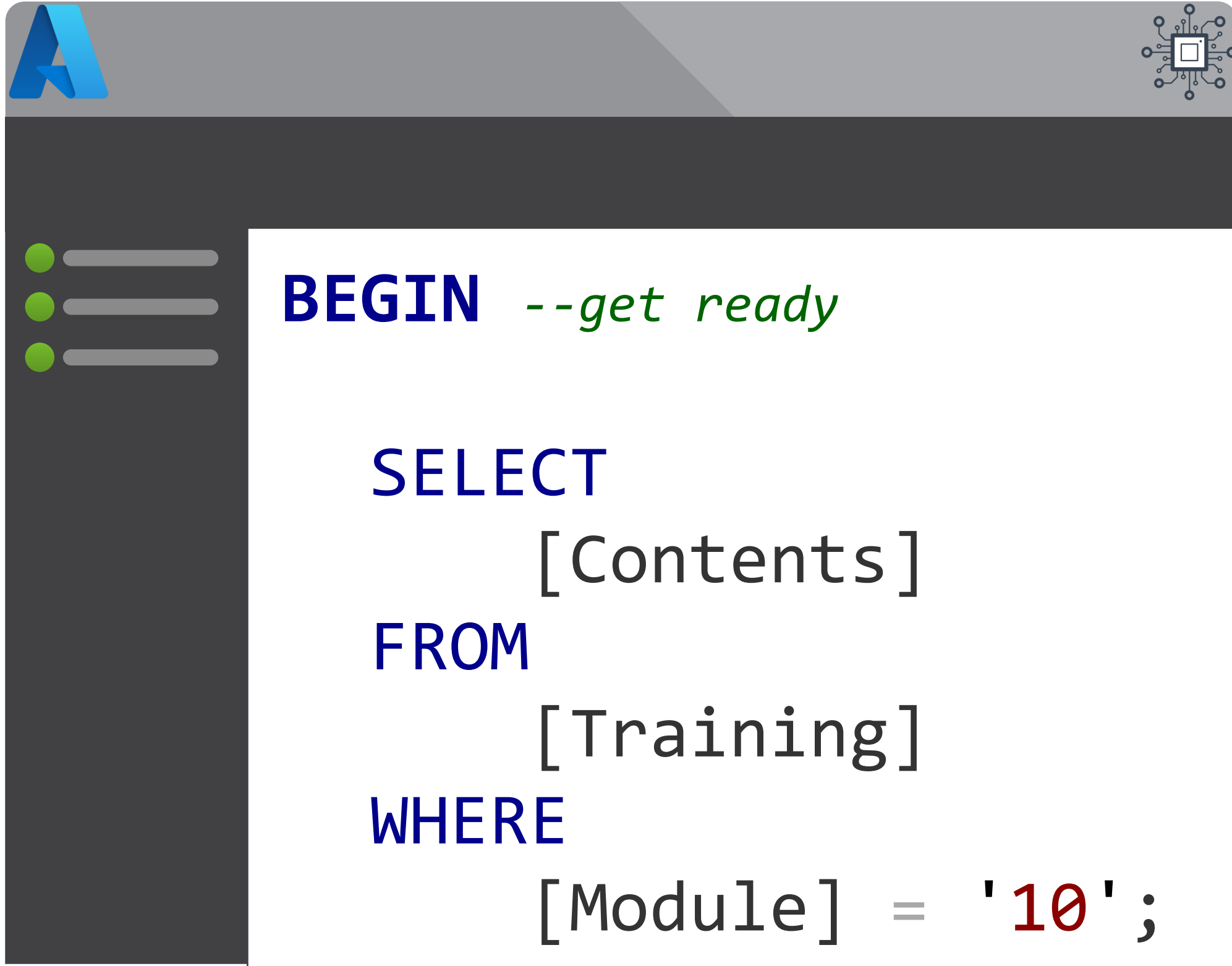


Module 10

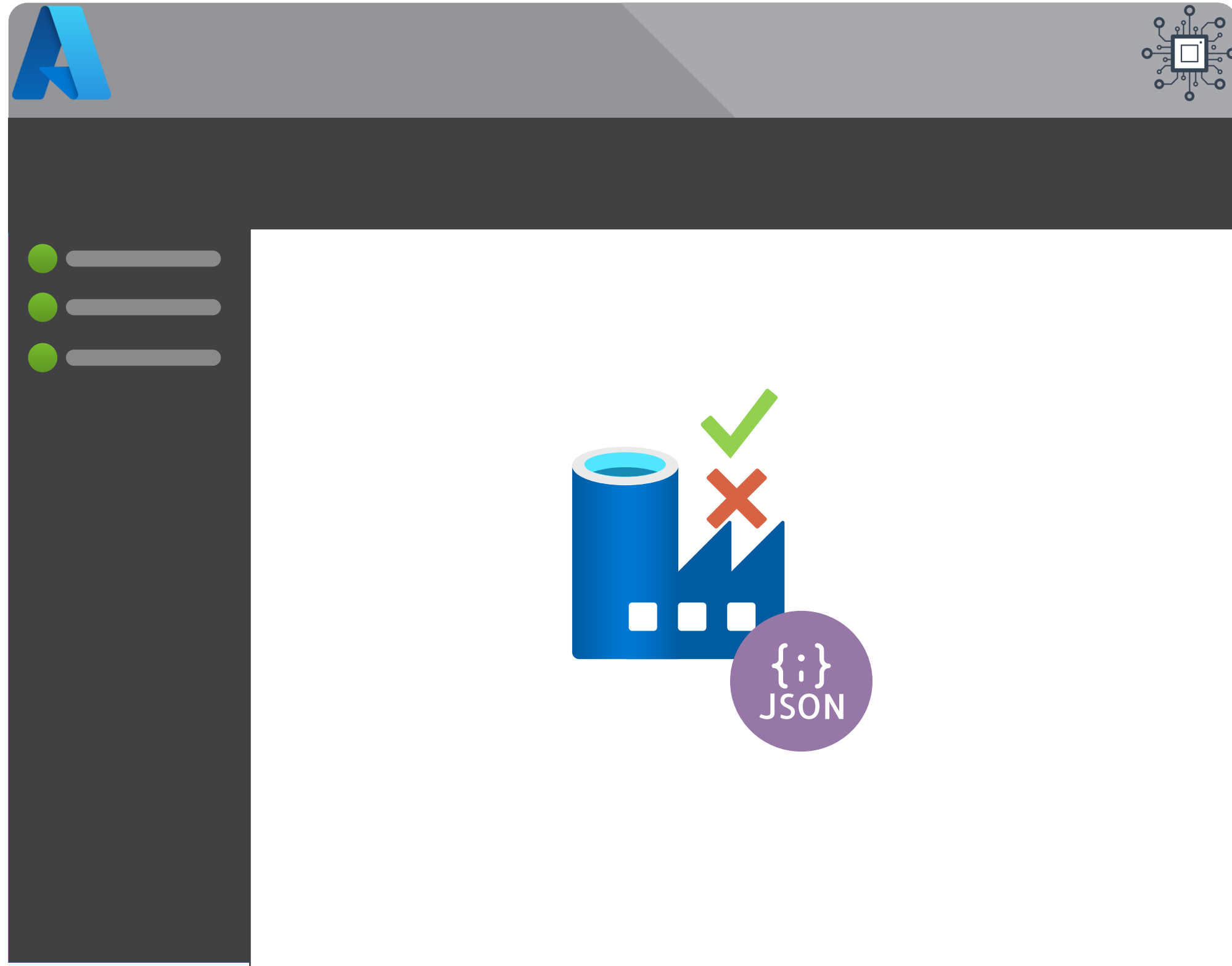
Testing



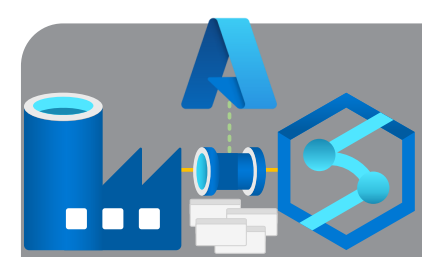
- Development Time Validation
- Test Coverage
- NUnit Tests

Module 10

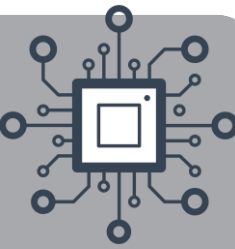
Testing



- Development Time Validation
- Test Coverage
- NUnit Tests



Development Time Validation



Microsoft Azure | Data Factory ▶ TrainingFactoryDev

>> / main branch **✓ Validate all** Save all Publish

Factory Resources

Filter resources by name

- Pipeline 15
 - Demo Pipelines 15
