# Sharing Team Knowledge using Azure Project Wikis

# Lab overview

In this lab, you'll create and configure a wiki in Azure DevOps, including managing markdown content and creating a Mermaid diagram.

# Objectives

After you complete this lab, you will be able to:

- Create a wiki in an Azure Project.
- Add and edit markdown.
- Create a Mermaid diagram.

# Instructions

## Exercise 0: Configure the lab prerequisites

In this exercise, you will set up the prerequisites for the lab, which consist of the preconfigured **Tailwind Traders** team project based on an Azure DevOps Demo Generator template and a team created in Microsoft Teams.

## Task 1: Configure the team project

In this task, you will use Azure DevOps Demo Generator to generate a new project based on the **Tailwind Traders** template.

- 1. On your lab computer, start a web browser and navigate to <u>Azure DevOps Demo</u> <u>Generator</u>. This utility site will automate the process of creating a new Azure DevOps project within your account that is prepopulated with content (work items, repos, etc.) required for the lab.
- 2. Click **Sign in** and sign in using the Microsoft account associated with your Azure DevOps subscription.

- 3. If required, on the **Azure DevOps Demo Generator** page, click **Accept** to accept the permission requests for accessing your Azure DevOps subscription.
- 4. On the **Create New Project** page, in the **New Project Name** textbox, type **Sharing Team Knowledge using Azure Project Wikis**, in the **Select organization** dropdown list, select your Azure DevOps organization, and then click **Choose template**.
- 5. In the list of templates, select the **Tailwind Traders** template and click **Select Template**.
- 6. Back on the **Create New Project** page, if prompted to install a missing extension, select the checkbox below the **ARM Outputs** and click **Create Project**.
- 7. On the Create New Project page, click Navigate to project.

#### Exercise 1: Publish code as a wiki

In this exercise, you will step through publishing an Azure DevOps repository as wiki and managing the published wiki.

**Note**: Content that you maintain in a Git repository can be published to an Azure DevOps wiki. For example, content written to support a software development kit, product documentation, or README files can be published directly to a wiki. You have the option of publishing multiple wikis within the same Azure DevOps team project.

## Task 1: Publish a branch of an Azure DevOps repo as wiki

In this task, you will publish a branch of an Azure DevOps repo as wiki. **Note**: If your published wiki corresponds to a product version, you can publish new branches as you release new versions of your product.

- 1. In the vertical menu on the left side, click **Repos**, in the upper section of the **Files** pane, make sure you have the **TailwindTraders-Website** repo selected (choose it from the dropdown on the top with Git icon). In the branch dropdown list (on top of "Files" with the branch icon), select **main**, and review the content of the main branch.
- 2. To the left of the **Files** pane, in the listing of the repo folder and file hierarchy, expand the **Documents** folder and its **Images** subfolder, in the **Images** subfolder, locate the **Website.png** entry, hover with the mouse pointer over its right end to reveal the vertical ellipsis (three dots) symbol representing the **More** menu, click **More**, and, in the dropdown menu, click **Download** to download the **Website.png** file to the local **Downloads** folder on your lab computer.

**Note**: You will use this image in the next exercise of this lab.

3. In the vertical menu on the left side, click **Overview**, in the **Overview** section, select **Wiki**, select \**Publish code as wiki*.

4. On the **Publish code as wiki** pane, specify the following settings and click **Publish**.

Setting	Value
Repository	TailwindTraders-Website
Branch	main
Folder	/Documents
Wiki name	Tailwind Traders (Documents)

- 5. **Note**: This will automatically display the content of the **GitHubAction.md** file.
- 6. Review the content of **GitHubActions** file and note the overall structure of the wiki, matching the structure of the underlying repo.

#### Task 2: Manage content of a published wiki

In this task, you will manage content of the wiki you published in the previous task.

- 1. In the vertical menu on the left side, click **Repos**, ensure that the dropdown menu in the upper section of the **Files** pane displays the **TailwindTraders-Website** repo and **main** branch, in the repo folder hierarchy, select the **Documents** folder, in the upper right corner, click **+ New** and, in the dropdown menu, click **File**.
- 2. In the **New file** panel, in the **New file name**, after the **/Documents/** prefix, type **.order**, and click **Create**.
- 3. On the **Contents** tab of the **.order** pane, type the following and click **Commit**.

GitHubActions Images

- 4. On the **Commit** pane, click **Commit**.
- 5. In the vertical menu on the left side, click **Overview**, in the **Overview** section, select **Wiki**, verify that **Tailwind Traders (Documents)** appears in the upper section of the pane, and review the ordering of wiki content.

