Getting Up and Running with the Power BI Service

Setup Time: 60 minutes

Lab Folder: C:\Student\Modules\10_PowerBiService\Lab

Overview: In this lab you will log into a new Azure AD user account that has been created for you in an Azure AD tenant shared by all students which has a domain name of **powerbimvps.onmicrosoft.com**. Once you have logged into the Power BI service and started your 60 Power BI Pro trial, you will be able to upload PBIX files into your personal workspace and you can begin designing dashboard and reports in the browser. The lab will also step you through downloading and installing Power BI Desktop as well as publishing a Power BI Desktop project to the Power BI service. You create a new app workspace and populate it with a dataset, a report and a dashboard. In the final exercise, you will use the Publish to Web feature together with Visual Studio to embed a Power BI report in a custom web page.

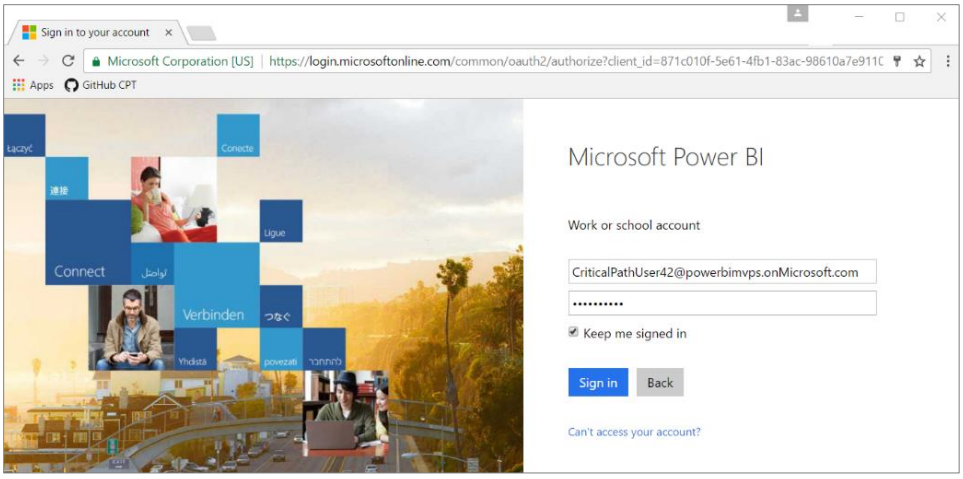
Exercise 1: Log into your User Account and Access the Power BI Service

In this exercise, you will log into an Azure Active Directory account that has been created for you to work inside the Power BI environment to complete the lab exercises for this workshop. The account you will use has been created in an Azure AD tenancy with a domain of **powerbimvps.onmicrosoft.com**. Once you log in, you will be prompted to accept a Power BI Pro trial for 60 days able to access the Power BI service. Once you accept the 60 day trial, you will be able to access your personal workspace and begin creating datasets, reports and dashboards.

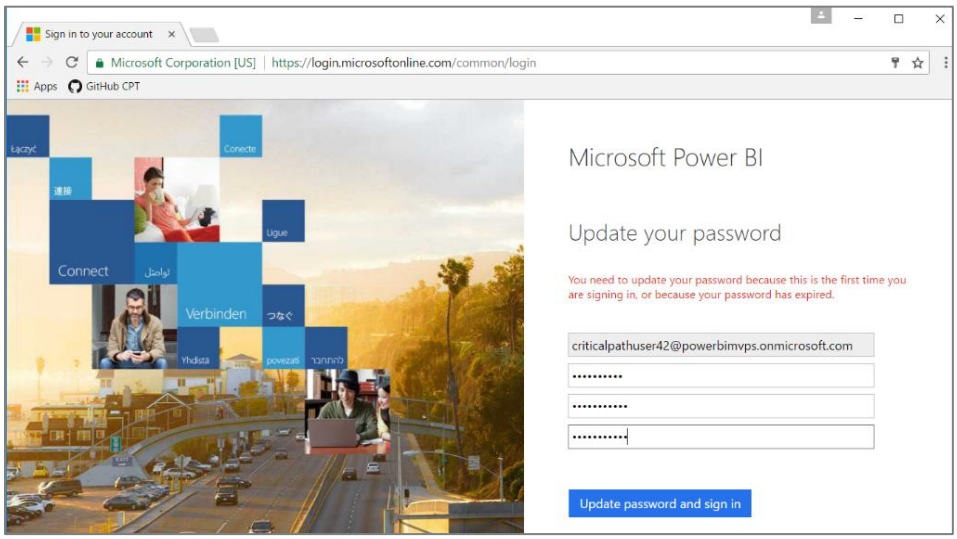
1. Make sure you have obtained the following information from the instructor about your user account:
   a) user account name (e.g. **CritialPathUser42.powerbimvps.onMicrosoft.com**)
   b) Password: **Pass@word1**
2. Log into the Power BI service using your new user account.
   a) Open a browser such as Chrome, Edge or Internet Explorer.
   b) Navigate to the following URL:

