a static Test Suite and name it Windows Functionality and add remaining 3 test cases to it
10. Select a plan and you can view the test cases in it right click on any of the test cases and you can view Run test as well as Run with Options. Select Run test and you can view that the test

case is shown in the left-hand side with all the test steps

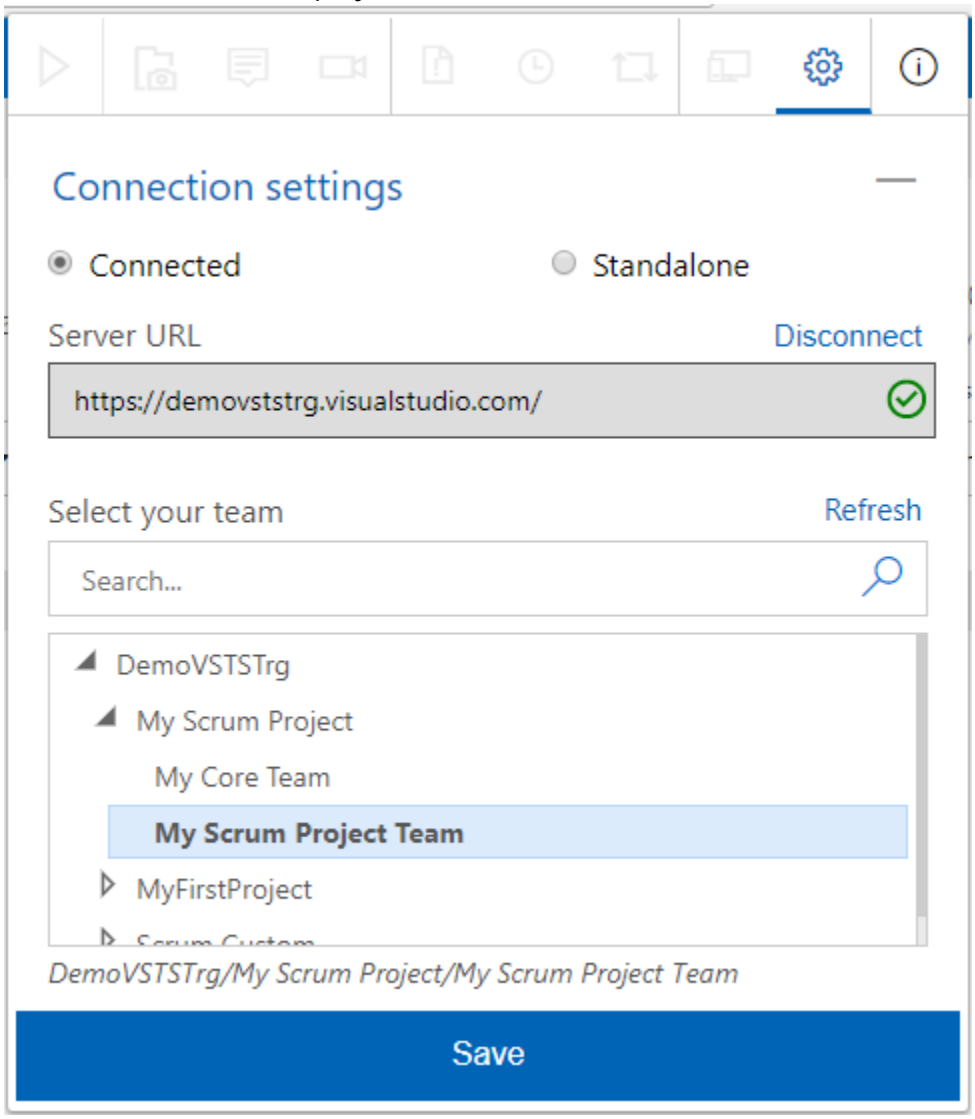



11. Execute each step and pass after successful execution. The test will be displayed as passed later

12. Start Chrome, login to VSTS account go to marketplace and search for Test & feedback manager. (this is available for Chrome and Firefox). Install and add to chrome

