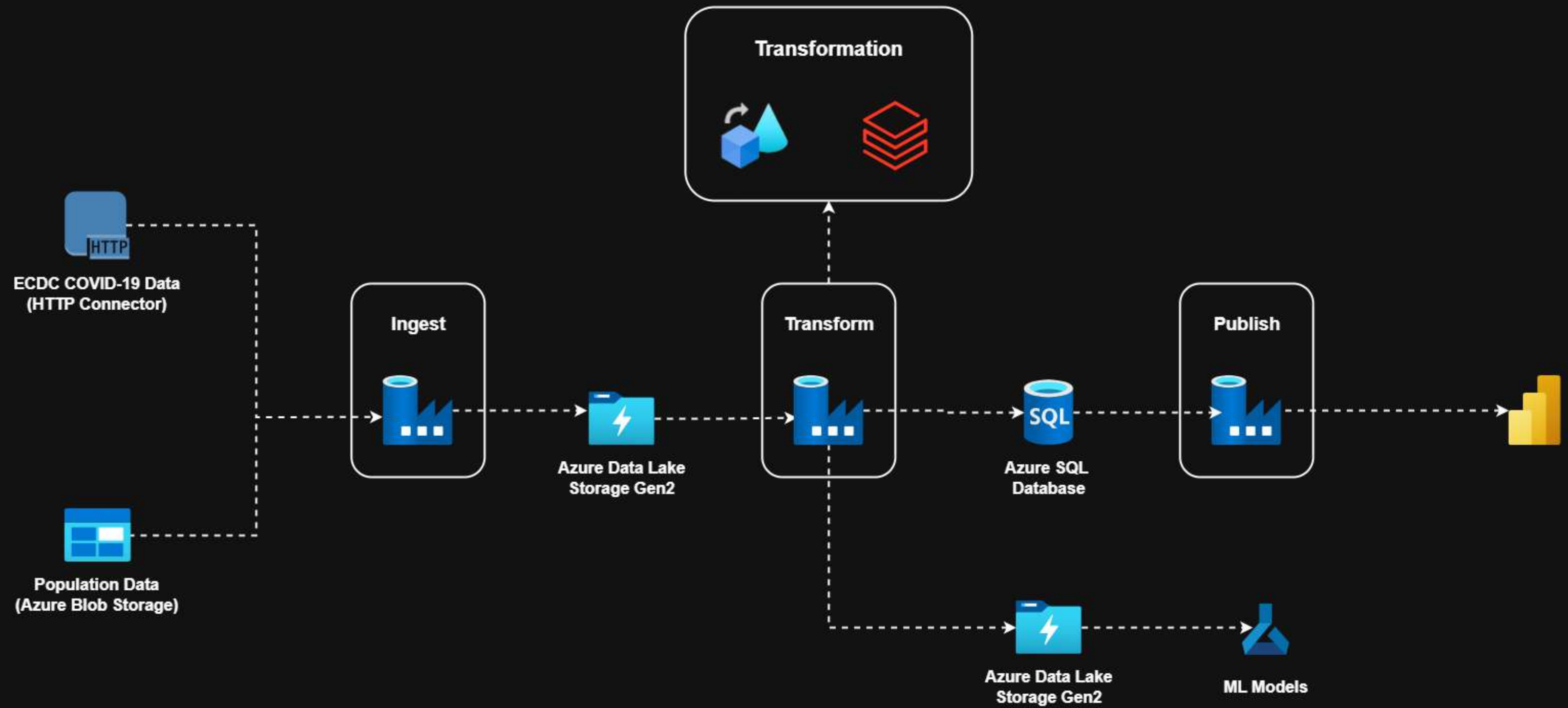


# Covid 19 Project Solution Architecture



Microsoft Azure

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Factory Resources

Filter resources by name

Pipelines10

pl\_execute\_population\_pipelines

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Trigger (1)

Lookup

Lookup ECDC File List

ForEach

Execute Copy for Each File

Activities

Copy ECDC Data

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pl\_ingest\_ecdc\_data

pl\_ingest\_populati...

Validate

Debug

Add trigger

Validation

Check if the file exists

Get Metadata

Get File Metadata

If Condition

If Column Count Matches

True

Copy Populatio...

Delete Source File

+

False

Column Match...

+

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pl\_ingest\_populatio...

pl\_processed\_case... x

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Trigger (1)

Data flow debug

Data flow

df\_transform\_cases deaths

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pl\_ingest\_ecdc\_data

pl\_ingest\_populatio...

pl\_processed\_cases...

df\_transform\_cases\_... x

Validate

Data flow debug

CasesAndDeathSource

Import data from ds\_raw\_cases\_and\_deaths

FilterEuropeOnly

Filtering rows using expressions on columns 'continent, country\_code'

SelectOnlyRequiredField

Renaming FilterEuropeOnly to SelectOnlyRequiredField with columns 'country, country\_code, population, ...'