   ```
   https://app.powerbi.com
   ```

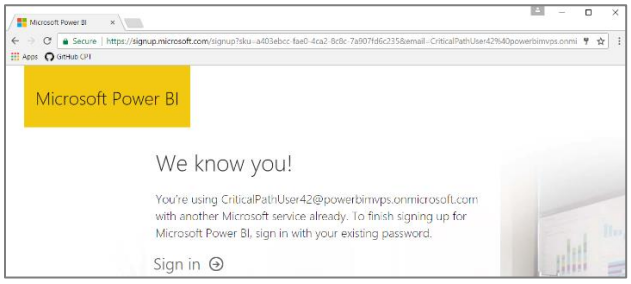
   c) When prompted to sign in, enter the user account name that has been provided to you and a password of **Pass@word1**. Click the **Sign in** button to begin the initial log in sequence.



   d) When prompted to update your password, enter a new password that you can remember for the entire day of this workshop ;)

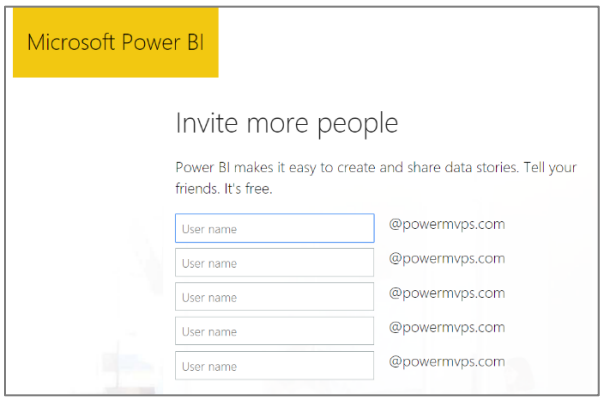


e) You should now be prompted with a Power BI Sign in page. Click **Sign in**.

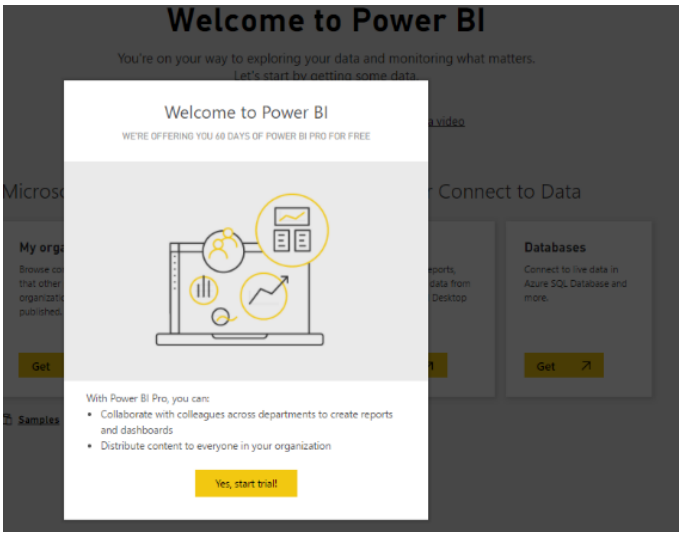


f) Next click the **Start** button.

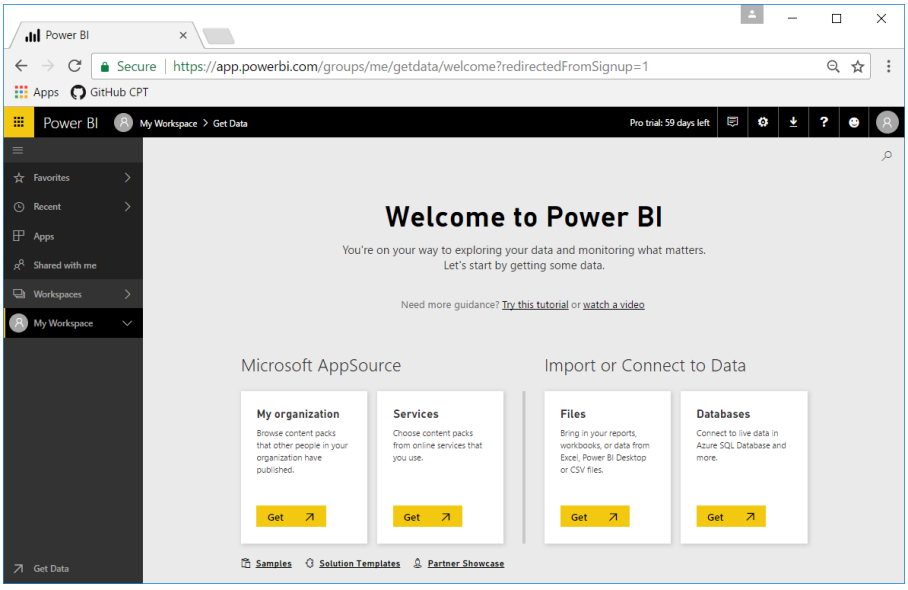
g) Skip by the next page which asks if you want to invite more people.



h) When you see the **Welcome to Power BI** dialog as shown in the following screenshot, click the **Yes, start trial!** Button.