 - pipeline1**
 - Data Flows 1

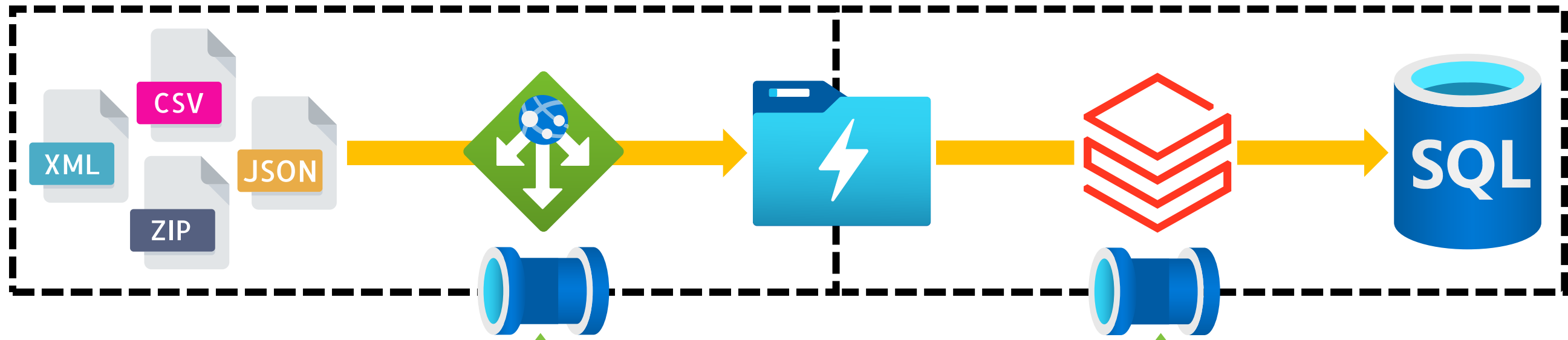
Activities

Search activities



- Move & transform
- Azure Data Explorer
- Azure Function

Saved Save as template **✓ Validate** Debug Add trigger

What is Data Factory actually checking for?



- 1 Linked Services
- 2 Datasets
- 3 Activities
- 4 Pipelines
- 5 Triggers



JSON

General¹

Variables¹

User properties

Name *

✖

Activity name is required.

[Learn more](#)

Description

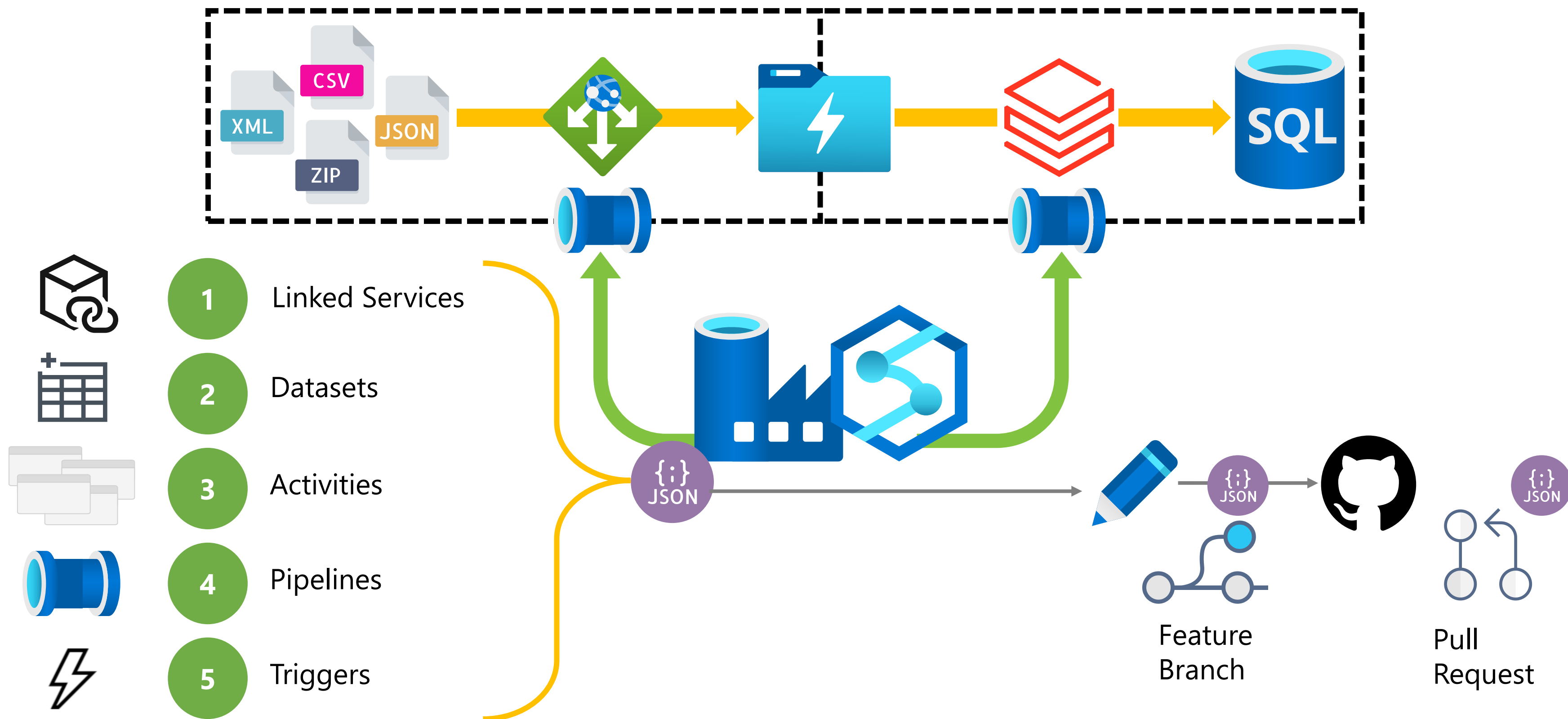
- 1. Mandatory Values
- 2. Value Data Types
- 3. Value Context

