Exercise - Part 1: Create resources you need to get started

In this exercise, you will create the resources required to start working with Azure Machine Learning on the Microsoft Azure platform.

Step-1: Create a workspace

The workspace is the central hub for managing your machine learning activities in Azure. Follow these steps to create one:

1. Click on **+ Create a resource**, search for "Machine Learning", and create a new **Azure Machine Learning** resource with the following settings(see Figure 1.9 and Table 1.1 for reference):

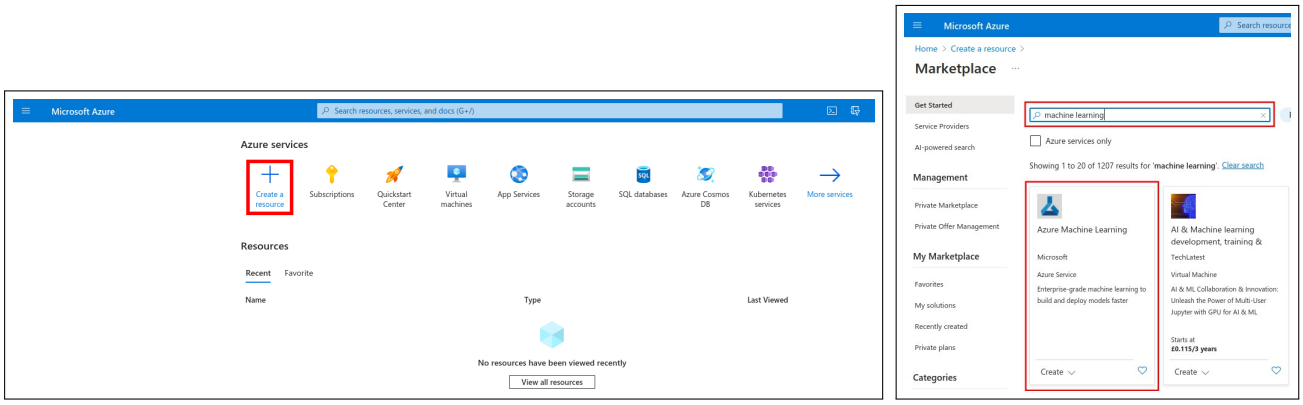

Fig. 1.8: Creating resource in Azure Portal

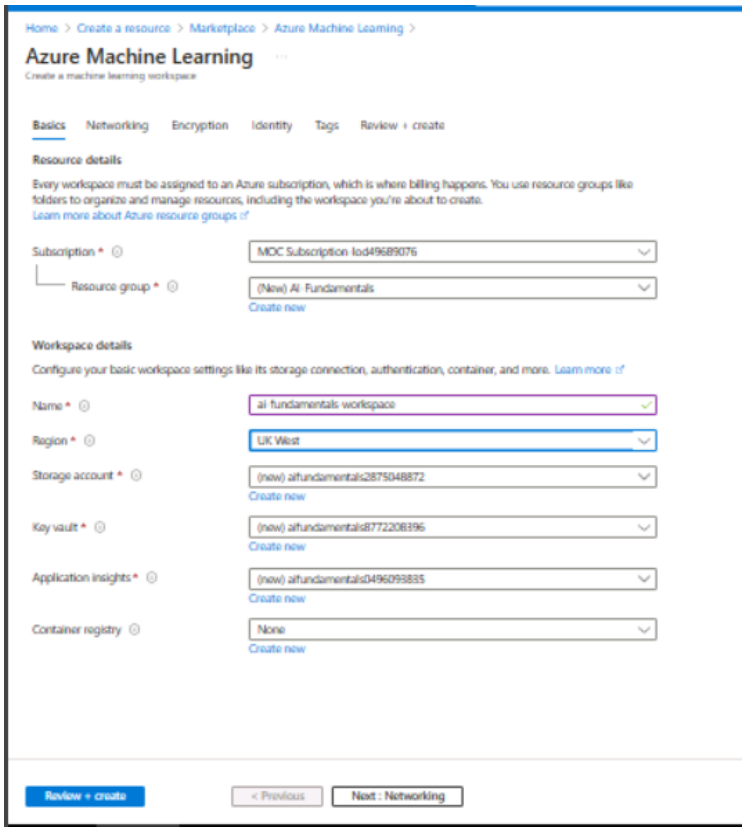

Fig. 1.9: Workspace configuration

Field	Description
Subscription:	Generated automaticlly
Resource group:	Enter a name to create a new resource group (e.g. ai-fundamentals).
Workspace name:	Enter a unique name for your workspace (e.g. ai-fundamentals-workspace).
Region:	Select the closest geographical region (e.g. UK South, UK West).
Storage account:	The default new storage account that will be created for your workspace.
Key vault:	The default new key vault that will be created for your workspace.
Application insights:	The default new application insights resource that will be created for your workspace.
Container registry:	None.