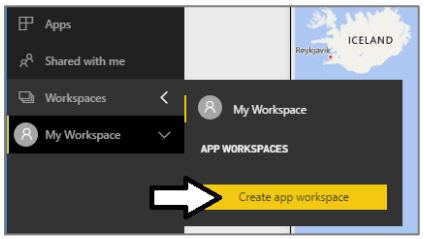
i) You should now be signed into Power BI and running within your personal workspace.



Exercise 2: Create a New App Workspace to Build a Custom Solution

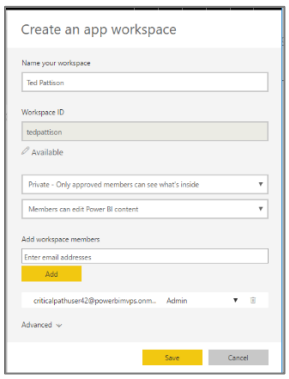
In this exercise, you will create a new app workspace. After that, you will populate the workspace with datasets, reports and a dashboard just as you did in your personal workspace.

1. Create a new app workspace.
   a) Expand the Workspace menu in the left navigation and select the **Create app workspace** command.

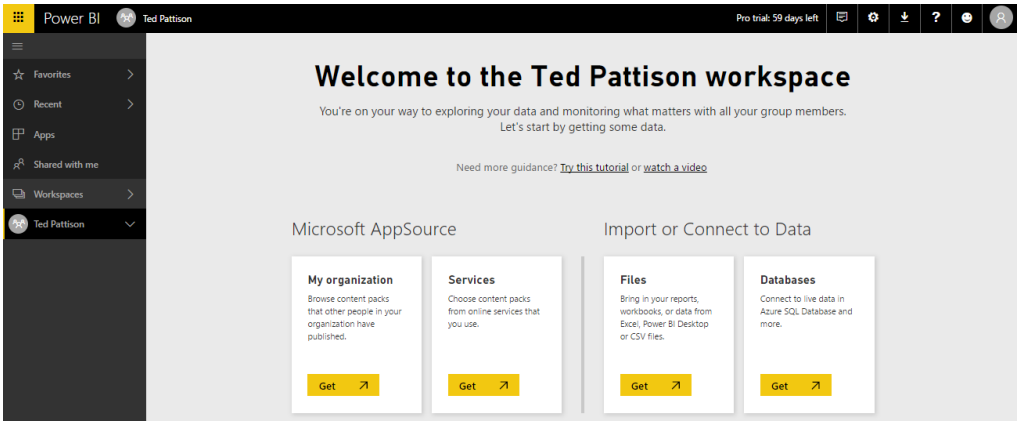


Note that all the students in this workshop are working within the same Power BI tenants. That means everybody must create a app workspace with a unique name. Therefore, you will be asked to use your own name when creating a new app workspace. As long as know two students have the exact same name, nobody should run into naming conflicts.

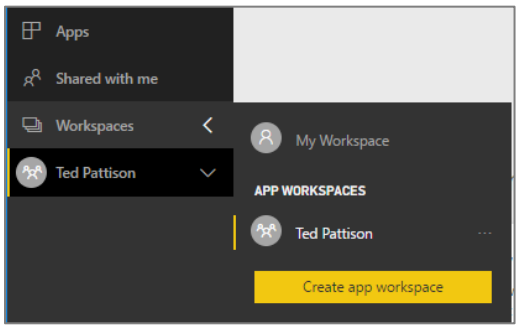
   b) Enter your name into the **Name your workspace** textbox.
   c) Add your user account as a workspace member with **Admin** permissions.
   d) Click **Save** to create the new app workspace.



   e) Power BI should create the new app workspace and navigate you to its welcome page as shown in the following screenshot.



   f) If you expand the **Workspaces** menu in the left navigation, you can see it provides the Ability to move between your personal workspace and any available app workspace.

