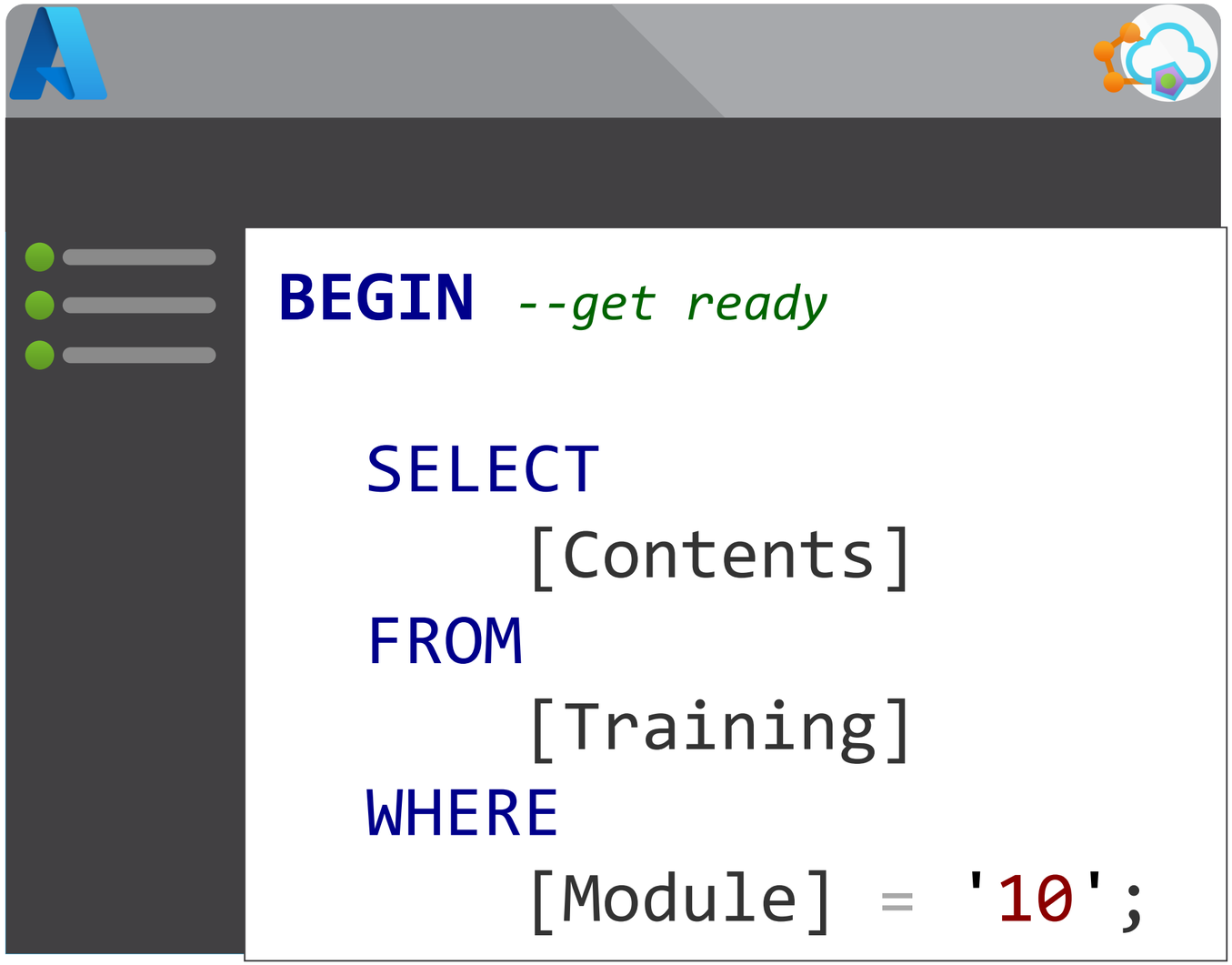
Module 10

Testing



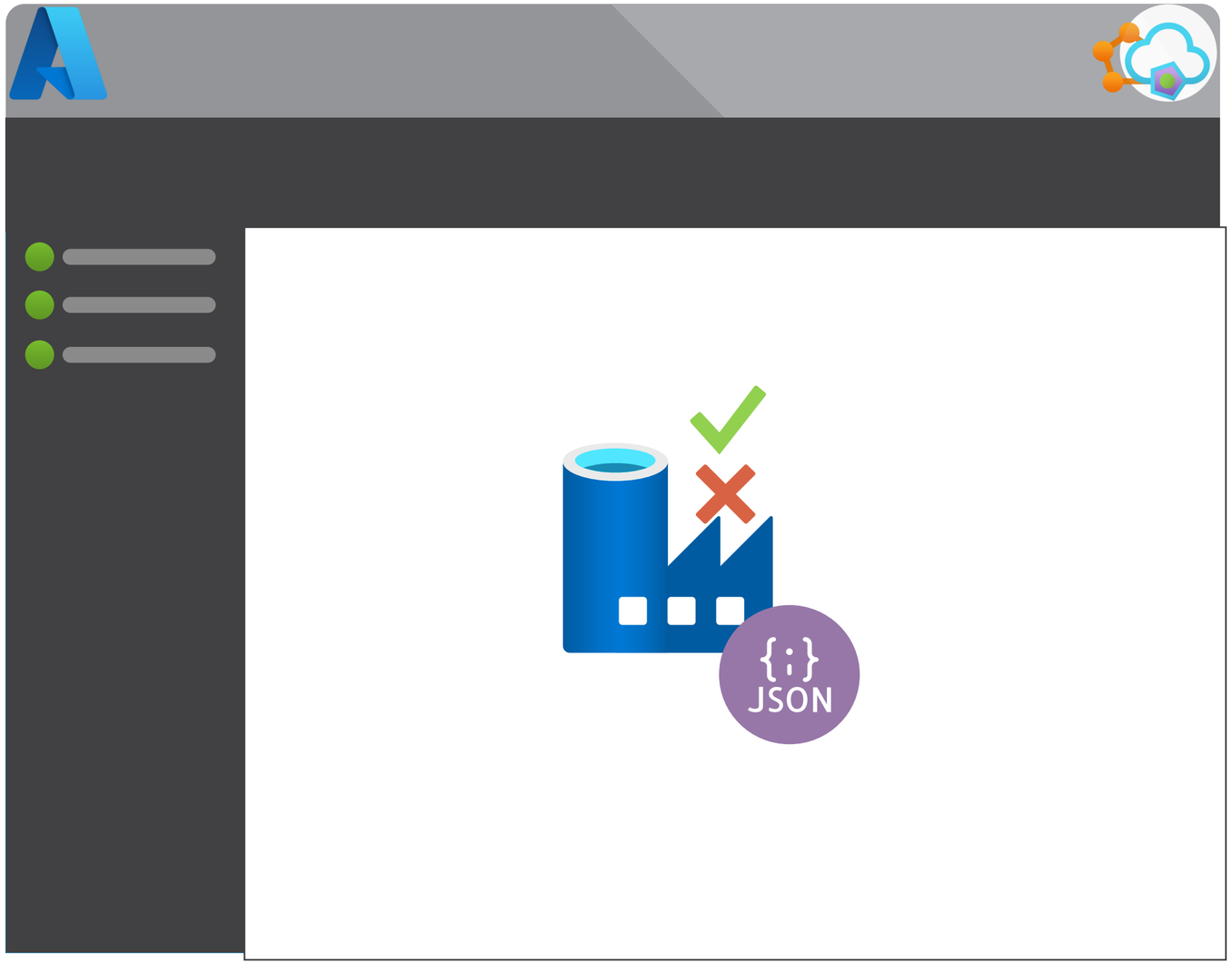
```
BEGIN --get ready

   SELECT
        [Contents]
   FROM
        [Training]
   WHERE
        [Module] = '10';
```