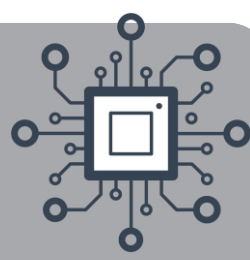


Integration Pipelines Validation



What is Data Factory actually checking for?



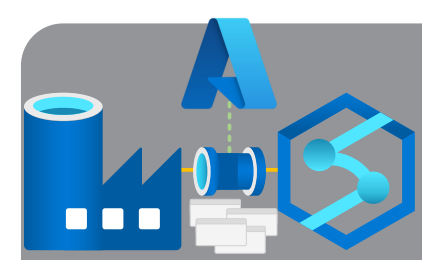


Module 10

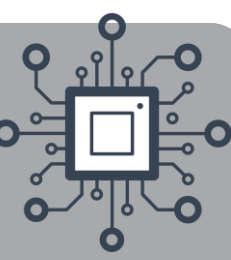
Testing



- Development Time Validation
- Test Coverage
- NUnit Tests



Types of Testing

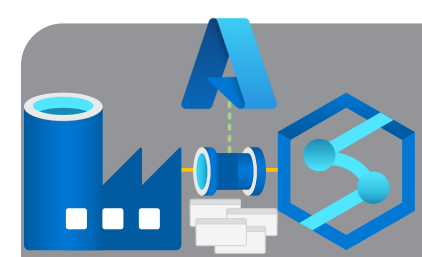


🔊 **Integration Tests** - A test of a pipeline as-is, without eliminating any effects of external dependencies.

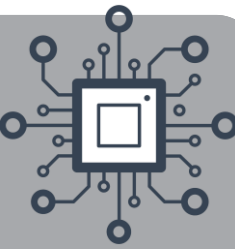
🔊 **Functional Tests** - An isolated test of whether the pipeline is doing things right – is the pipeline producing the desired result?

🔊 **Unit Tests** - An isolated test of whether the pipeline is doing the right things – do the pipeline's activities get executed in the way you expect?

Source: Richard Swinbank richardswinbank.net



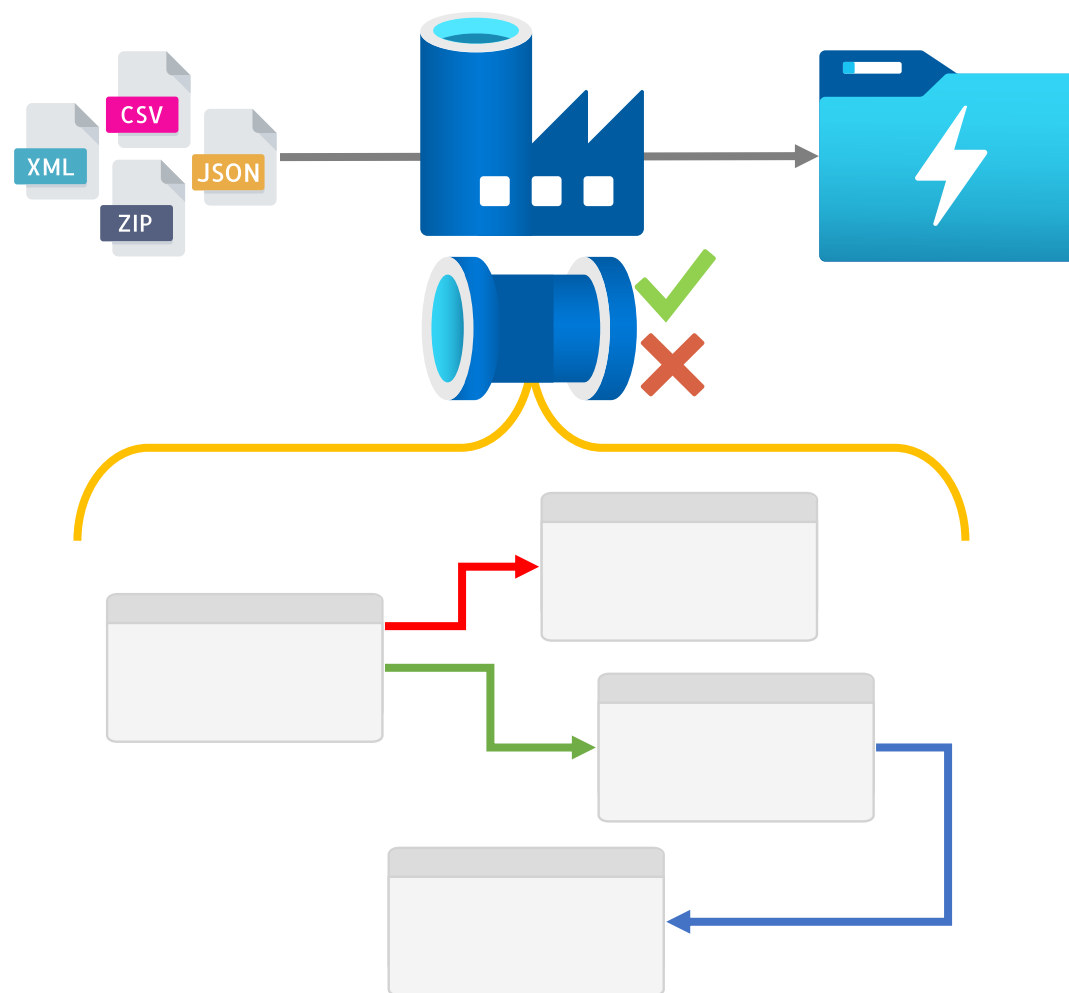
Types of Testing



What do they mean in our pipelines?