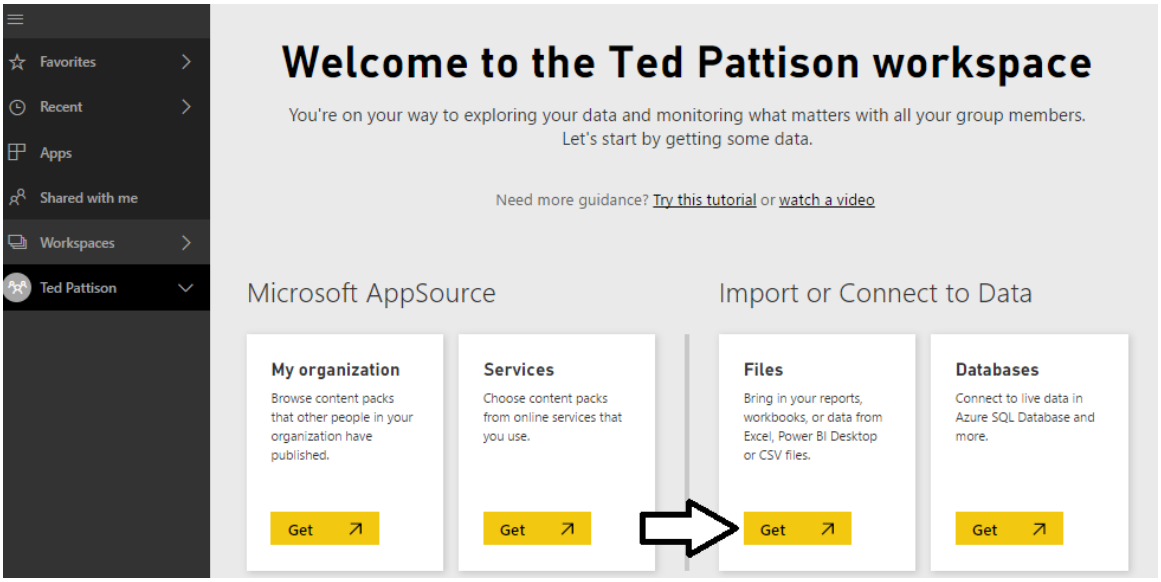


g) Navigate you're your personal workspace.

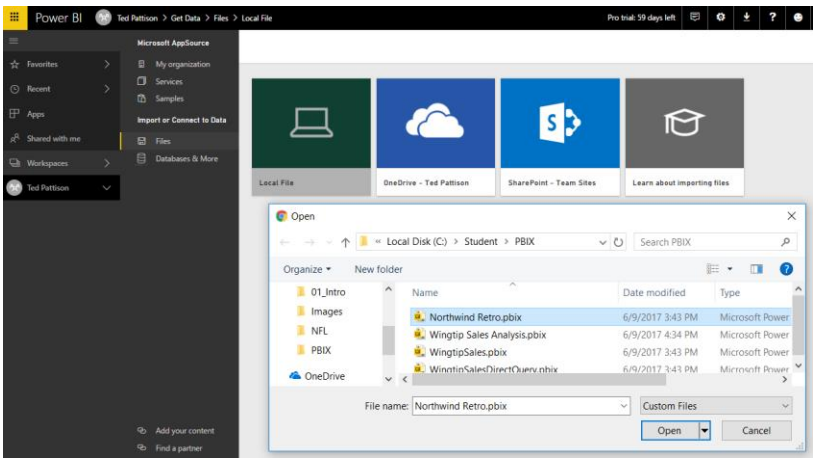
h) Now, navigate back to your new App Workspace.

2. Add content to your new app workspace.

a) On the Welcome page of the app workspace, click the **Get** button in the **Files** section.

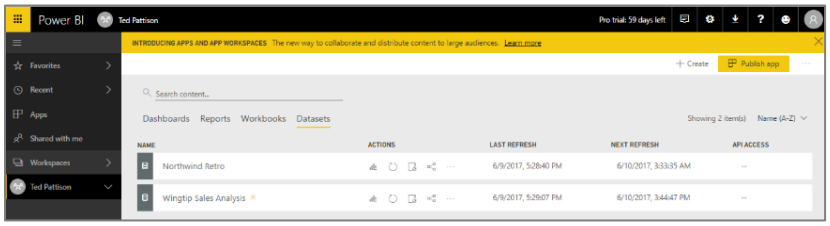


b) On the next page you should see several tiles which indicate your choices for the location of the file you would like to connect to or import. Click on the tile with the caption **Local File** and import **Northwind Retro.pbix** from inside your student folder which is located at the path **c:\Student\Data\PBIX\Northwind Retro.pbix.**

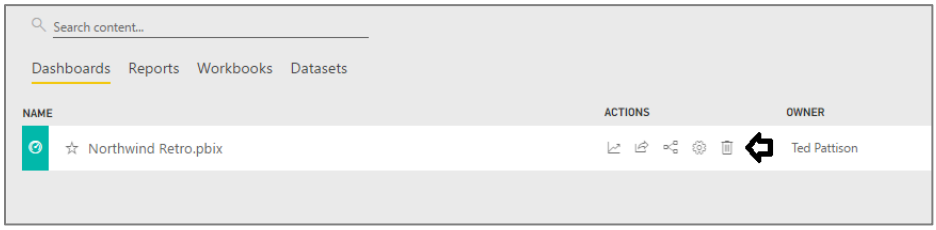


c) Repeat the previous step to import the other PBIX project file named **Wingtip Sales Analysis.pbix**.