- Development Time Validation
- Test Coverage
- NUnit Tests

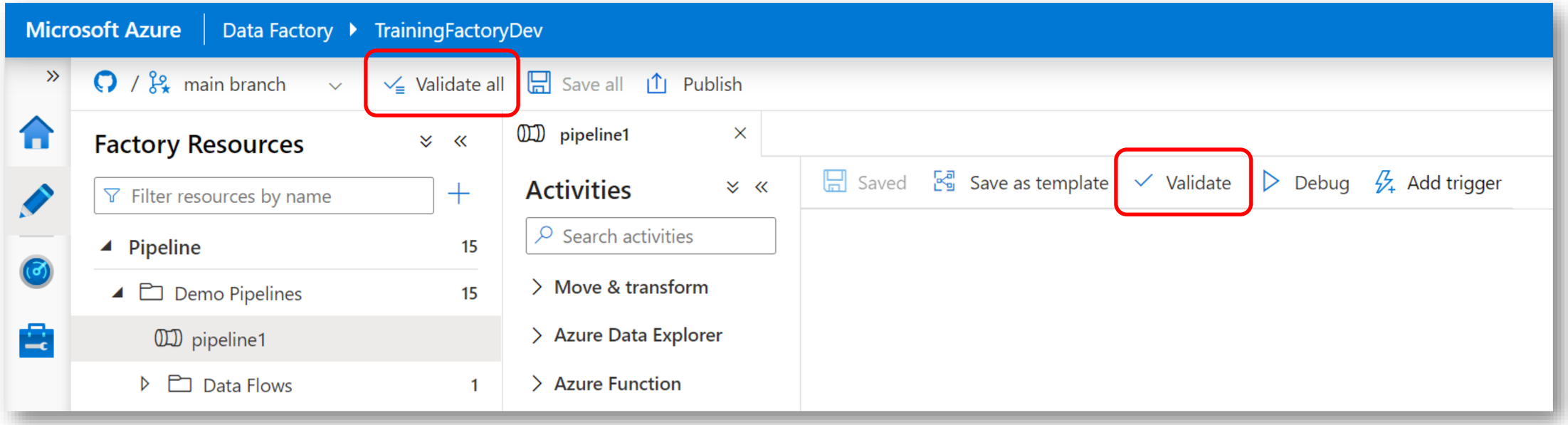
Module 10

Testing



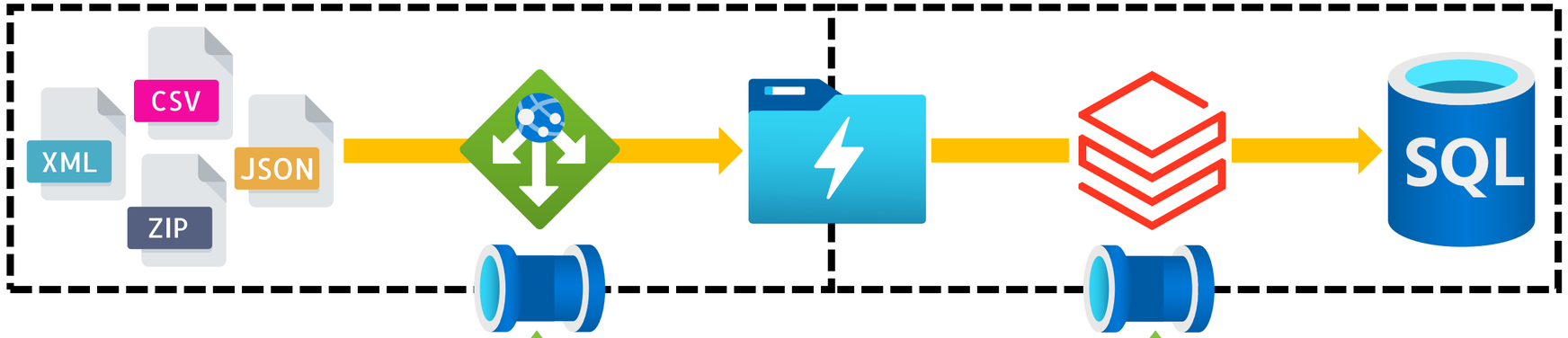
- Development Time Validation
- Test Coverage
- NUnit Tests