PivotCounts

Pivots row values into columns, groups columns and aggregates data

LookupCountry

Lookup on 'PivotCounts' from 'CountryLookup'

SelectForSink

Renaming LookupCountry to SelectForSink with columns 'country, country\_code\_2\_digit, country\_code\_3\_digit, ...'

CasesAndDeathSink

Export data to ds\_processed\_cases\_and\_deaths

CountryLookup

Import data from ds\_country\_lookup

Add Source

Parameters

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pl\_processed\_cases...

df\_transform\_cases\_...

pl\_processed\_hosp...

Validate

Debug

Trigger (1)

Data flow debug

Data flow

df\_transform\_hospi tal admissions

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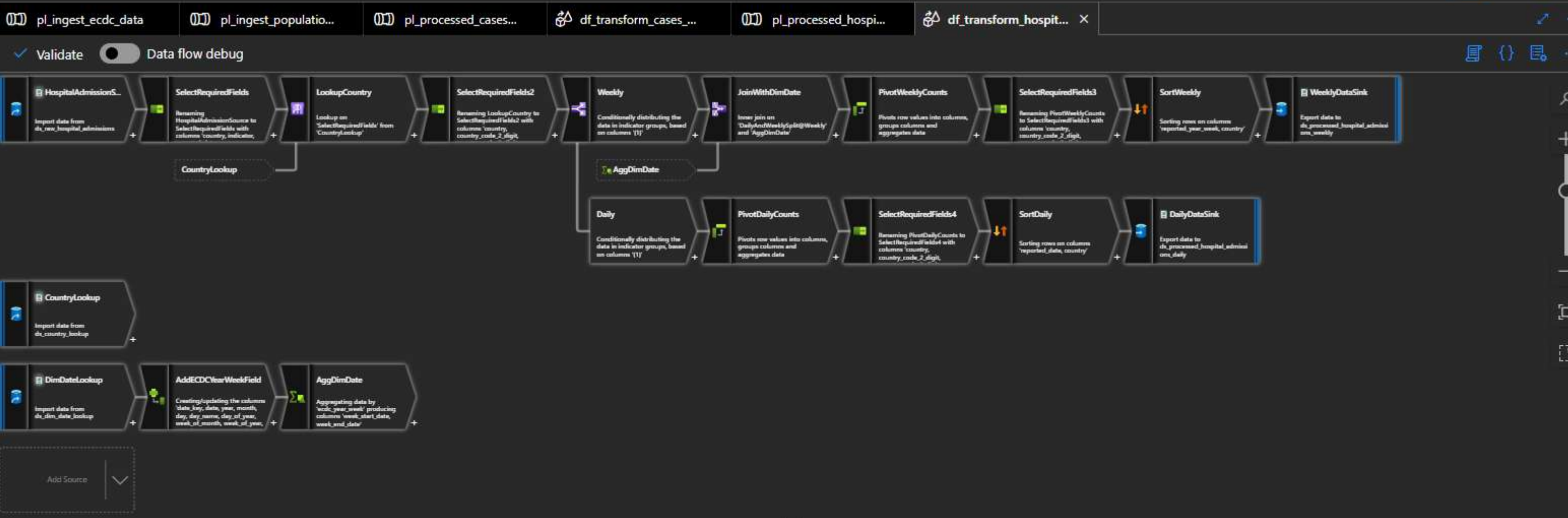
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pl\_ingest\_populatio...

pl\_processed\_cases...

df\_transform\_cases\_...

pl\_processed\_hospi...

df\_transform\_hospita...

pl\_processed\_testi...

Validate

Debug

Trigger (1)

Notebook

ExceuteTestingData Transformation

Parameters

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pl\_ingest\_populatio...

pl\_processed\_cases...

df\_transform\_cases\_...

pl\_processed\_hospi...

df\_transform\_hospita...

pl\_processed\_testin...

pl\_processed\_pop...

Validate

Debug

Add trigger

Notebook

ExceutePopulation DataTransformation

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pl\_processed\_cases...

df\_transform\_cases\_...

pl\_processed\_hospi...

df\_transform\_hospita...

pl\_processed\_testin...

pl\_processed\_popu...

pl\_sql\_cases\_and\_d...

Validate

Debug

Trigger (1)

Copy data

CopyCasesAndDeat

hs

Parameters

Variables

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Trigger (1)

Copy data

CopyHospitalAdmis

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Copy data

CopyTestingData

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