

# Build and Modernise AI Apps (1/2)

[www.aka.ms/pathways](http://www.aka.ms/pathways)

## Getting started

### Overview

#### What is your challenge?

- You want to leverage the power of Microsoft Apps, Data and AI Solutions to modernise and build intelligent apps focusing on internal business critical apps and external customer facing apps

#### Areas this could apply to:

- Azure Kubernetes Service
- Azure App Service
- Azure Functions
- Azure Container Apps
- Azure Cosmos DB
- Azure SQL Database
- Azure Database for PostgreSQL
- Azure Cognitive Services
- Azure OpenAI

### Certifications to Consider

- |   |                               |        |         |
|---|-------------------------------|--------|---------|
| 1 | AZ-900 Azure Fundamentals     | Course |         |
| 2 | AI- 900 Azure AI Fundamentals | Course |         |
| 3 | AI-102 Azure AI Engineer      | Course | Pathway |
| 4 | DP-420 Cosmos DB Developer    | Course |         |
| 5 | DP-100 Azure Data Scientist   | Course | Pathway |
| 6 | AZ-204 Azure Developer        | Course | Pathway |

### Microsoft Virtual Training Days

Build the technical skills you need with free Virtual Training Days.

[Click Here](#)

## Microsoft Learn Collections

### Innovate & Scale with Cloud Native Apps

#### Collection

#### Innovate with Cloud-Native Apps

- What is Cloud Native?
- Cloud adoption-related innovation
- Engage customers through applications
- Application development and deployment
- Innovation on modern application platforms

#### Application Modernisation

- Introduction to Kubernetes on Azure
- Build serverless, full stack applications in Azure
- Create cloud native apps with Azure and open-source software
- Bring Azure innovation to your hybrid environments with Azure Arc
- Architect a data platform in Azure
- Create serverless applications

### Drive Innovation with Cloud-Native Architectures

#### Collection

#### Training Resources

- Introduction to Kubernetes on Azure
- Create serverless applications

#### Product Documentation

- Azure Kubernetes Service (AKS)
- Azure Container Apps
- Azure Functions Overview

#### Product Pages

- Azure Kubernetes Service Overview
- Azure Serverless

#### Blogs / Videos

- Azure Kubernetes Service (AKS)
- Apps on Azure Blog
- Ask the Expert: Serverless September: Azure Functions
- How to get started with Azure Container Apps

### Accelerate Cloud Development with AKS and Containers

#### Collection

#### Training

- Manage Application Configuration and Secrets in AKS
- Introduction to Docker Containers
- Introduction to AKS
- Introduction to cloud-native apps on Azure

#### Documentation/Blog

- What is Azure Kubernetes Service?
- Azure Container Apps overview
- Connect applications in Azure Container Apps
- Azure Kubernetes Service Blog

### Build Serverless apps with Azure Functions

#### Collection

#### Training

- Build serverless, full stack applications
- Create serverless applications
- Upload images to Azure Blob Storage from a static web app
- Publish an API to Azure Static Web Apps

#### Documentation / Blog

- Build serverless, full stack applications
- Create serverless applications
- Serverless Web Application – Architecture Center
- Getting started with Azure Functions
- Azure Functions developer guide
- Azure Functions Blog

### Modernise Enterprise Applications

#### Collection

#### Application Modernisation

- Introduction to the modern application platform
- Modernize your processes for the cloud
- Modernize any application in the cloud
- Modernize any database in the cloud
- Accelerate your migration and modernization journey
- Architect modern applications in Azure
- Introduction to Kubernetes on Azure
- Get started with Java on Azure
- Architect a data platform in Azure

#### Technical Deep Dive

- Azure Functions overview
- What is Spring Cloud Azure?
- Integration best practice with REST APIs – Azure DevOps Services

### Modernise .NET and Java Web Applications

#### Collection

#### Training

- Modernize .NET and Java apps
- AZ-204: Implement Azure App Service web apps
- Deploy a Java web app to Azure App Service

#### Documentation

- Quickstart: Deploy an ASP.NET web app
- Quickstart: Create a Java app on Azure App Service
- Configure an ASP.NET app for Azure App Service
- Configure a Java app for Azure App Service

#### Videos/Shows/Other

- Deploying a Java App to Azure App Service using GitHub Actions
- Azure App Service

### 30 Days to Learn it Challenge

30 Days to Learn It can help you build skills and start your preparation for Microsoft Certifications. Select your challenge below.