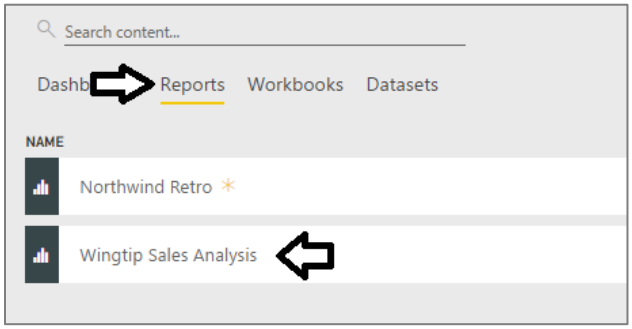
d) You should be able to verify that your app workspace now contains two datasets.



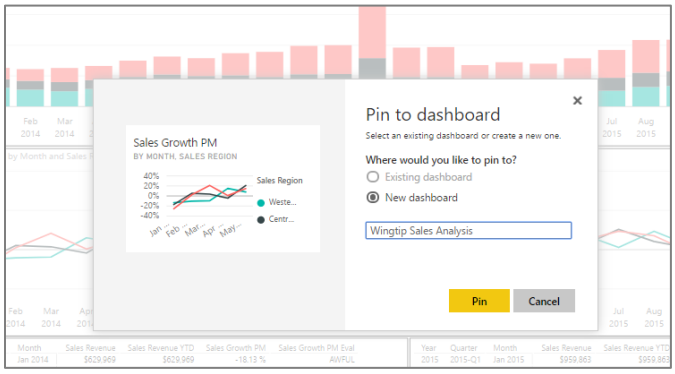
e) Delete any dashboard that was created when your imported the two PBIX project files.



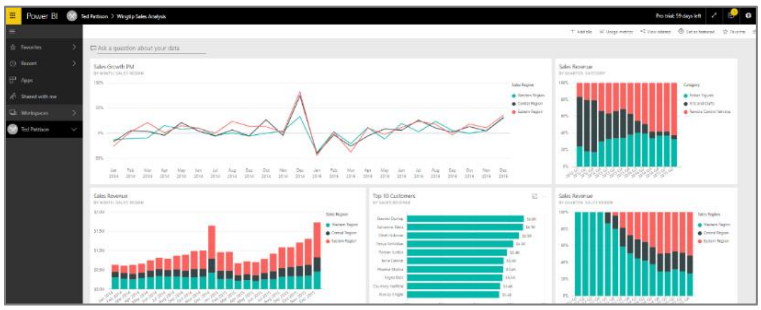
f) Switch to **Reports** view and open the report named **Wingtip Sales Analysis**.



g) Just as you did back in lab exercise 3, create a new dashboard named **Wingtip Sales Analysis** by pinning visuals from the report named **Wingtip Sales Analysis**.



h) Add several titles to the dashboard until it resembles the dashboard shown in the following screenshot.

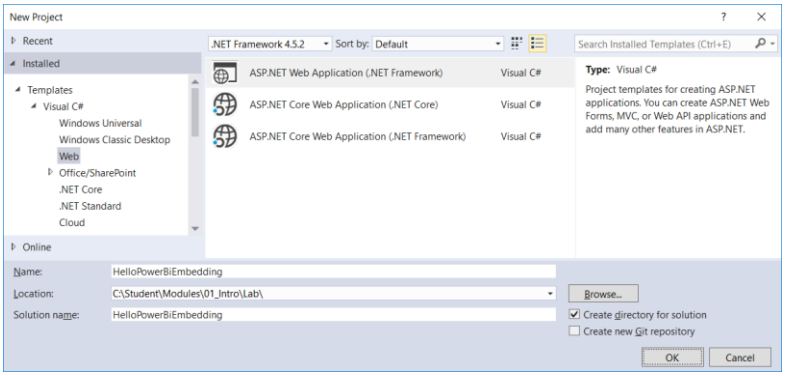


At this point, you have had some hands-on experience working with the app workspace in the Power BI service.

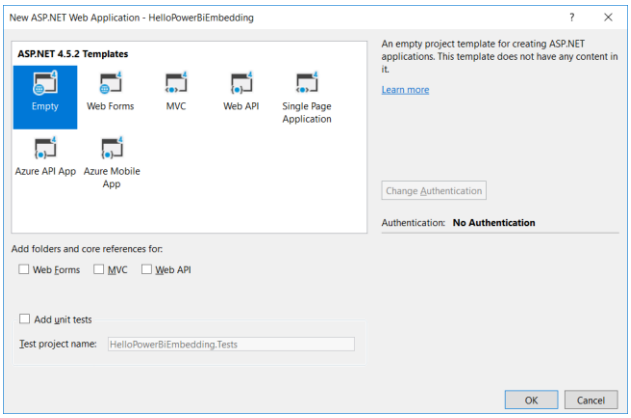
Exercise 3: Embed a Power BI Report in a Web App using the Publish to Web Feature

Now that you have worked hard in the previous exercise to create an app workspace with content, you will now be rewarded with a final exercise that will provide spontaneous gratification to the developer who lives inside you. More specifically, you will use Visual Studio to develop a custom web page to embed a Power BI report *using only 12 lines of code!*