Integration Tests

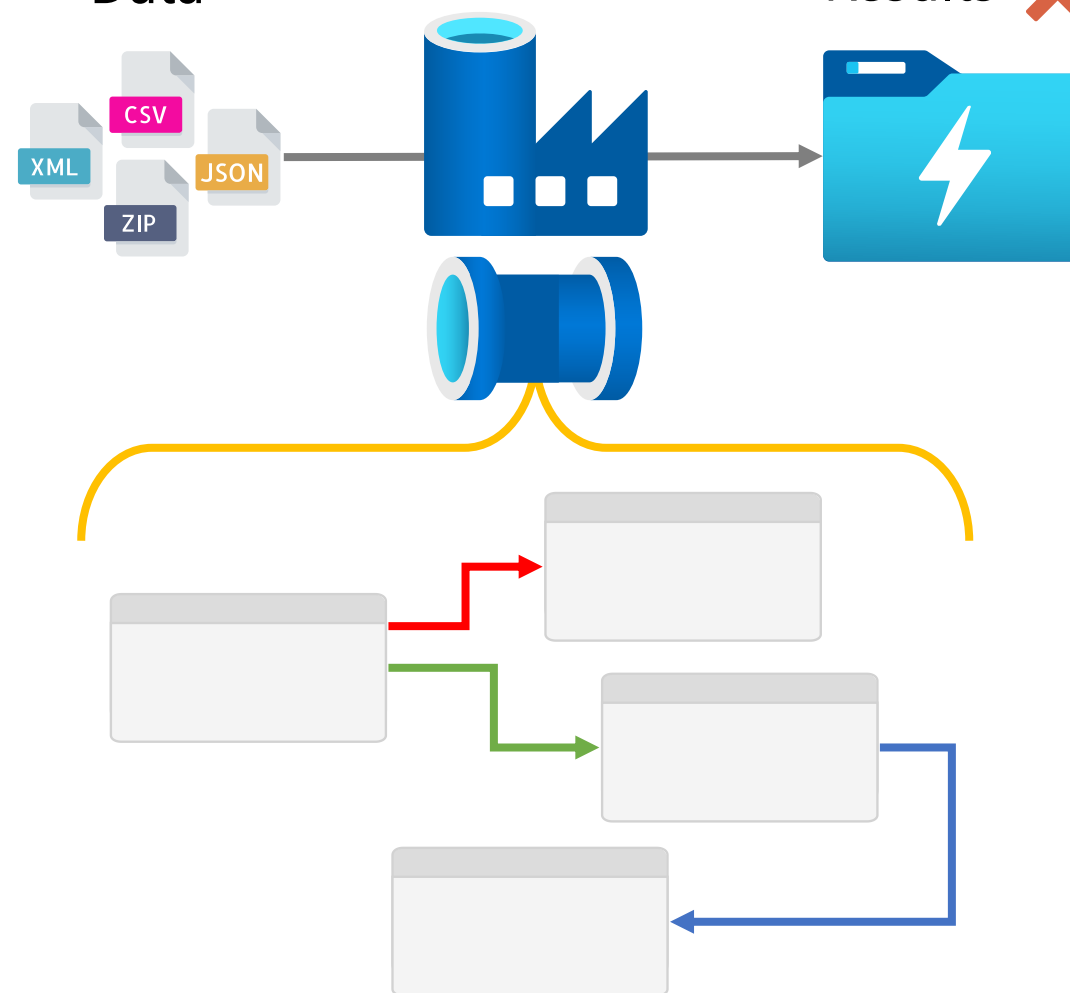
Simple Run Outcome



Functional Tests

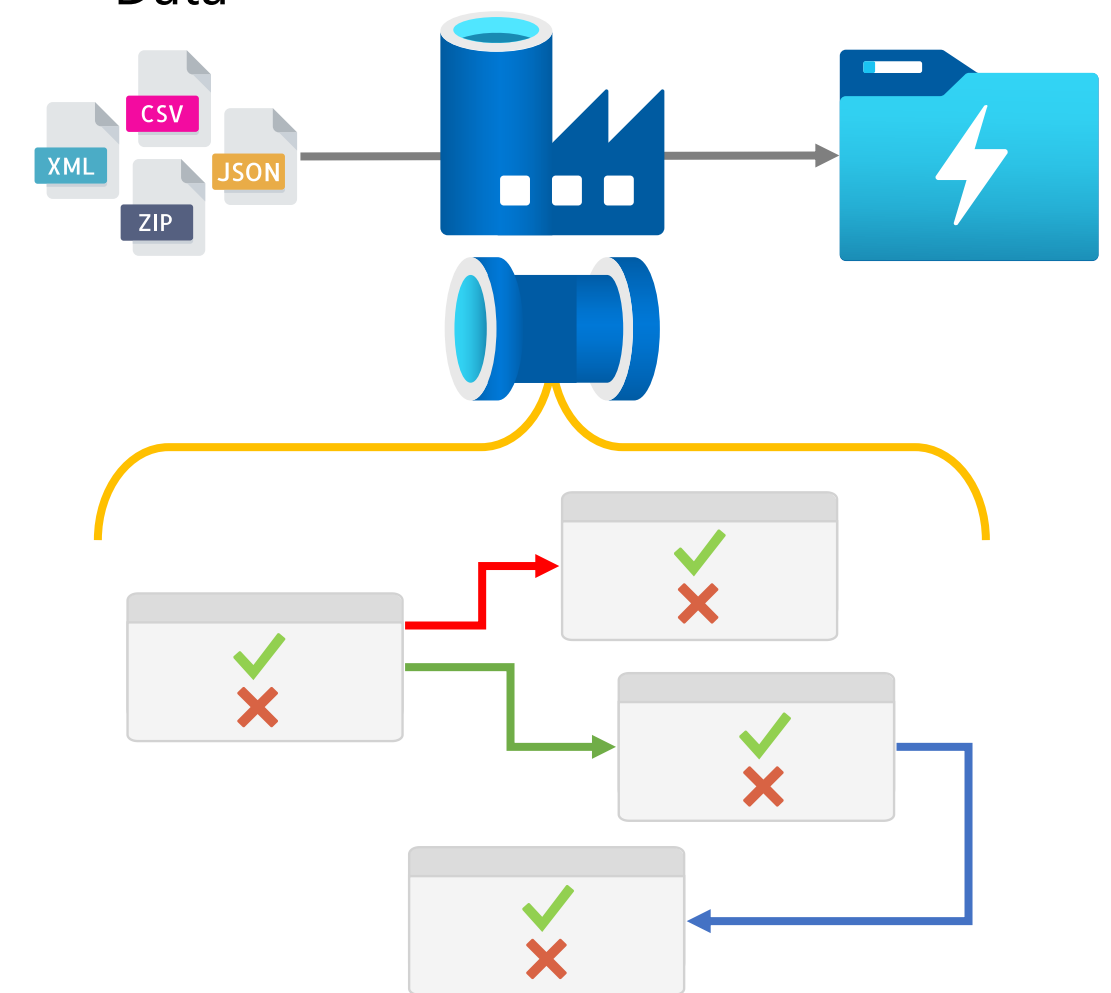
Sample Data

Specific Results ✓
✗

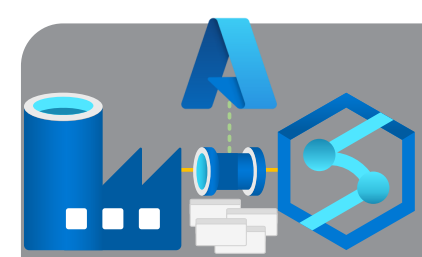


Unit Tests