[Azure Developer](#)

[Azure AI Fundamentals](#)

[Java Developer on Azure](#)

[Power Platform App Maker](#)

[Azure Cosmos DB Developer](#)

[Azure Data Scientist](#)

# Build and Modernise AI Apps (2/2)

[www.aka.ms/pathways](http://www.aka.ms/pathways)



## Learn Live

Discover thousands of hours of fun, authentic, and informative original programming from Microsoft technical experts



**Learn Live: Create microservices with .NET and ASP.NET**



**Learn Live: Deploy your apps with Java on Azure**



**Learn Live: Azure Cosmos DB Certification Study Hall**



**Learn Live: Start your Learning Journey into Azure AI**

### Azure Connected Learning Experience

Microsoft Azure Connected Learning Experience (CLX) is an experiential training program that sets a trajectory for aspiring learners and working professionals to be Azure experts. The CLX program offers a personalized journey that aims to optimize learning experience while maximizing return on time invested.

[Click Here](#)

## Skills Navigator – Ramp Up Guides

**Developers**  
Looking to develop your Microsoft knowledge and skills? You're on the right path.

[DOWNLOAD](#)

**Java Skills Navigator**

[DOWNLOAD](#)

**Zero to hero in 4 weeks with Machine Learning**  
A guide to achieving Machine Learning expertise on Azure

[DOWNLOAD](#)

**Zero to hero in 4 weeks with Azure AI**  
A guide to achieving artificial intelligence expertise on Azure

[DOWNLOAD](#)

## Create cloud native apps with Azure and open-source software



This hands-on learning path covers the essentials of selecting components for cloud-native apps, building the integrations, and deploying to Azure.

- Introduction to cloud-native apps on Azure
- Orchestrate containers for cloud-native apps with AKS
- Build a basic cloud-native service using PostgreSQL and Node.js
- Stream internet-of-things (IoT) data to a cloud-native app with IoT Central
- Build an IoT service for your cloud-native apps by using IoT Central
- Deploy and maintain cloud-native apps with GitHub actions and Azure Pipelines
- Authenticate and authorize multi-tenant apps using Azure Active Directory

## Build serverless, full stack applications in Azure



Learn how to create, build, and deploy modern full stack applications in Azure by using the language of your choice (Python, Node.js, or .NET) and with a Vue.js frontend.

- Architect modern applications using Azure SQL Database
- Deploy serverless APIs with Azure Functions, Logic Apps, and Azure SQL Database
- Build full stack applications with Azure Static Web Apps and Azure SQL Database
- Architect full-stack applications and automate deployments with GitHub

## Create Serverless applications



Learn how to leverage functions to execute server-side logic and build serverless architectures.

- Introduction to Azure Functions
- Choose the best Azure service to automate your business processes
- Create serverless logic with Azure Functions
- Execute an Azure Function with triggers
- Chain Azure Functions together using input and output bindings
- Create a long-running serverless workflow with Durable Functions
- Develop, test, and publish Azure Functions by using Azure Functions Core Tools
- Develop, test, and deploy an Azure Function with Visual Studio
- Monitor GitHub events by using a webhook with Azure Functions
- Enable automatic updates in a web application using Azure Functions and SignalR Service
- Expose multiple Azure Function apps as a consistent API by using Azure API Management
- Build serverless apps with Go

## Migrating Cassandra and MongoDB workloads to Cosmos DB



Learn how to migrate Cassandra and MongoDB workloads to Cosmos DB

- Introduction to open-source database migration to Azure Cosmos DB
- Migrate Cassandra workloads to Cosmos DB
- Migrate on-premises MongoDB databases to Cosmos DB