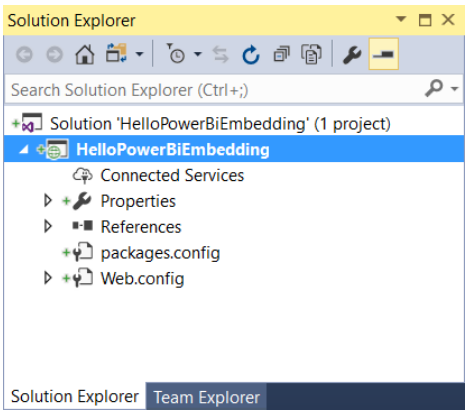
1. Launch Visual Studio 2017 (or Visual Studio 2015 if that is what you have installed).
2. Create a new Visual Studio project named **HelloPowerBiEmbedding**.
   a) Select the **File > New Project** command.
   b) On the left side of the **New Project** dialog, select **Templates > Visual C# > Web**.
   c) Select the project template named **ASP.NET Web Application**.
   d) Enter a project name of **HelloPowerBiEmbedding**.
   e) Change the Location to C:\Student\Modules\01_Intro\Lab.
   f) Click **OK** to begin the process of creating the new project.



   g) In the **New ASP.NET Web Application** dialog, select **Empty** and ensure that **Authentication** is set to **No Authentication**.

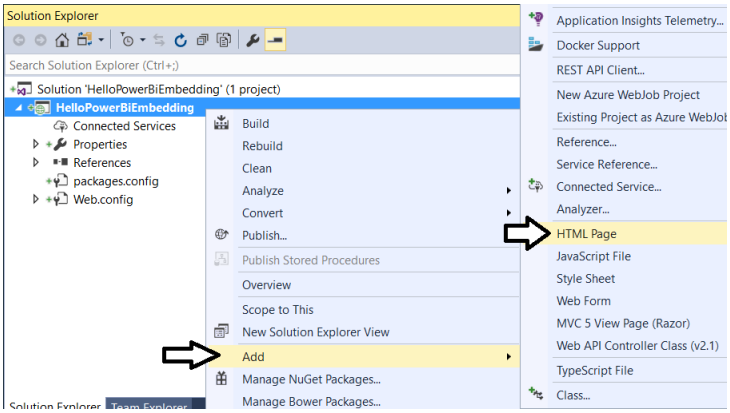


h) The **HelloPowerBiEmbedding** project should now be created.

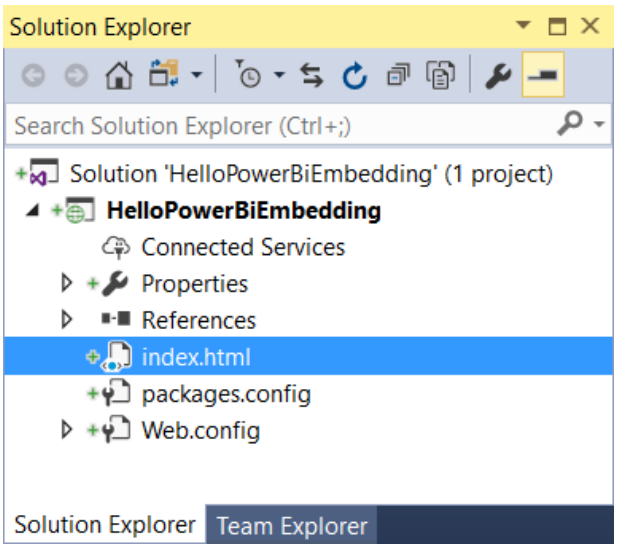


3. Add an HTML web page to the project.

a) Right-click on the top project node in Solution Explorer and select the **Add > HTML Page** command.



b) Give the new page a name of **index.html**.



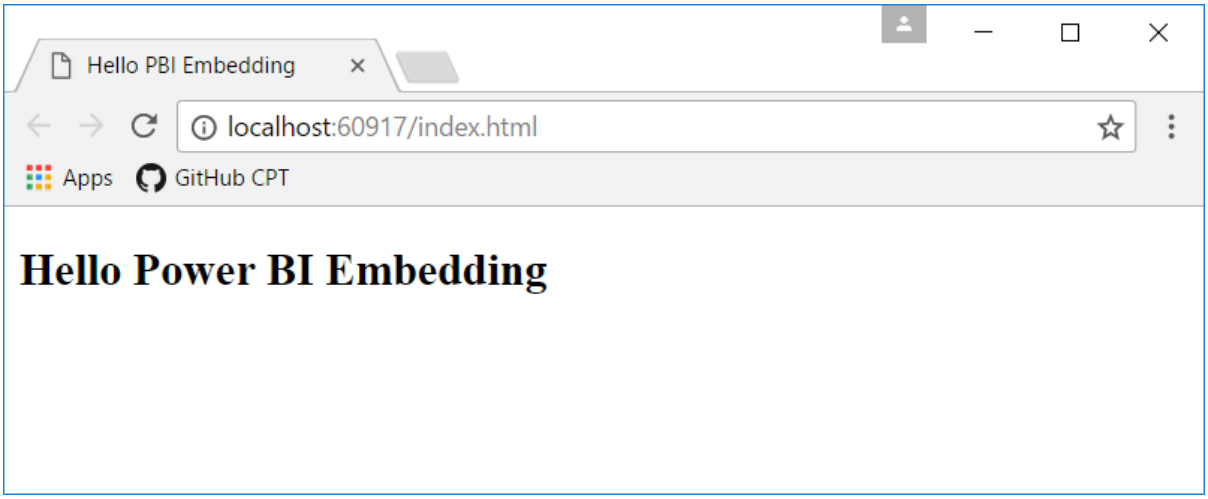
c) Delete any existing content inside index.html and replace by copying and pasting the following code listing.