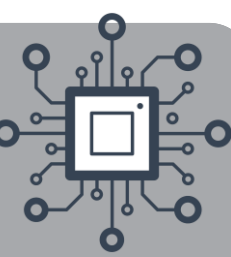
Sample Data



Specific Activity Inputs &
Outputs

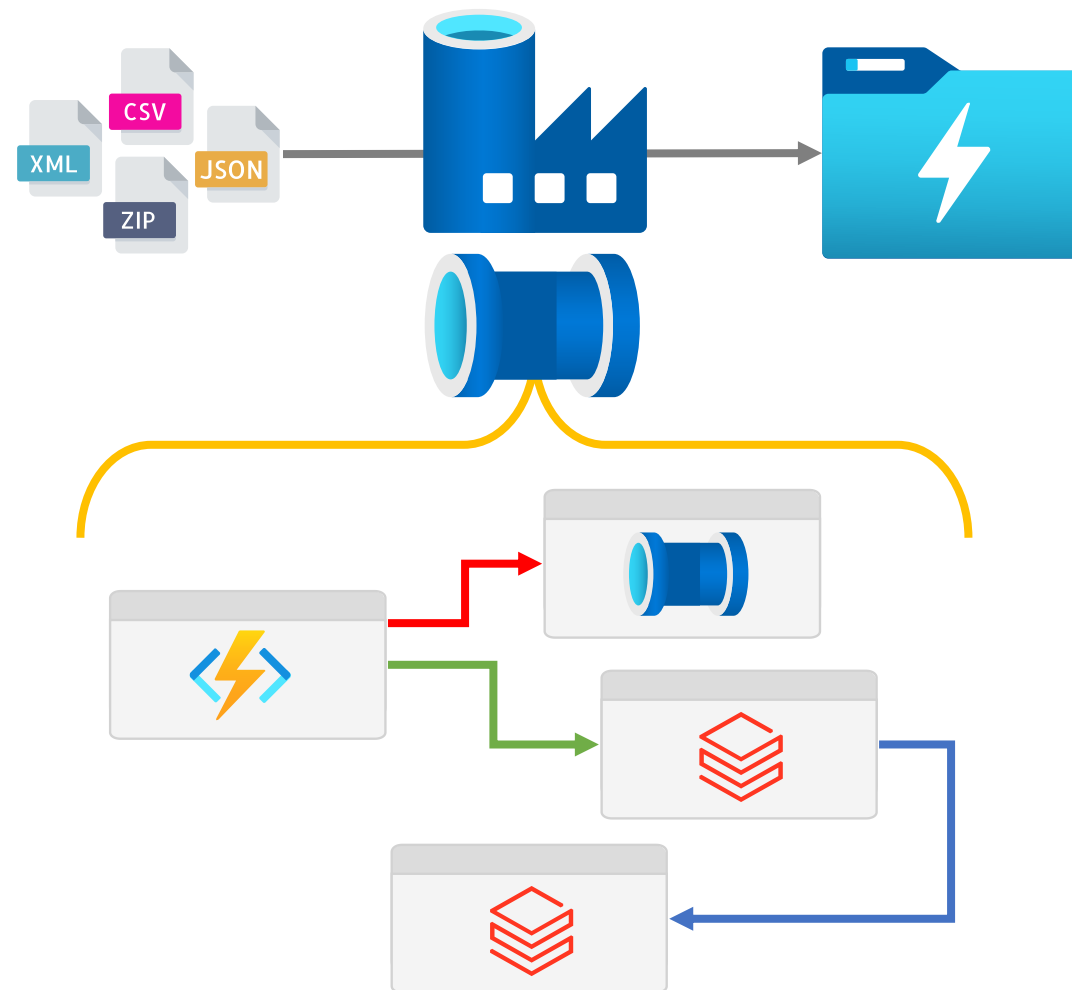


Types of Testing

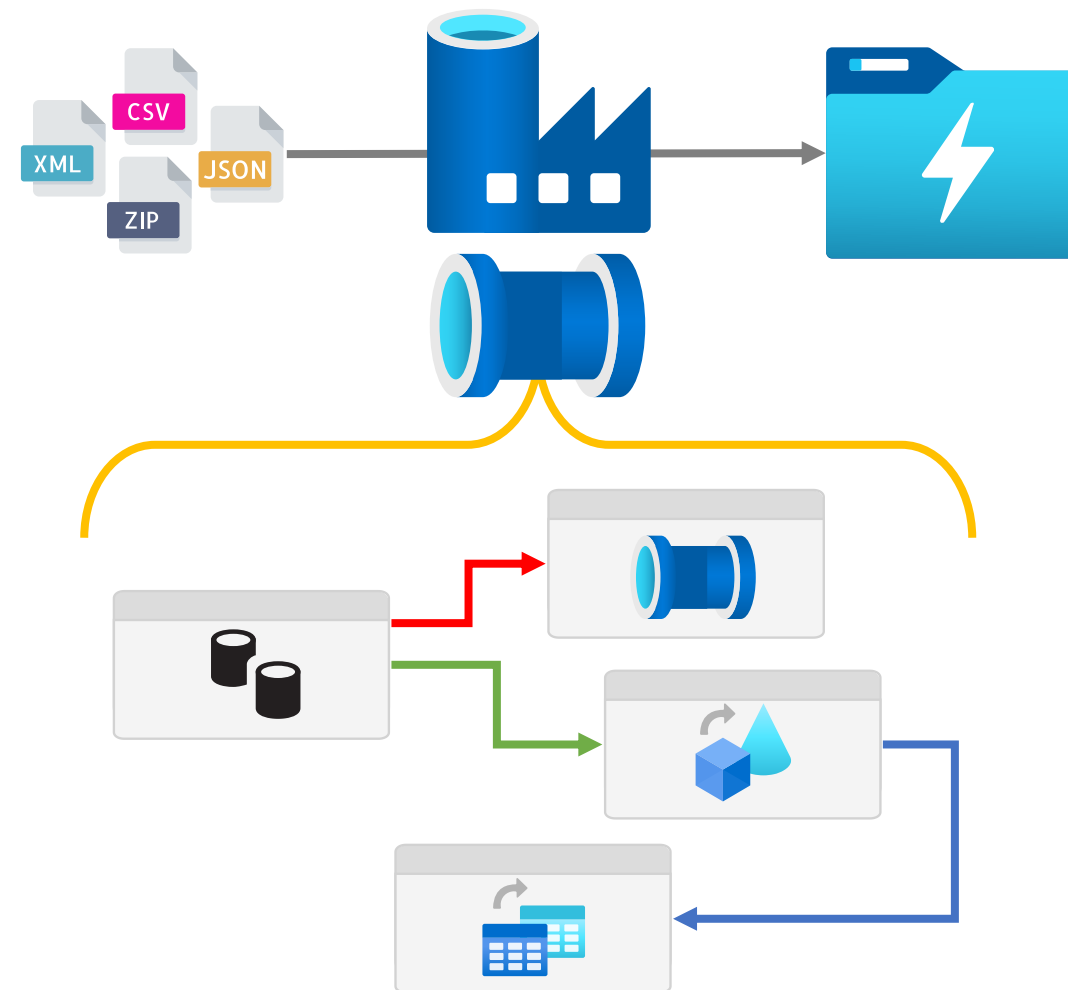


Does it depend on external resources?