Development Time Validation



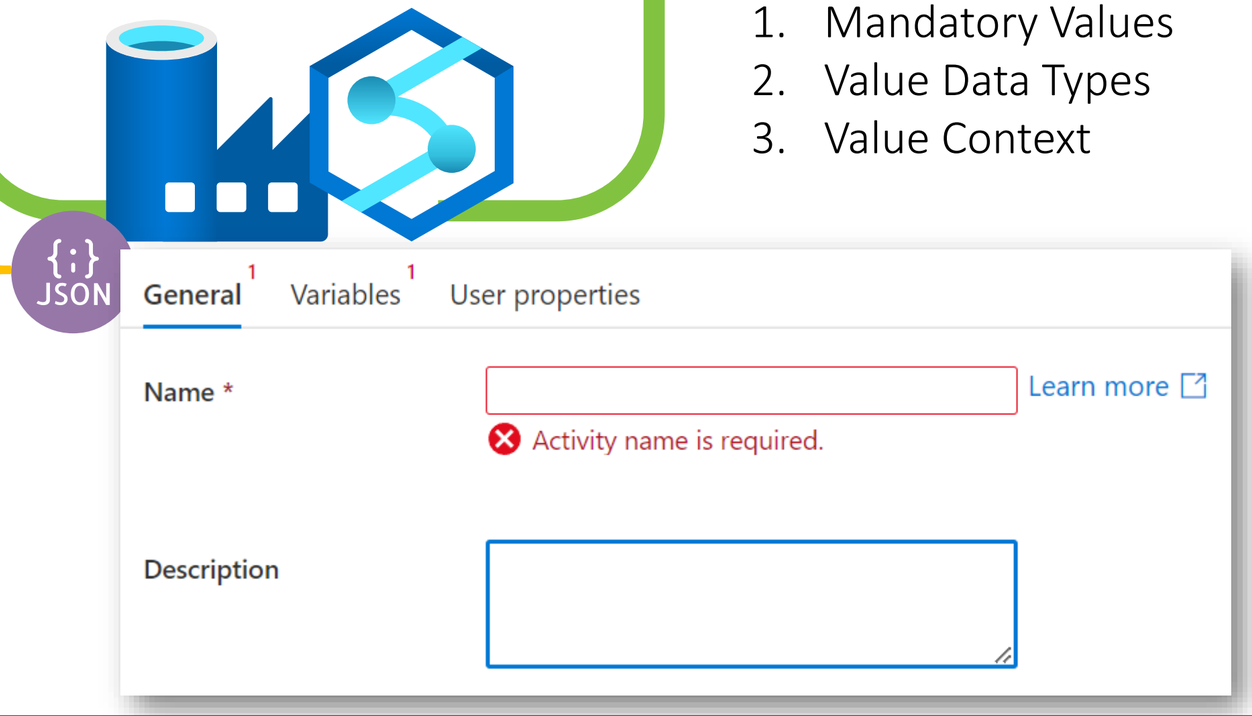
Integration Pipelines Validation

What is Data Factory actually checking for?



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

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



Integration Pipelines Validation

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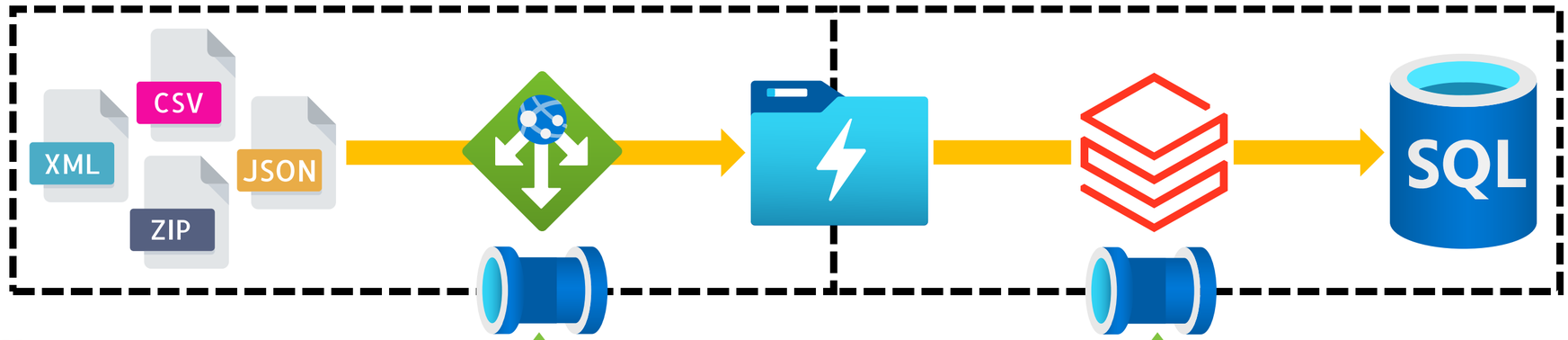
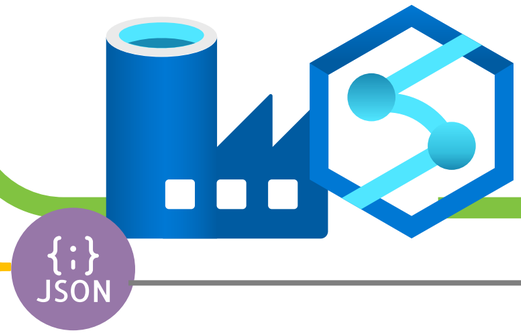
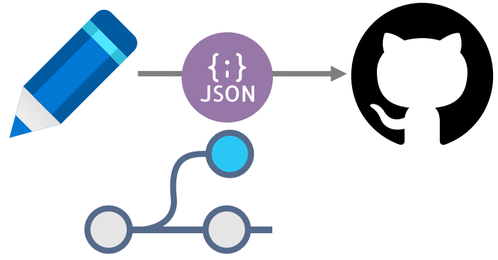
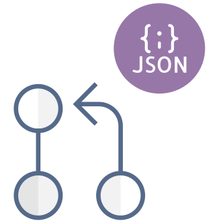