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8" />
    <title>Hello PBI Embedding</title>
</head>
<body>

  <h2>Hello Power BI Embedding</h2>

  <div>
    <!-- TODO: Embed Power BI Report Here-->
  </div>

</body>
</html>
```

4. Test the new HTML page.

a) Press **{F5}** to start a new Visual Studio debugging session.

b) You should see the page appear in the browser.

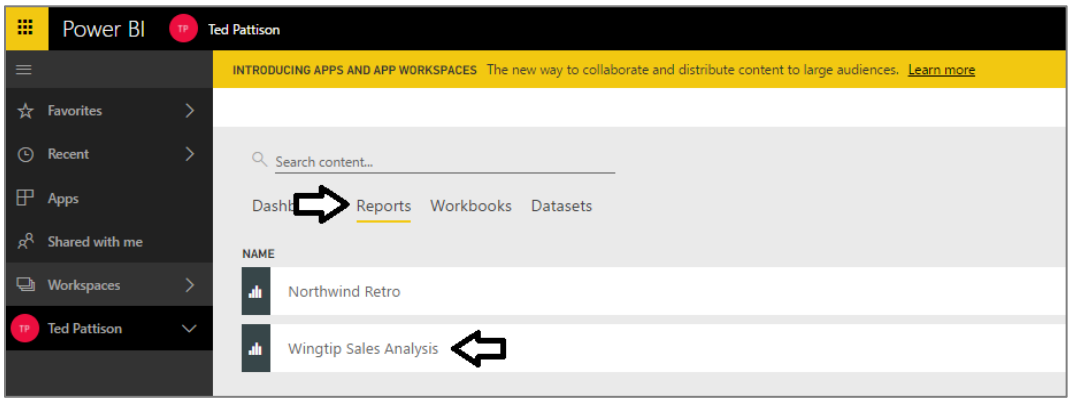


c) Close the browser, return to Visual Studio and stop the debugging session.

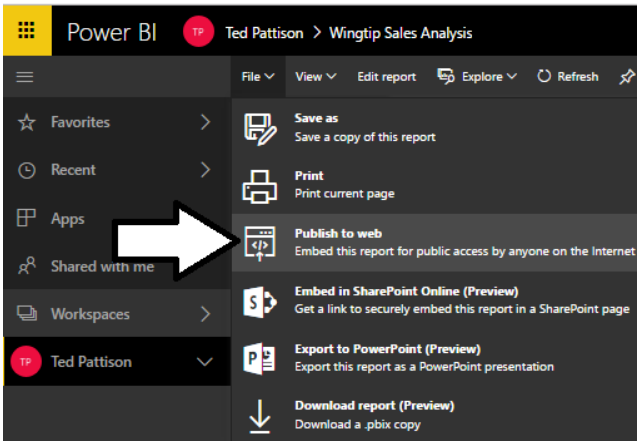
5. Use the Publish to Web feature to create an embed code and an embeddable iFrame tag

   a) In the browser, return to your app workspace in the Power BI service.

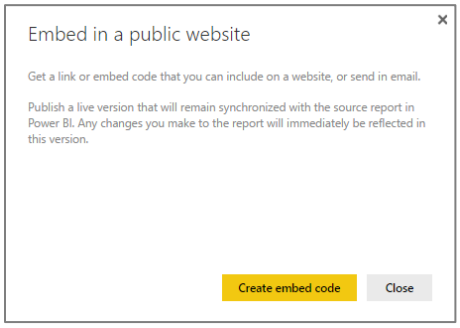
   b) Open the report named **Wingtip Sales Analysis**.



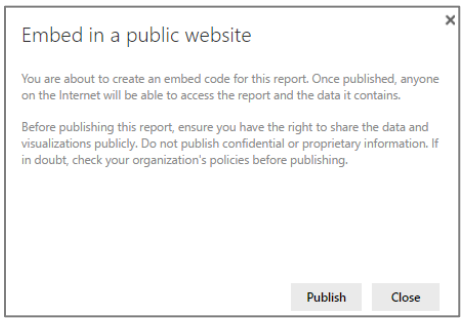
   c) Drop down the report's **File** menu and select the **Publish to Web** command.



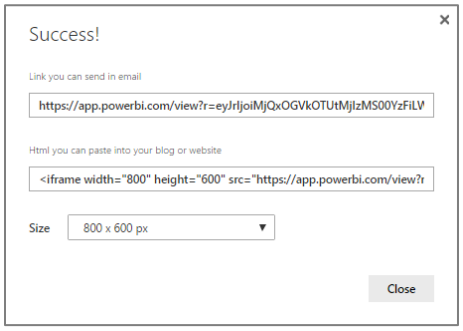
   d) When prompted with the **Embed in a public website** dialog, click the **Create embed code** button.