Table 1.1: Configuration fields of the new workspace:

2. Click **Review + create**, then click **Create**. Wait for your workspace to be created (this may take a few minutes), and then proceed to the deployed resource by clicking **Go to resource**.

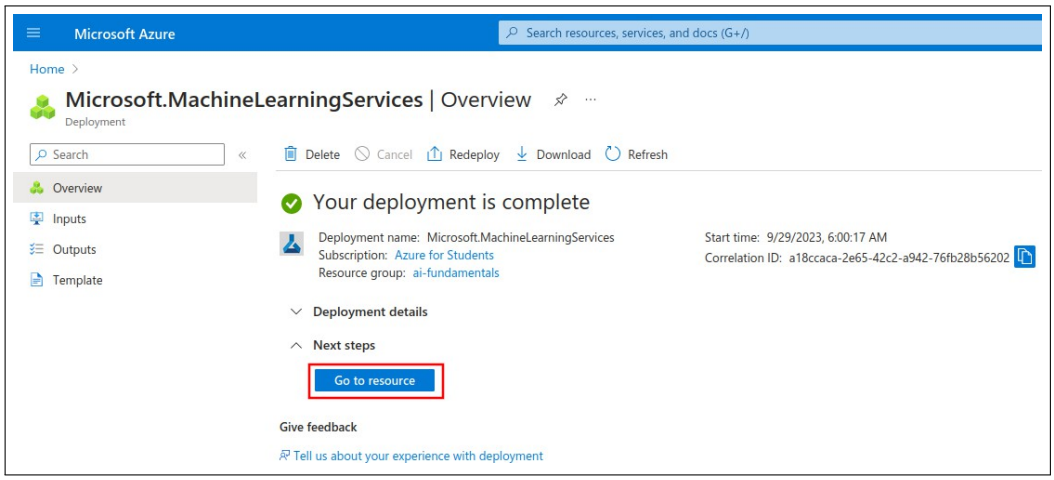

Fig. 1.10: Resource deployment done

3. Click **Launch studio** and close any messages that are displayed. In Azure Machine Learning studio, you should see your newly created workspace. If not, select **All workspaces** in the left-hand menu and then select the workspace you just created. Congratulations! You have successfully created your workspace.

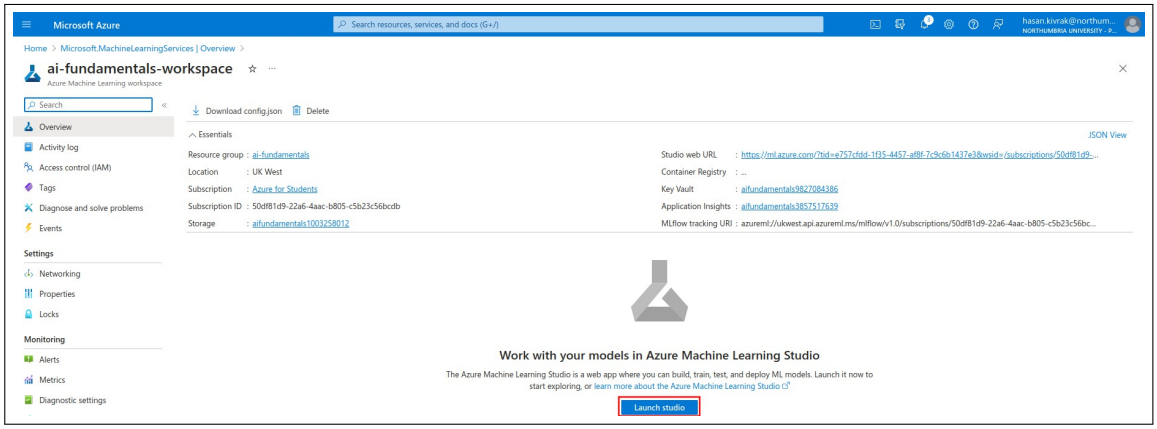

Fig. 1.11: Launching Azure ML Studio

Quick tour of the studio

The studio is your web portal for Azure Machine Learning. Review the parts of the studio on the left-hand navigation bar.