1. Linked Services
2. Datasets
3. Activities
4. Pipelines
5. Triggers





Feature Branch

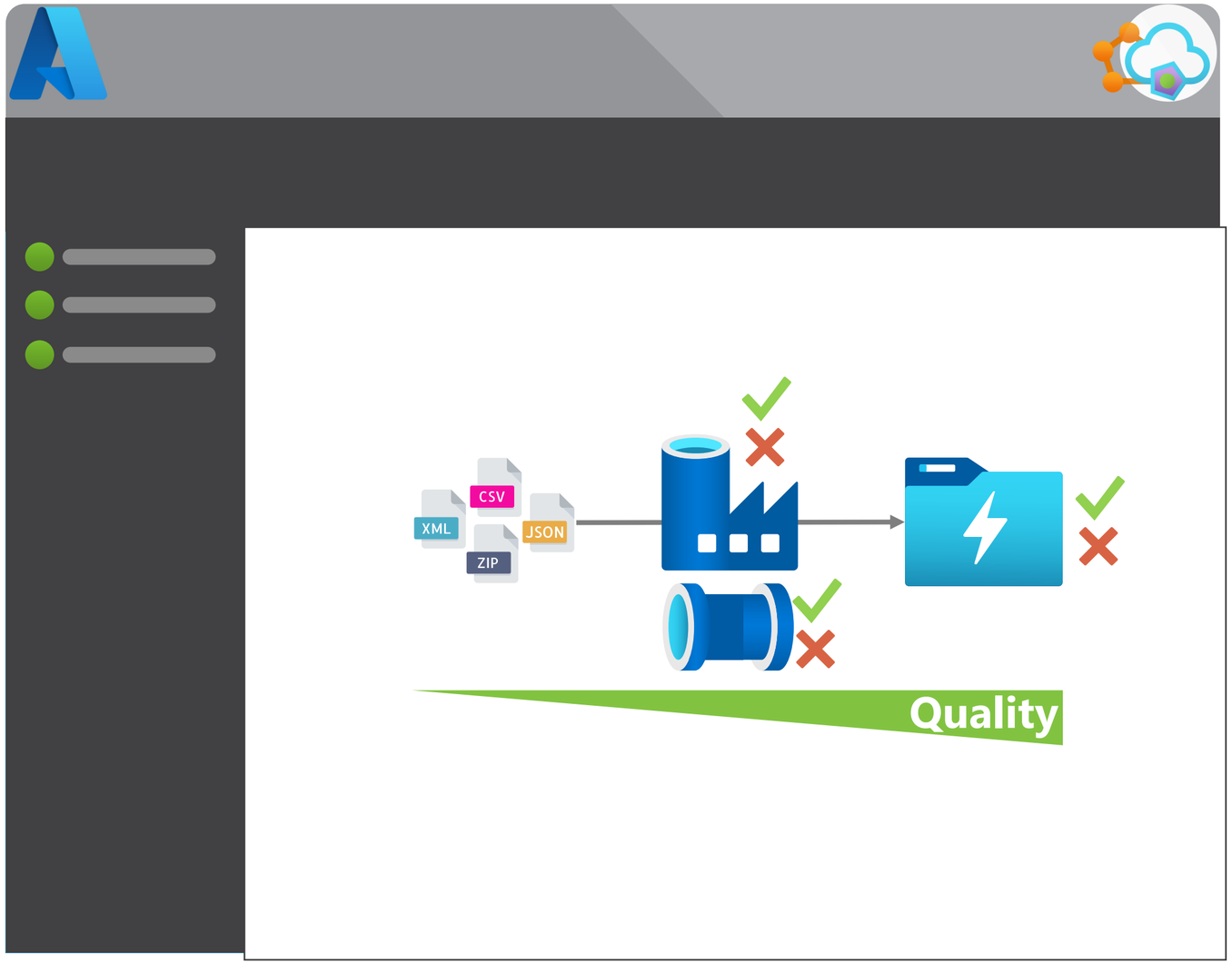


Pull Request

Demo

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?