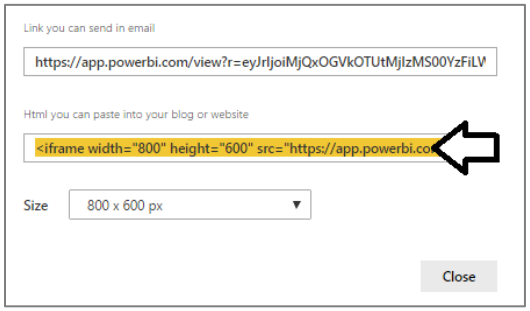
   e) On the next page, click the **Publish** button.



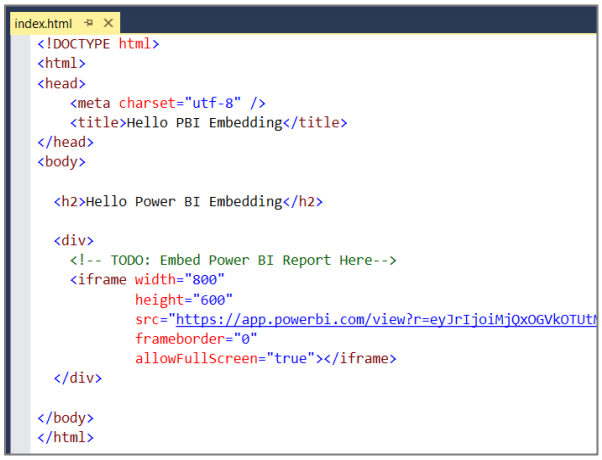
f) Inspect what is displayed to you on the **Success!** Page.



g) Select the contents of the **Html you can paste into your blog or website** textbox and copy it to the Windows clipboard,

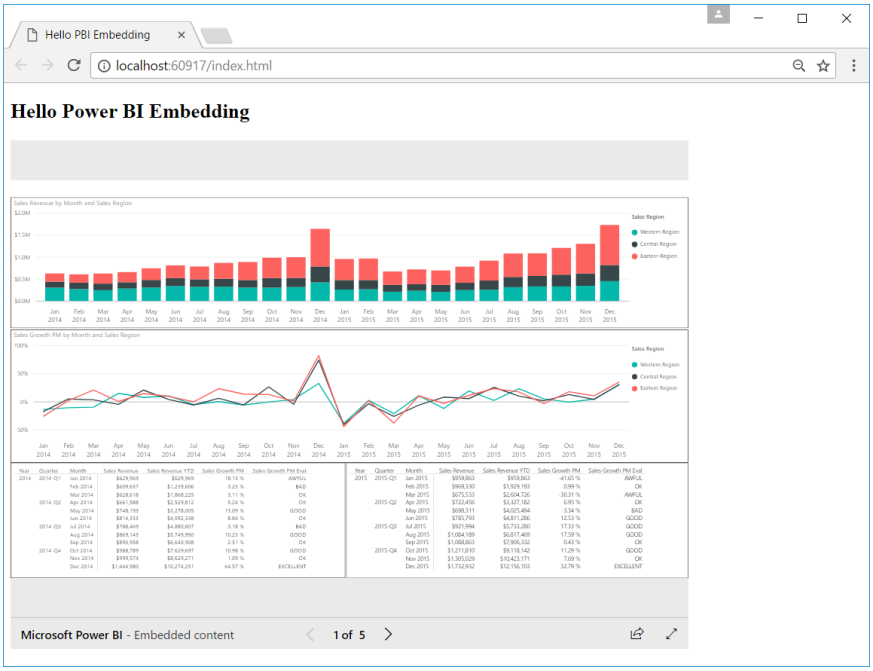


h) Return to Visual Studio and paste the HTML snippet with the iFrame tag into **index.htm**.



i) Press **{F5}** to start a new Visual Studio debugging session.

j) You should see the page appear in the browser the embedded Power BI report.



You have now complete this set of lab exercises. When we told you that you would only have to write 12 line of code, you probably didn't expect 11 of those lines to be the basic HTML code for a simple web page. This demonstrates how easy it is to embed a Power BI report on a web page using anonymous access. The type of report and dashboard embedding you will learn about later today will be significantly more complicated and require many more developer skills than were required to complete this lab.