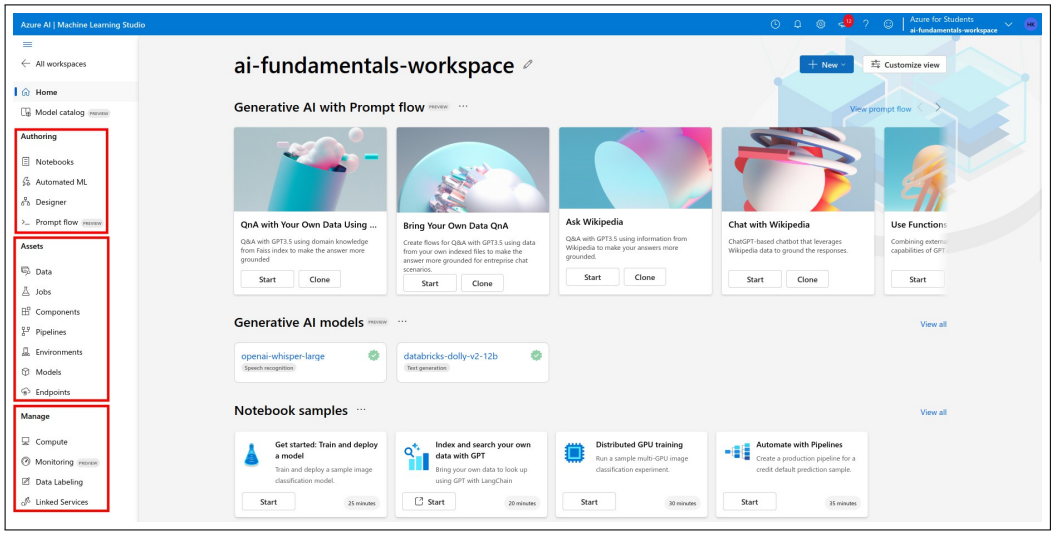

Fig. 1.12: Workspace - Azure Machine Learning Studio

- The **Authoring** section of the studio contains multiple ways to get started in creating machine learning models. You can:
  - **Notebooks** section allows you to create Jupyter Notebooks, copy sample notebooks, and run notebooks and Python scripts.
  - **Automated ML** steps you through creating a machine learning model without writing code.
  - **Designer** gives you a drag-and-drop way to build models using prebuilt components.
- The **Assets** section of the studio helps you keep track of the assets you create as you run your jobs. If you have a new workspace, there's nothing in any of these sections yet.
- The **Manage** section of the studio lets you create and manage compute and external services you link to your workspace.

Step-2: Create a compute instance

This compute instance will allow you to run machine learning experiments, train models, and perform data analysis within your Azure Machine Learning workspace. To create it:

1. On the left navigation pane, select **Notebooks** and Click **Create compute** in the middle of the page.

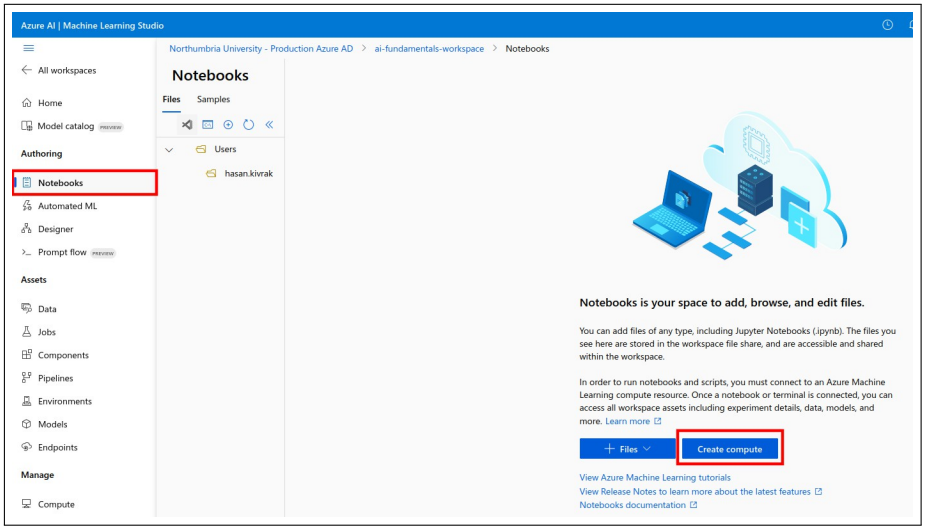

Fig. 1.13: Create a compute instance

2. Provide a name for your compute instance. You can keep all the defaults on the first page. Keep the default values for the rest of the page and click **Review + Create**. Review the settings, and click **Create** on the next page.