**Note**: The order of wiki content should match the sequence of files and folders listed in the **.order** file.

- 6. In the vertical menu on the left side, click **Repos**, ensure that the dropdown menu in the upper section of the **Files** pane displays the **TailwindTraders-Website** repo and **main** branch, in the listing of files, under **Documents**, select **GitHubActions.md**, and on the **GitHubActions.md** pane, click **Edit**.
- 7. On the **GitHubActions.md** pane, directly below the **#GitHub Actions** header, add the following markdown element referencing one of the images within the **Documents** folder:

```
![Tailwind Traders Website](Images/Website.png)
```

- 8. On the **GitHubActions.md** pane, click **Commit** and, on the **Commit** pane, click **Commit**.
- 9. On the **Preview** tab of the **GitHubActions.md** pane, verify that the image is being displayed.
- 10. In the vertical menu on the left side, click **Overview**, in the **Overview** section, select **Wiki**, verify that **Tailwind Traders (Documents)** appears in the upper section of the pane, and that the content of the **GitHubActions** pane includes the newly referenced image.

#### Exercise 2: Create and manage a project wiki

In this exercise, you will step through creating and managing a project wiki.

#### Task 1: Create a project wiki including a Mermaid diagram and an image

In this task, you will create a project wiki and add to it a Mermaid diagram and an image.

- On your lab computer, in the Azure DevOps portal displaying the Wiki pane of the Sharing Team Knowledge using Azure Project Wikis project, with the content of the Tailwind Traders (Documents) wiki selected, at the top of the pane, click the Tailwind Traders (Documents) dropdown list header, and, in the drop down list, select Create new project wiki.
- 2. In the Page title text box, type Project Design.
- 3. Place the cursor in the body of the page, click the left-most icon in the toolbar representing the header setting and, in the dropdown list, click **Header 1**. This will automatically add the hash character (#) at the beginning of the line.
- 4. Directly after the newly added # character, type **Authentication and Authorization** and press the **Enter** key.
- 5. Click the left-most icon in the toolbar representing the header setting and, in the dropdown list, click **Header 2**. This will automatically add the hash character (##) at the beginning of the line.

- 6. Directly after the newly added ## character, type Azure DevOps OAuth 2.0 Authorization Flow and press the Enter key.
- 7. **Copy and paste** the following code to insert a mermaid diagram on your wiki.

```
::: mermaid
sequenceDiagram
participant U as User
participant A as Your app
participant D as Azure DevOps
U->>A: Use your app
A->>D: Request authorization for user
D-->>U: Request authorization
U->>D: Grant authorization
D-->>A: Send authorization code
A->>D: Get access token
D-->>A: Send access token
A->>D: Call REST API with access token
D-->>A: Respond to REST API
A-->>U: Relay REST API response
:::
```

Note: For details regarding the Mermaid syntax, refer to About Mermaid

- 8. To the right of the editor pane, in the preview pane, click **Load diagram** and review the outcome.
- 9. In the upper right corner of the editor pane, click the down-facing caret next to the **Save** button and, in the dropdown menu, click **Save with revision message**.
- 10. In the Save page dialog box, type Authentication and authorization section with the OAuth 2.0 Mermaid diagram and click Save.
- 11. On the **Project Design** editor pane, place the cursor at the end of the Mermaid element you added earlier in this task, press the **Enter** key to add an extra line, click the left-most icon in the toolbar representing the header setting and, in the dropdown list, click **Header 2**. This will automatically add the double hash character (##) at the beginning of the line.
- 12. Directly after the newly added ## character, type **User Interface** and press the **Enter** key.
- 13. On the **Project Design** editor pane, in the toolbar, click the paper clip icon representing the **Insert a file** action, in the **Open** dialog box, navigate to the **Downloads** folder, select the **Website.png** file you downloaded in the previous exercise, and click **Open**.
- 14. Back on the **Project Design** editor pane, review the preview pane and verify that the image is properly displayed.
- 15. In the upper right corner of the editor pane, click the down-facing caret next to the **Save** button and, in the dropdown menu, click **Save with revision message**.
- 16. In the Save page dialog box, type User Interface section with the Tailwind Traders image and click Save.
- 17. Back on the editor pane, in the upper right corner, click **Close**.

#### Task 2: Manage a project wiki

In this task, you will manage the newly created project wiki.

**Note**: You will start by reverting the most recent change to the wiki page.

- On you lab computer, in the Azure DevOps portal displaying the Wiki pane of the Sharing Team Knowledge using Azure Project Wikis project, with the content of the Project Design wiki selected, in the upper right corner, click the vertical ellipsis symbol and, in the dropdown menu, click View revisions.
- 2. On the **Revisions** pane, click the entry representing the most recent change.
- 3. On the resulting pane, review the comparison between the previous and the current version of the document, click **Revert**, when prompted for the confirmation, click **Revert** again, and then click **Browse Page**.
- 4. Back on the **Project Design** pane, verify that the change was successfully reverted.

**Note**: Now you will add another page to the project wiki and set it as the wiki home page.

- 5. On the **Project Design** pane, at the bottom left corner, click + **New page**.
- 6. On the page editor pane, in the **Page title** text box, type **Project Design Overview**, click **Save**, and then click **Close**.
- 7. Back in the pane listing the pages within the **Project Design** project wiki, locate the **Project Design Overview** entry, select it with the mouse pointer, drag and drop it above the **Project Design** page entry.
- 8. Verify that the **Project Design Overview** entry is listed as the top level page with the home icon designating it as the wiki home page.