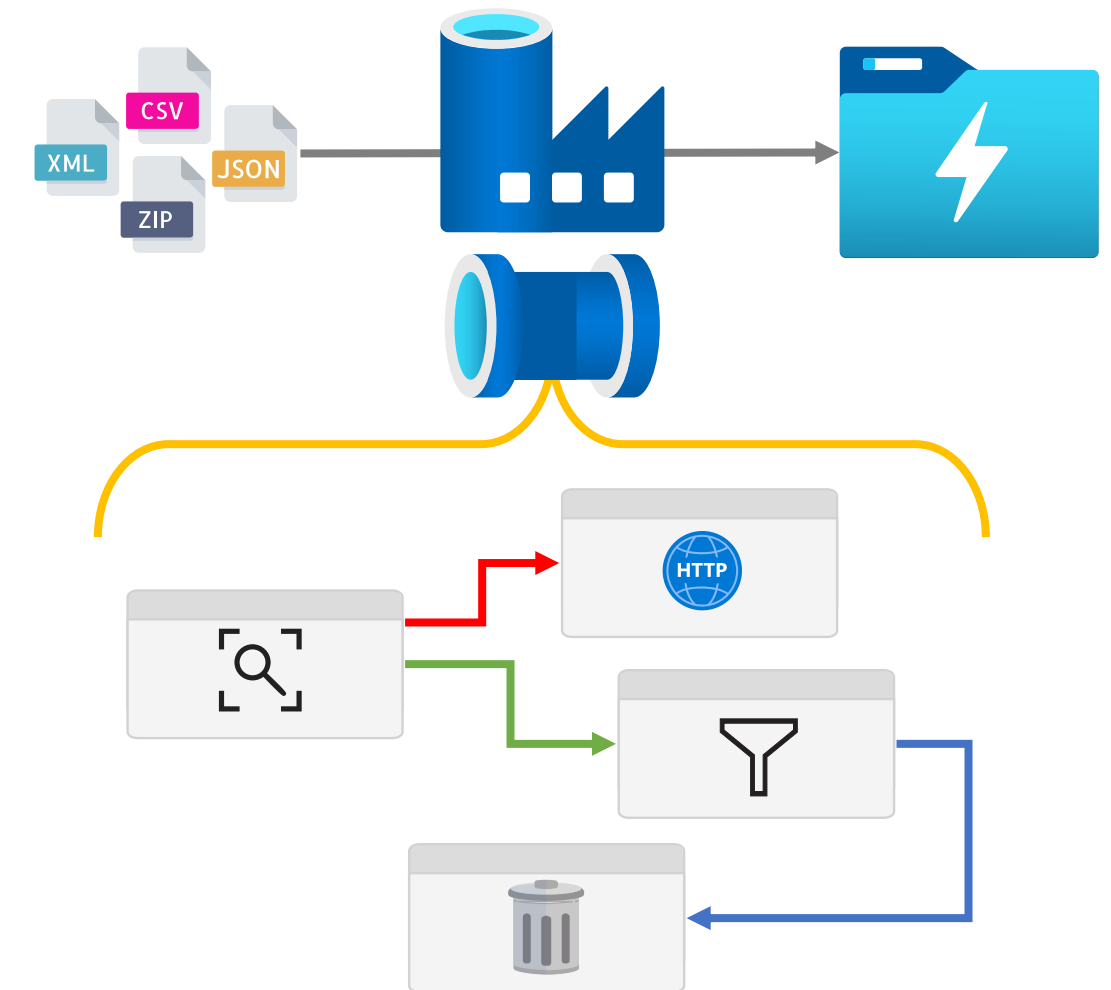
Integration Tests



Functional Tests



Unit Tests



Module 10

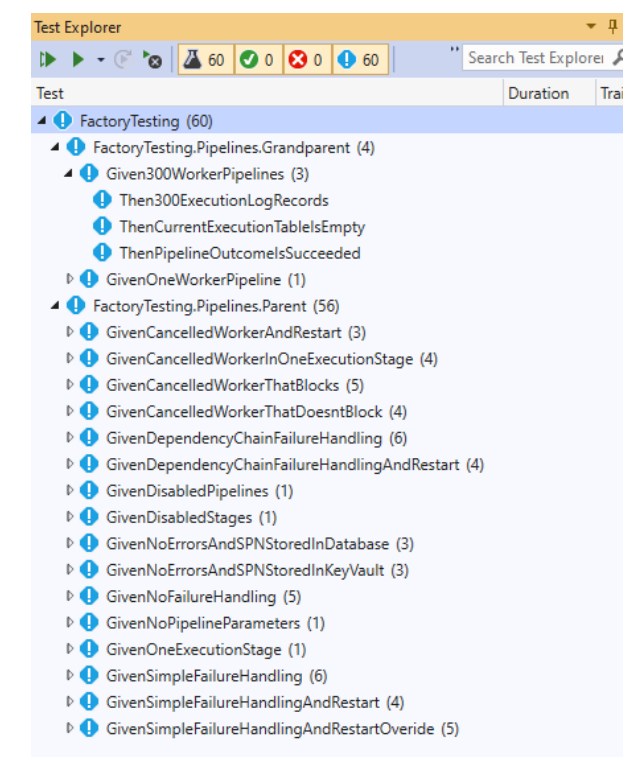
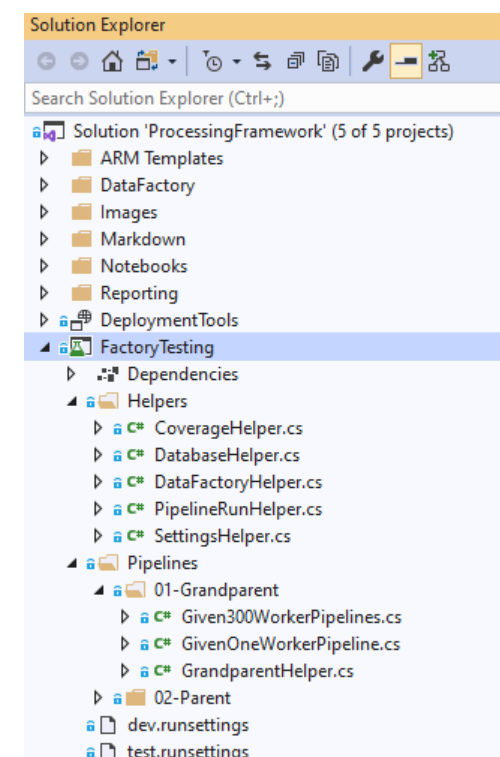
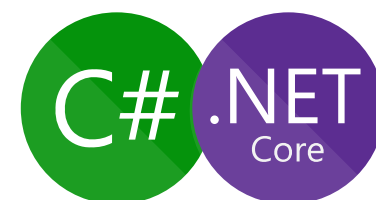
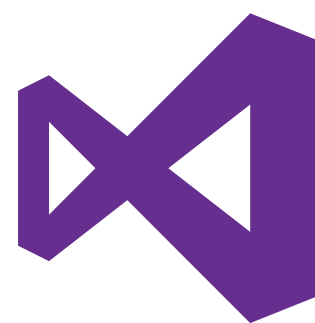
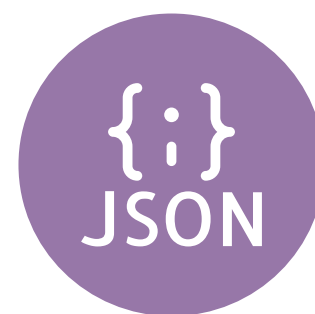