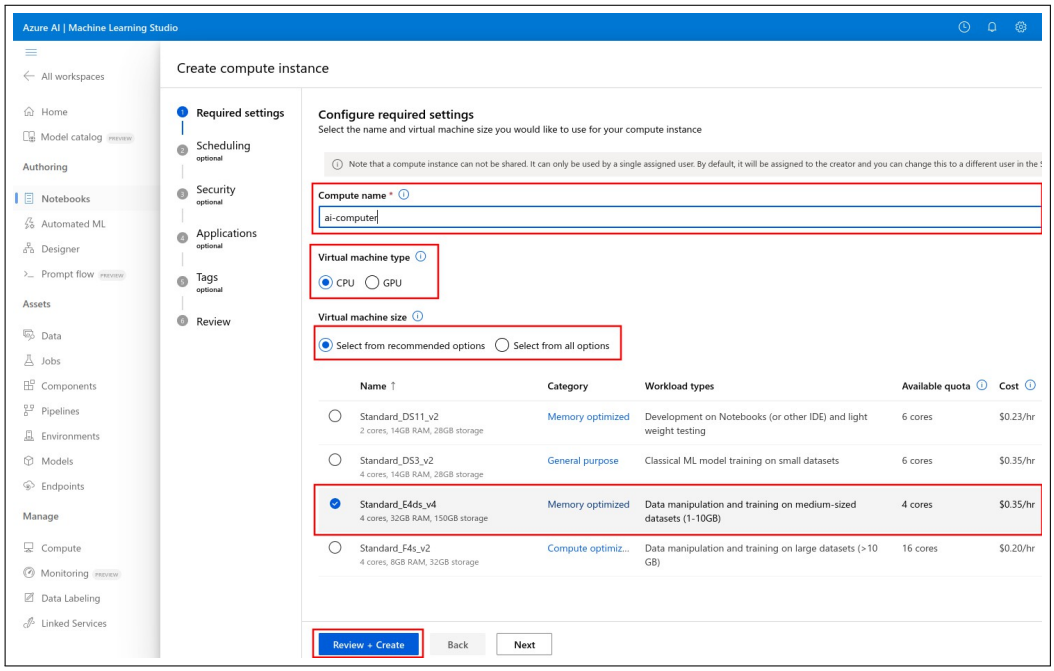

Fig. 1.14: Create a compute instance - 2

3. Your Azure Machine Learning workspace now contains a compute instance that you can use for your development environment.

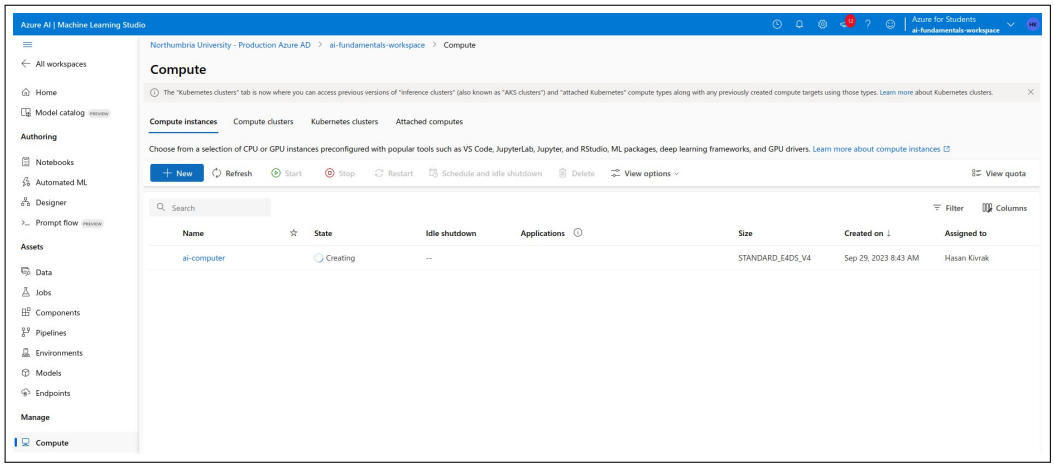

Fig. 1.15: Created compute instance