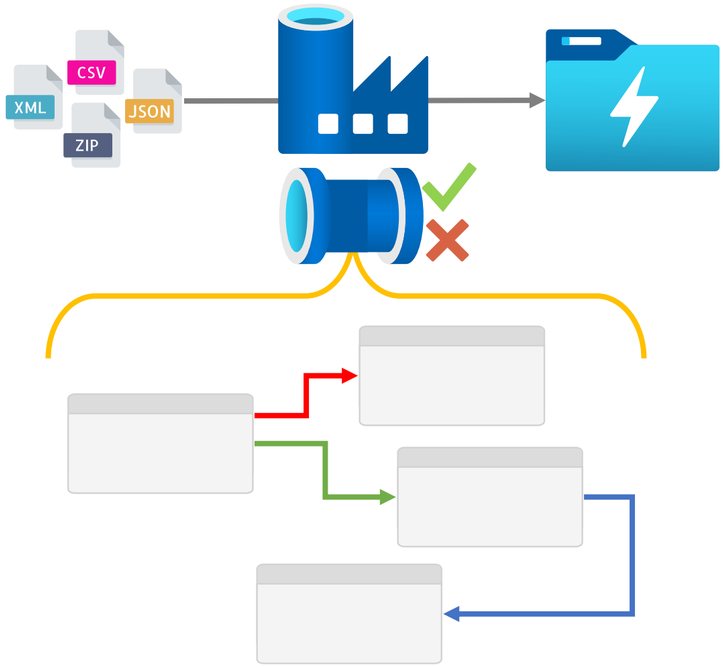
Source: Richard Swinbank richardswinbank.net

Types of Testing

What do they mean in our pipelines?

