

Women Elevate Program: Lab 1 - Introduction to Azure Cloud

Lab Overview

This lab introduces participants to the Azure Cloud platform, focusing on accessing the Azure portal, verifying user details, exploring subscriptions, resource groups, and reviewing Azure AI services. The goal is to familiarize candidates with the Azure environment and its role in AI development. **No need to submit Lab work anywhere.**

Objectives

1. Log in to the Azure platform and verify portal access.
2. Verify the user account from the Azure portal.
3. Review Azure subscriptions and understand their purpose.
4. Explore the "Lab-ResourceGroup" resource group, its benefits, and deployed services.
5. Navigate to Azure AI services and describe key services under AI + Machine Learning.

Prerequisites

- Azure account credentials (username and password) provided by the program.
- Access to a web browser (e.g., Chrome, Edge, or Firefox).
- Basic understanding of cloud computing concepts.

Lab Steps

Step 1: Log in to the Azure Platform

1. Open a web browser and navigate to the Azure portal: <https://portal.azure.com>.
2. Enter your provided **Azure username** and **password** in the login fields.
3. Click **Sign In** to access the Azure portal.
4. **Verification:** Confirm that the Azure portal dashboard loads successfully, displaying the main interface with services and resources.

Comment: Successful login confirms that your credentials are valid and you have access to the Azure environment.

Step 2: Verify User Account

1. Locate the user profile icon in the **top right corner** of the Azure portal (typically your initials or profile picture).
2. Click the icon to view your user details, including your username and associated email.
3. **Verification:** Ensure the displayed username matches the credentials provided for the lab.

Comment: Verifying the user account ensures you are logged in with the correct permissions to access assigned resources.

Step 3: Review Azure Subscription

1. In the Azure portal, navigate to the **Subscriptions** section (search for "Subscriptions" in the top search bar or find it in the left-hand menu).
2. Select the subscription assigned to you (e.g., "Women Elevate Program Subscription").
3. Review the subscription details, including the subscription name, ID, and status.

Comment: An Azure subscription is a logical container used to provision and manage Azure resources. It serves as a billing and access control boundary, enabling organizations to manage costs and permissions for cloud services. In this lab, the subscription provides access to resources for AI development and experimentation.

Action: No changes or actions are required; simply review the subscription details.

Step 4: Explore Resource Group

1. Navigate to **Resource Groups** in the Azure portal (search for "Resource Groups" in the top search bar or find it in the left-hand menu).
2. Locate and select the resource group named **Lab-ResourceGroup**.
3. Note the **region** (e.g., East US, West Europe) where the resource group is deployed.
4. Open the **Lab-ResourceGroup** and observe the list of services deployed within it (e.g., virtual machines, storage accounts, AI services).
5. Review the services and their types without making any changes.

Comment: A resource group is a container that holds related Azure resources for an application or project. It simplifies management, monitoring, and governance of resources. In AI projects, resource groups organize services like Azure Machine Learning, storage, and

compute resources, ensuring efficient deployment and scalability. The region indicates where the resources are physically hosted, impacting latency and compliance.

Step 5: Review Azure AI Services

1. Navigate to the **All Services** section in the Azure portal (search for "All Services" or find it in the left-hand menu).
2. Under the **AI + Machine Learning** category, observe the available Azure AI services.
3. Review the following services and their descriptions:
 - **Computer Vision:** Analyzes and extracts information from images and videos, enabling applications like object detection, image classification, and optical character recognition (OCR).
 - **Language:** Provides natural language processing capabilities, including sentiment analysis, text analytics, and language translation for building intelligent text-based applications.
 - **Speech:** Enables speech-to-text, text-to-speech, and speech translation, supporting voice-driven applications and accessibility features.
 - **Azure Open AI:** Offers access to powerful AI models (e.g., GPT-based models) for generating human-like text, code, and other creative outputs.
 - **Content Moderator:** Automatically detects and moderates inappropriate content in text, images, and videos to ensure compliance with policies.
 - **Document Intelligence:** Extracts text, tables, and key-value pairs from documents, enabling automation of data extraction from forms, invoices, and receipts.

Comment: These AI services provide building blocks for developing intelligent applications, from image recognition to natural language understanding, and are integral to modern AI solutions.

Learning

- Recall your observations for each step, including:
 - Confirmation of successful login.
 - Verified user account details.
 - Description of the Azure subscription and its purpose.

- Details of the Lab-ResourceGroup, including its region and deployed services.
- Brief notes on the AI + Machine Learning services reviewed.

Notes

- Do not modify or delete any resources in the Azure portal during this lab.
- If you encounter access issues, contact the support for assistance.
- The next six labs will focus on hands-on activities with Azure AI services.