## Module 1: Introduction to DevOps

Azure Repos – provides two types of version control: Git and Team Foundation Version Control

IaC (Infrastructure as Code) - a practice that enables the automation and validation of the creation and teardown of environments to help with delivering secure and stable application hosting platforms.

## Module 2: Plan application lifecycle management (ALM) for Power Platform

Environment in Microsoft Power Platform:

**Sandbox** - A sandbox environment is any nonproduction environment of Dataverse. Isolated from production, a sandbox environment is the place to safely develop and test application changes with low risk.

**Production** - The environment where apps and other software are put into operation for their intended use.

**Community (developer)** - The Power Apps Community Plan gives a user access to Power Apps premium functionality, Dataverse, and Microsoft Power Automate for individual use only. This environment is primarily meant for learning purposes. A developer environment is a single-user environment and can't be used to run or share apps. A Community Plan environment can participate in the Azure DevOps pipeline.

**Default** - A single default environment is automatically created for each tenant and shared by all users in that tenant. The default environment is used by Microsoft 365 services.

**Trial** - Trial environments are to try new features or perform proof of concepts. Trial environments are automatically deleted after 30 days.

Managing ALM – can be two apporach:

**Environment-centric approach**:

* The dev environment is the master copy of all changes.
* Changes are promoted directly from dev > test > production.

**Source control-centric** approach:

* Source control is the master.
* The dev environment is re-created from source control (process can be automated and repeatable).
* Changes from the dev environment are checked into source control.