Integration Tests

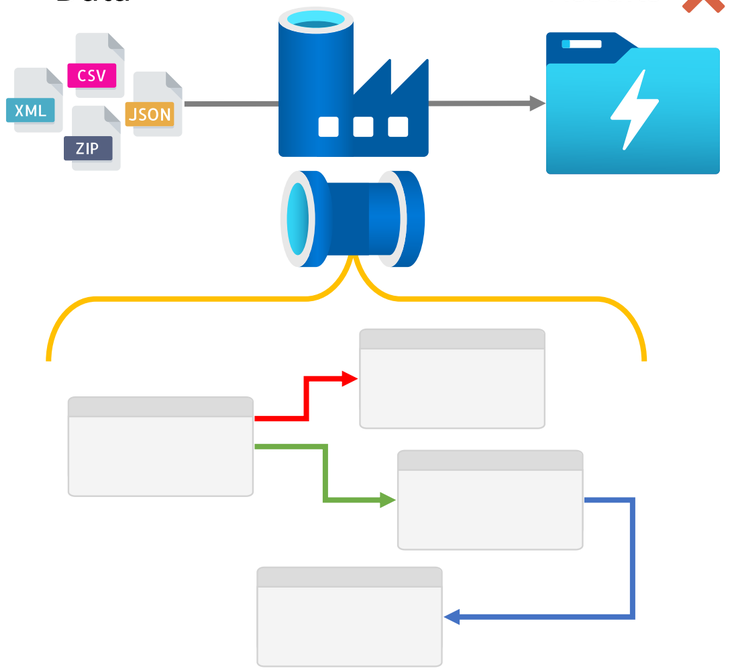
Simple Run Outcome



Functional Tests

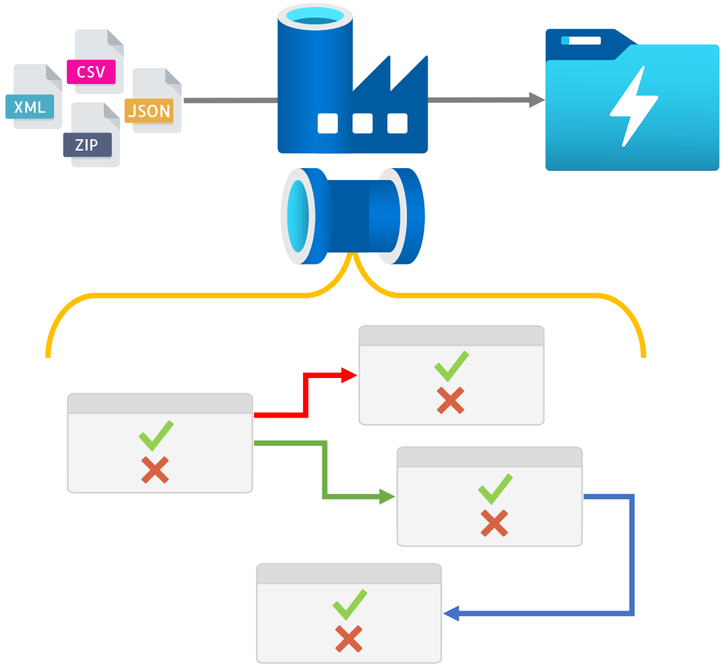
Sample Data

Specific Results



Unit Tests

Sample Data

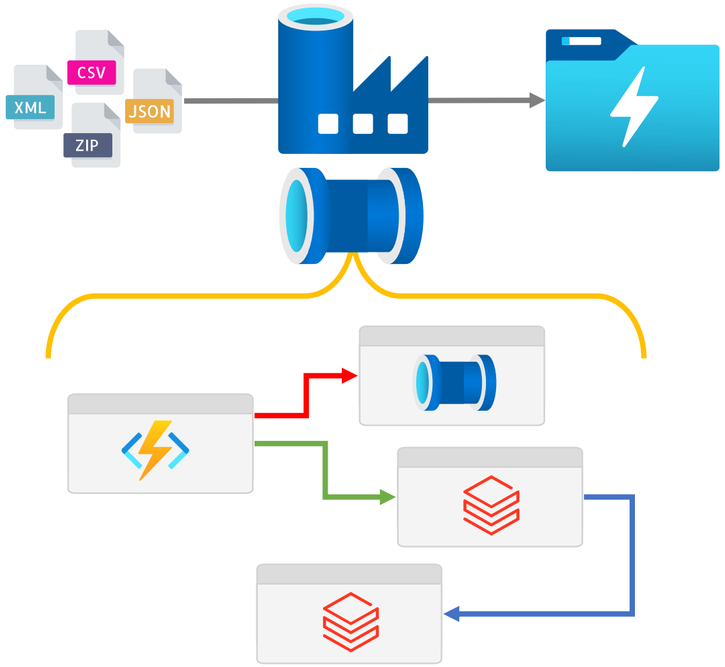


Specific Activity Inputs & Outputs

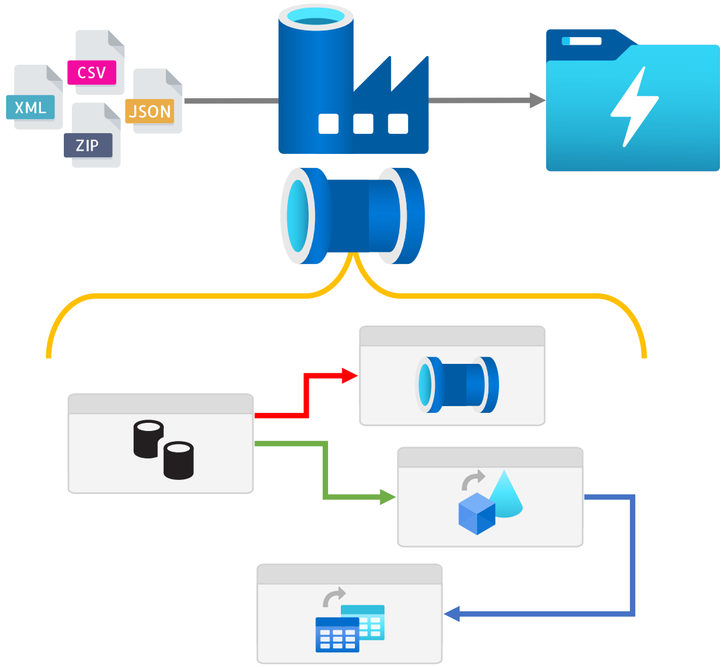
Types of Testing

Does it depend on external resources?