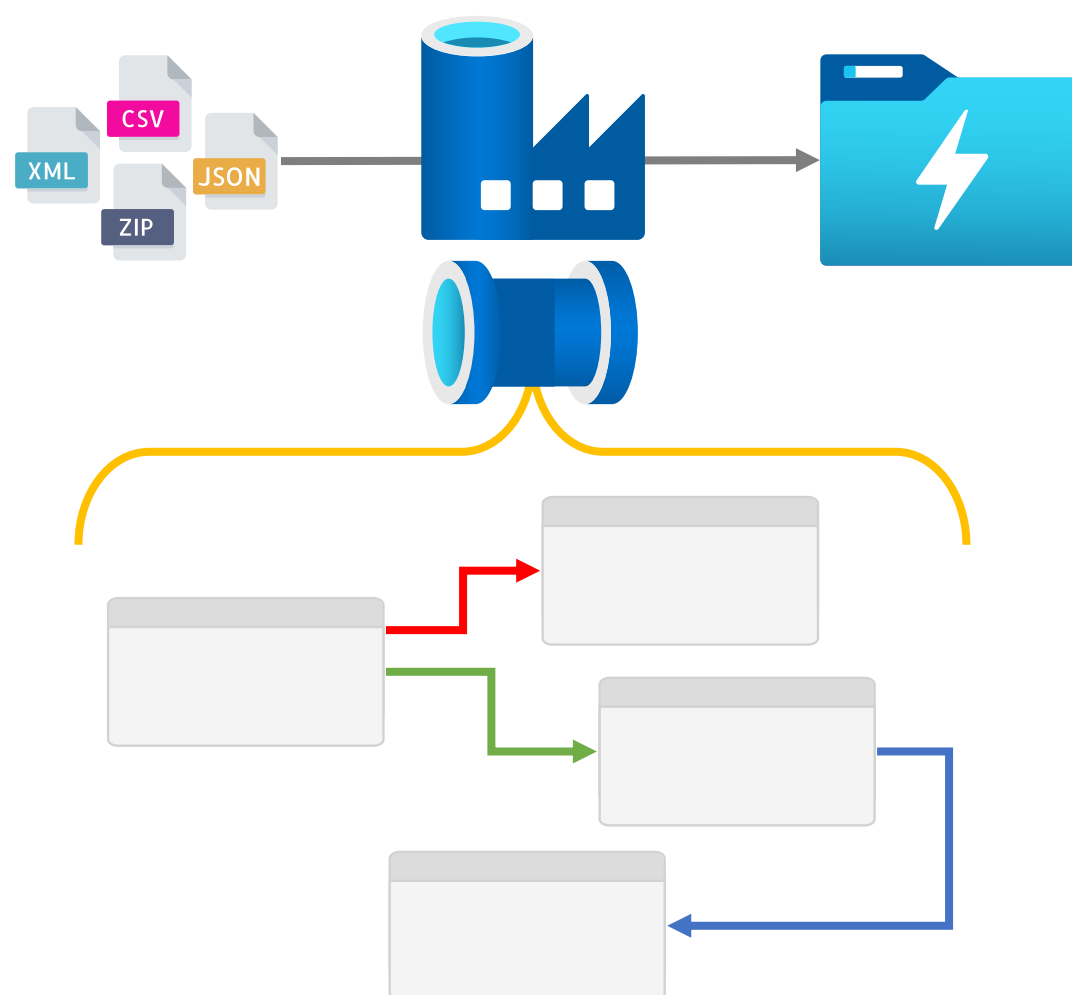
Testing



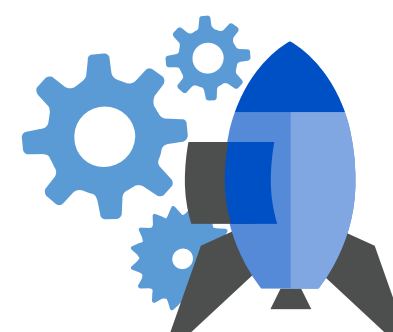
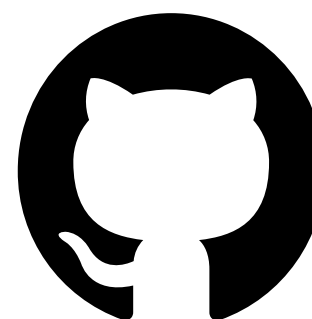
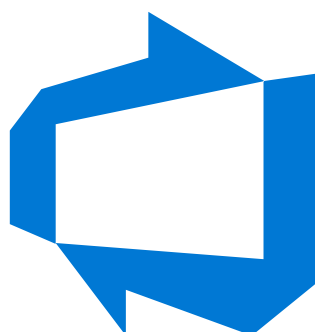
- Development Time Validation
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How To Run & Automate Tests



