Introduction to Cloud and Azure AI

Description

The workshop gives an overview of why and how to use cloud in your projects, as well as popular Azure AI services. As part of the workshop, we will create a language translation app connecting Azure Cognitive Services with a Python-based simple Flask application.

Learning Outcomes

After this workshop, you will be able to:
- Understand what is cloud and how to use it in your projects
- Compare main benefits of different cloud providers
- Connect Azure Cognitive Service to your application
- Understand how to use frontend frameworks for connecting AI services to your applications, such as Flask

Prerequisite Knowledge

Familiarity with HTML and Python is useful, but not necessary as this is not the main focus of the workshop.

Pre-Workshop Checklist

Before the workshop, please make sure you complete the following items:

- Bring your computer for creating an application, if you wish to follow along
- Have a university email for registering a free Azure student account, if you wish to follow along (if you have some free time, register a free student account using the last link in the document!)

Technical Jargon and Definitions

- **Azure:** Cloud platform managed and offered by Microsoft
- **AWS (Amazon Web Services)**: Cloud platform managed and offered by Amazon
- **GCP (Google Cloud Platform)**: Cloud platform managed and offered by Google

- **On-premises infrastructure:** Infrastructure (servers, databases, …) managed by the company itself and not hosted on the cloud
- **Hybrid Cloud**: Solution that combines on-premises datacenter with a public cloud allowing data and applications to be shared between them

Timeline (1 hour)

Time	Module
10 min	Introduction to Cloud
10 min	Setting up development environment
15 min	Coding the application
15 min	Azure account creation
5 min	Overview of Azure
5 min	Test of our beautiful application!

Workshop Lead Contact

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Additional Resources

Hack the North Resources

Hack the North 2023 Event Schedule

Check this out to stay up-to-date on activities, workshops, and other key happenings this weekend.

Workshop-Specific Resources

Here are the links to the code we will be using.

Microsoft Learn Module: Build an AI web app using Python & Flask

    (Unit 2) Set up a development environment

    (Unit 4) Exercise - Create an app

    (Unit 6) Create a Translator service

    (Unit 7) Call Translator service

List of Azure AI services

Register a student Azure account