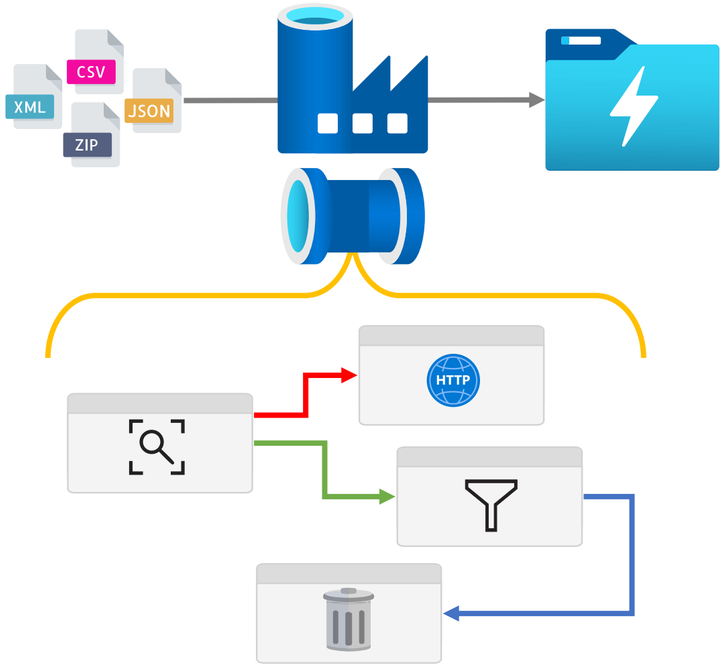
Integration Tests



Functional Tests



Unit Tests

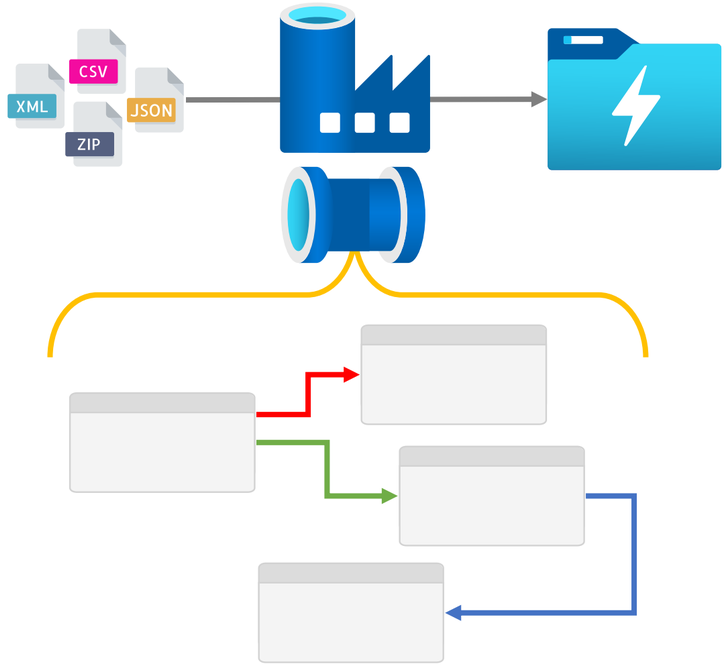


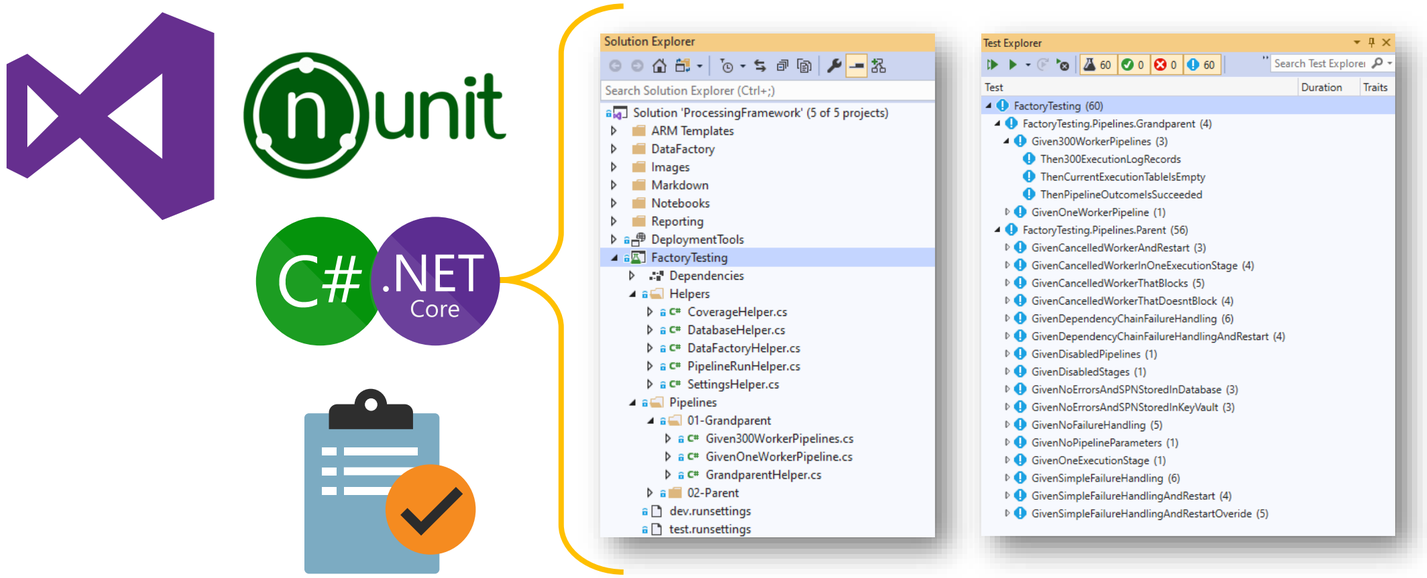
Module 10

Testing

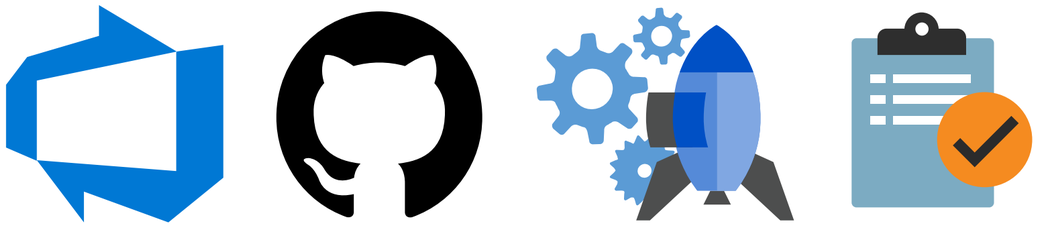
- Development Time Validation
- Test Coverage
- NUnit Tests

