



# Lab Manual- Sharing Team Knowledge using Azure Project Wikis

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## 1. Introduction

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

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

## 2. 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.

### 1. 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 [Azure DevOps Demo Generator](#). 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.

Note: For more information on the site, see <https://docs.microsoft.com/en-us/azure/devops/demo-gen>.

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**.

Note: Wait for the process to complete. This should take about 2 minutes. In case the process fails, navigate to your Azure DevOps organization, delete the project, and try again.

7. On the **Create New Project** page, click **Navigate to project**.

### 3. Exercise 1: Publish code as 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.

#### 1. 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	<b>TailwindTraders-Website</b>
Branch	<b>main</b>

Setting	Value
Folder	<b>/Documents</b>
Wiki name	<b>Tailwind Traders (Documents)</b>

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.

## 2. 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.

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

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

Note: You can create and manage wiki independently of the existing repos.

##### 1. 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.

1. 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.

Note: The output should resemble the flowchart that illustrates how to [Authorize access to REST APIs with OAuth 2.0](#)

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**.

## 2. 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.

1. 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 **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.