github.com/richardswinbank/community/tree/main/adf-testing-series

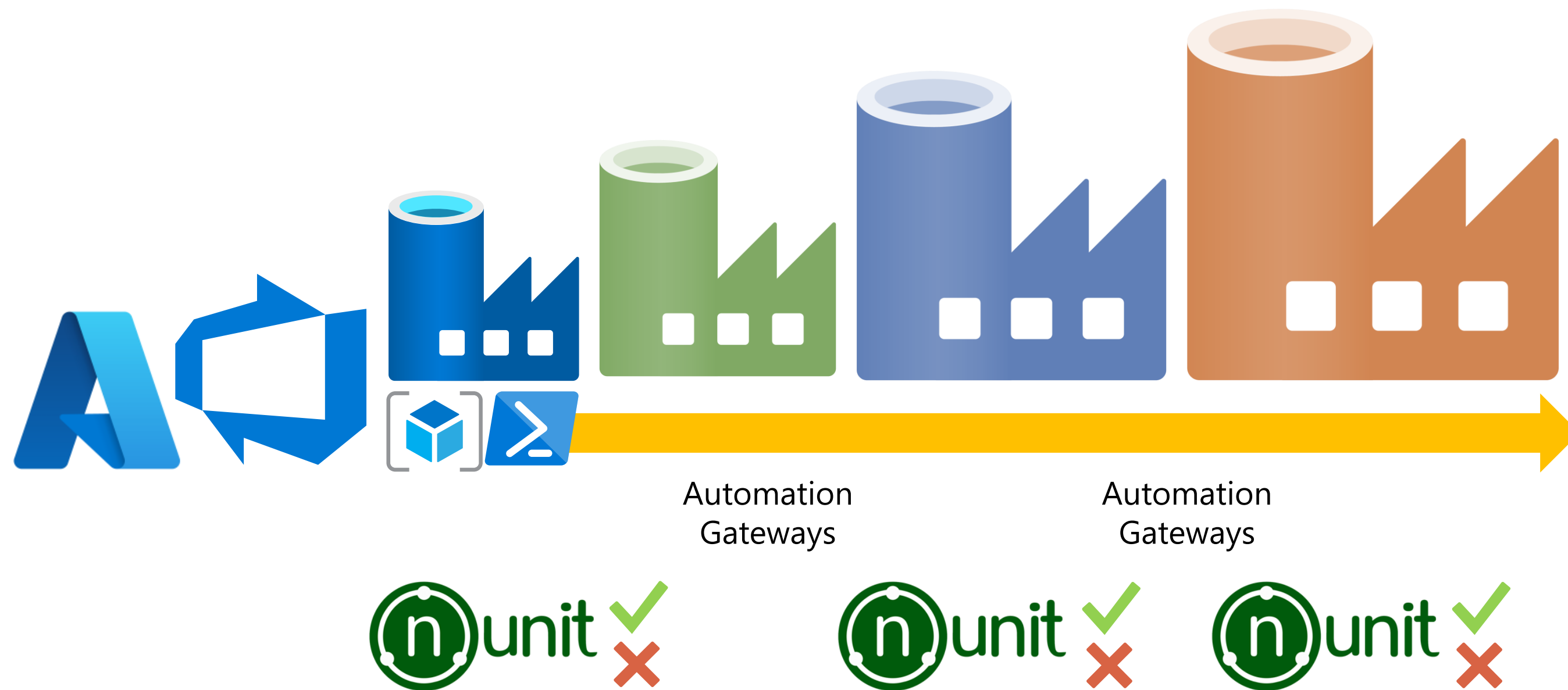




Testing Code vs Actual Code



Data Factory – Chicken vs Egg



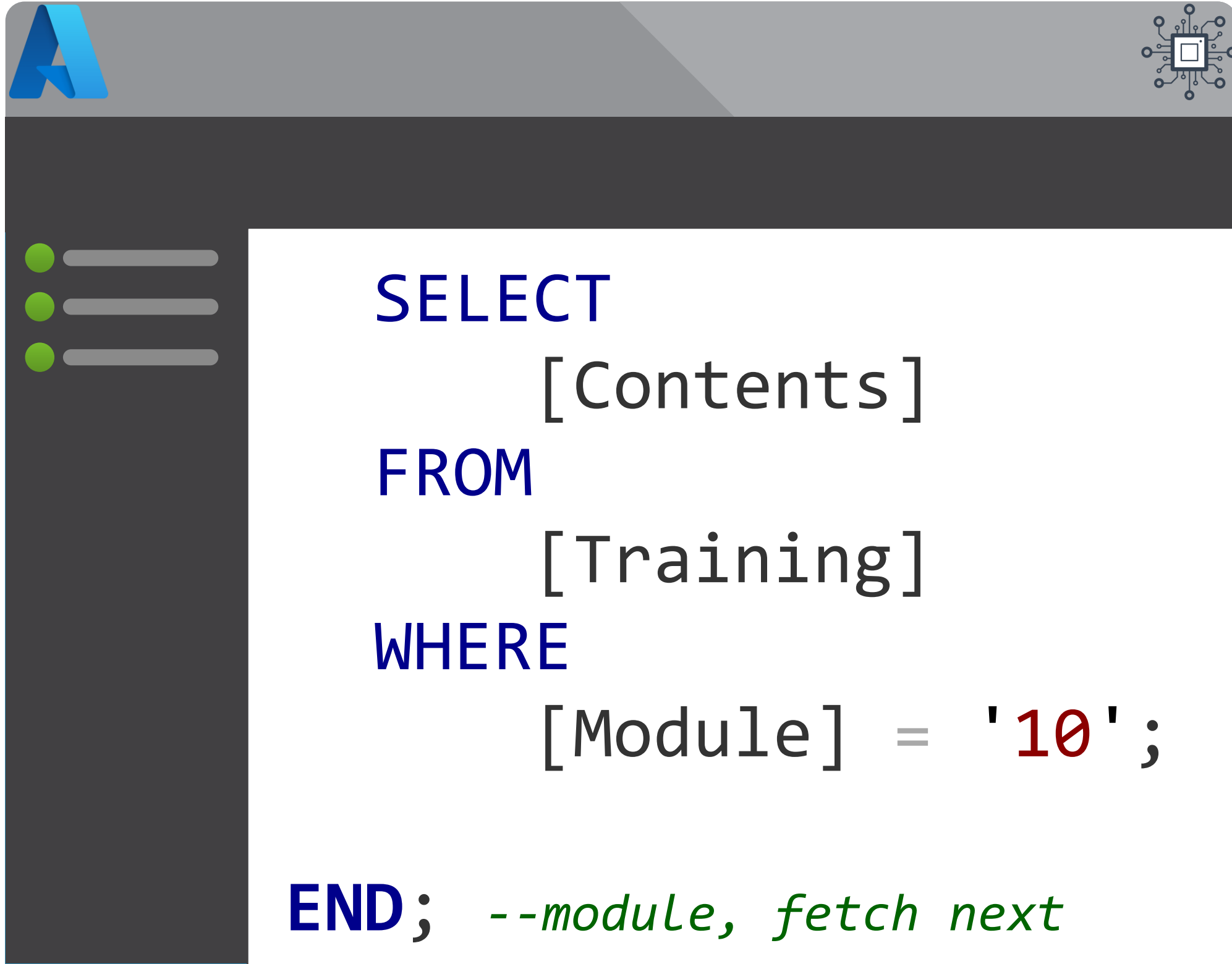
Should automate this?

When should testing scripts run?

What if a test case fails?

Module 10

Testing



- Development Time Validation
- Test Coverage
- NUnit Tests