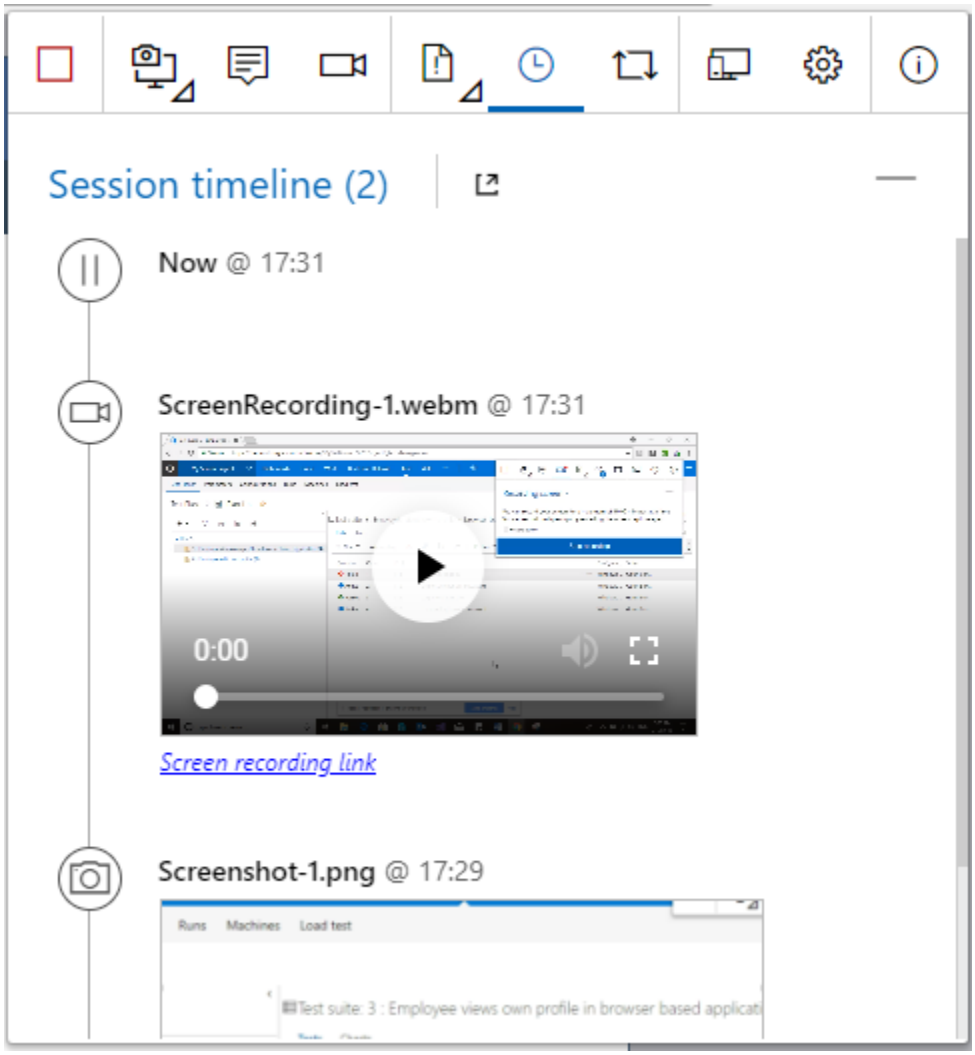


13. Click on gear icon to configure the extension (keep connected selected), provide the url and click on next. Select the project name and team name and clisk on Save

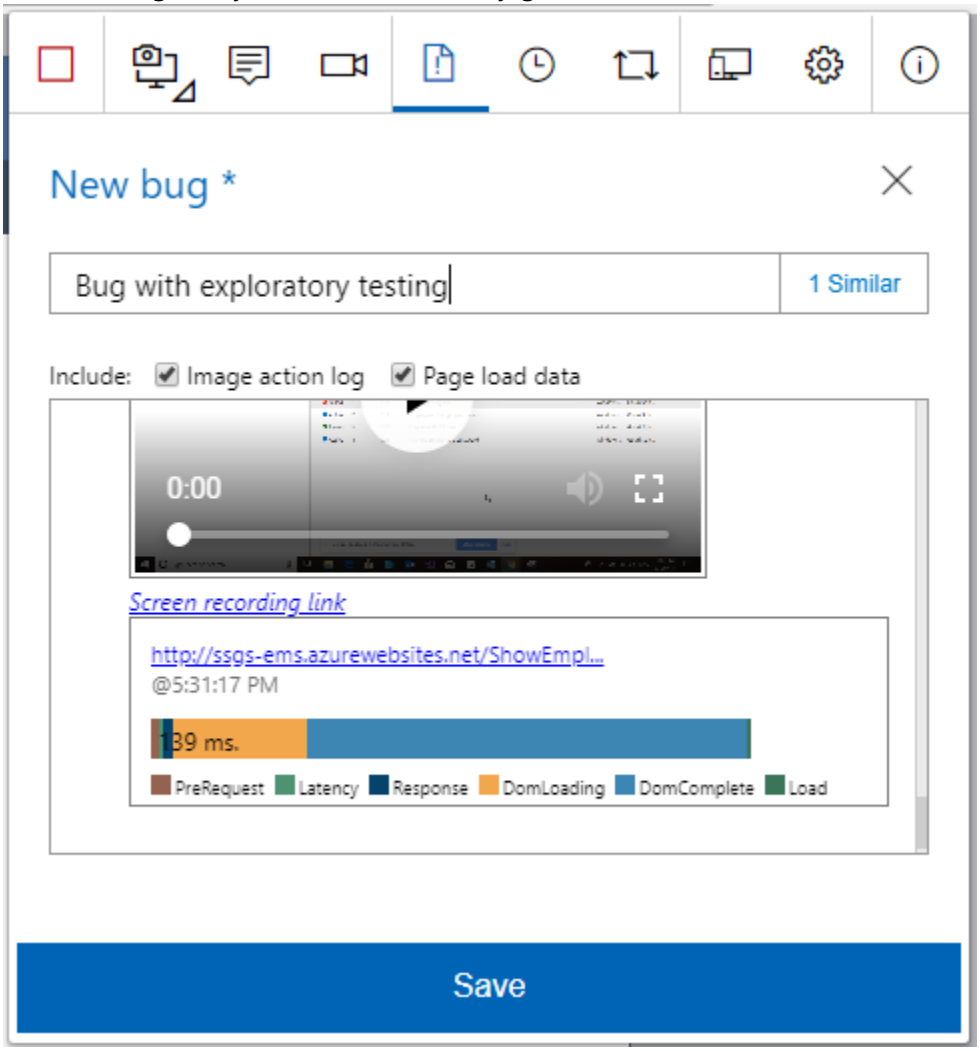



14. Now you can start session, explore application, take screenshots, record upto 10 minutes with audio, add notes, create workitems for bug or task

15. The timeline can be seen



16. Create a bug and you will automatically get screenshots added




stop the session and view the newly created bug. You can click on Runs tab to view the session

17. We can also select any test case and click on Do Exploratory Testing by right clicking on it. In this case the exploratory session will be linked to test case

18. We can create charts related to test plan