How To Run & Automate Tests



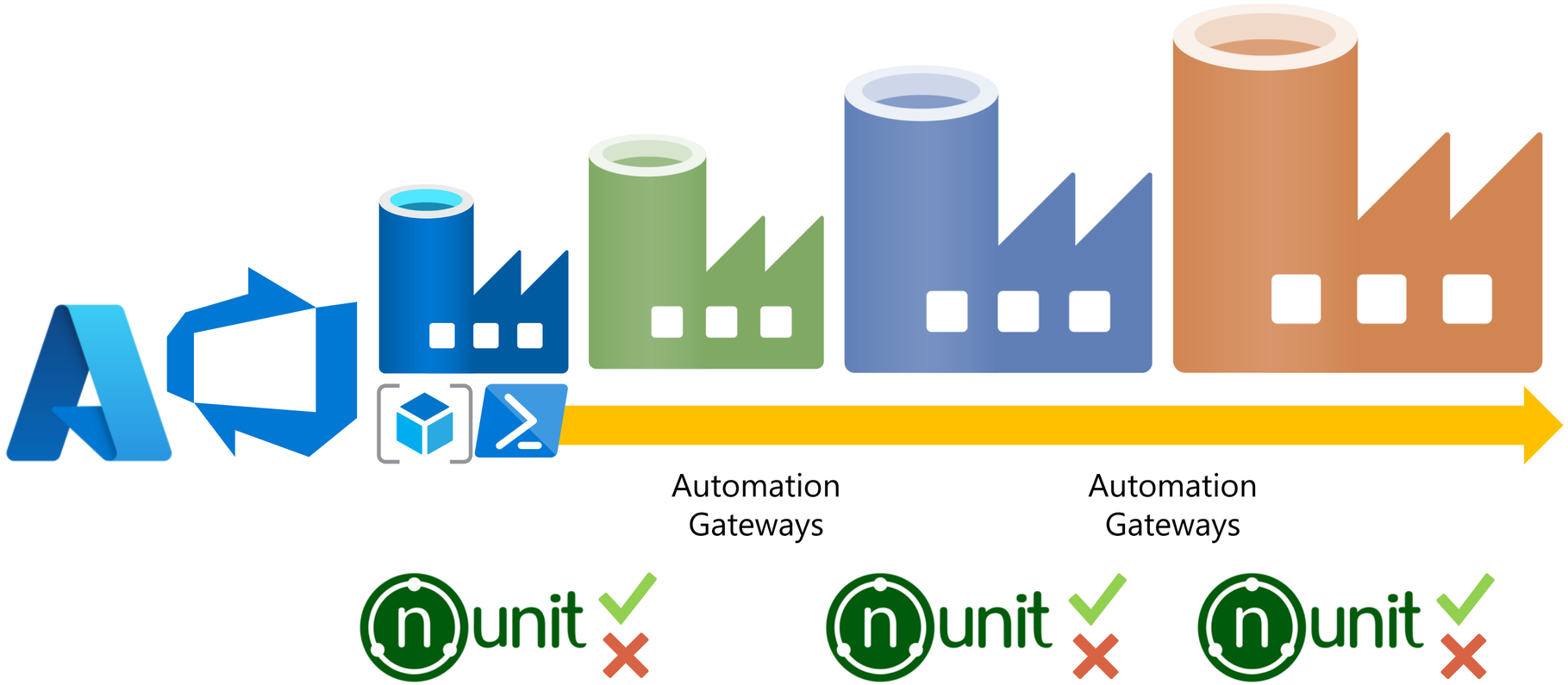


github.com/richardswinbank/community/tree/main/adf-testing-series



Testing Code vs Actual Code

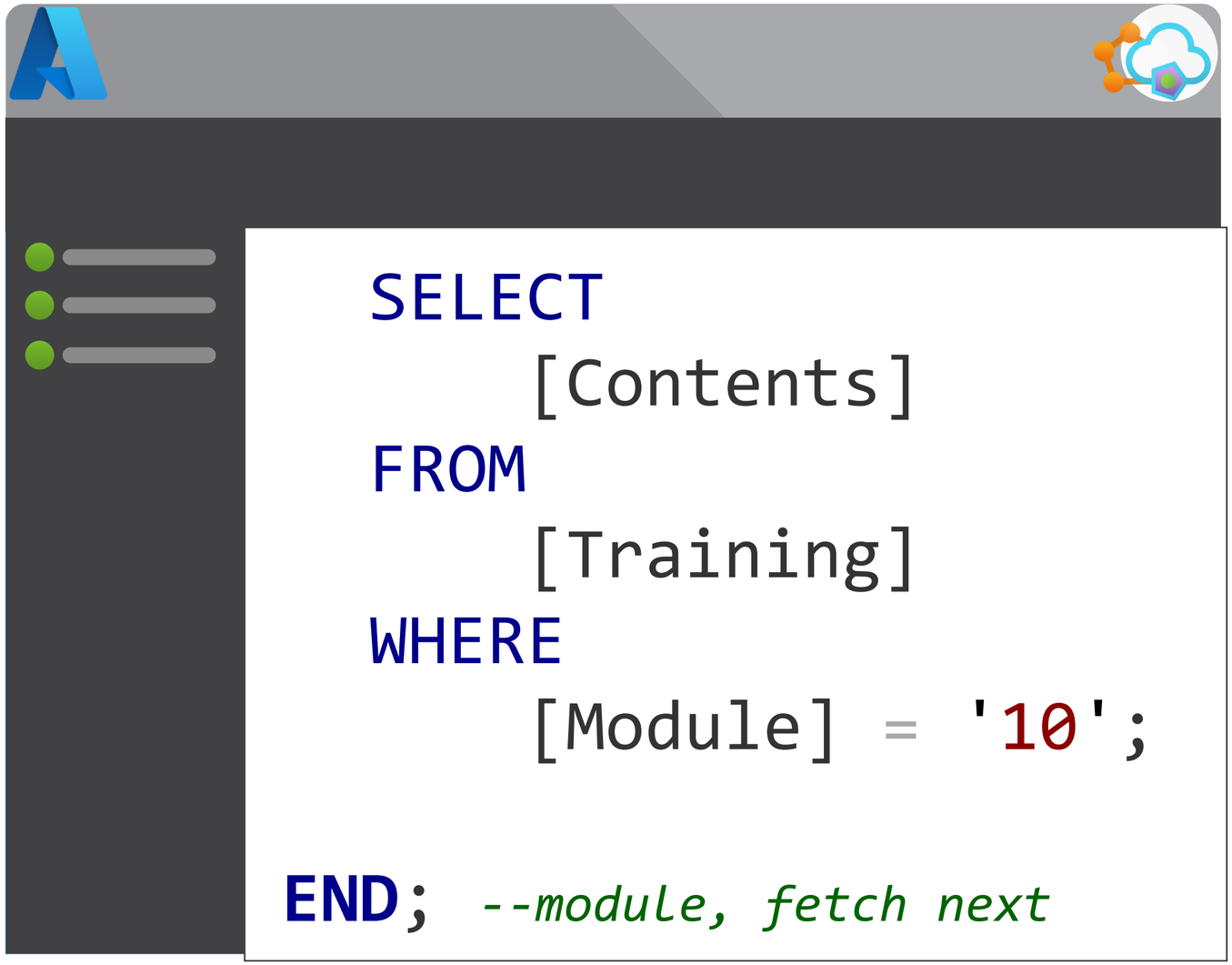
Data Factory – Chicken vs Egg



- Should automate this?
- When should testing scripts run?
- What if a test case fails?

Module 10

Testing



```
    SELECT
        [Contents]
    FROM
        [Training]
    WHERE
        [Module] = '10';

END; --module, fetch next
```

- Development Time Validation
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