Model Deploy

1. Package
2. Containeriz
3. Deploy

Model Developme
includes writing the
the model, training
on pre-processed
validating its perfor
evaluating its outc
ensure it meets the
metrics.

**Feature
Engineeri**
(Extract and Select

Feature Enginee
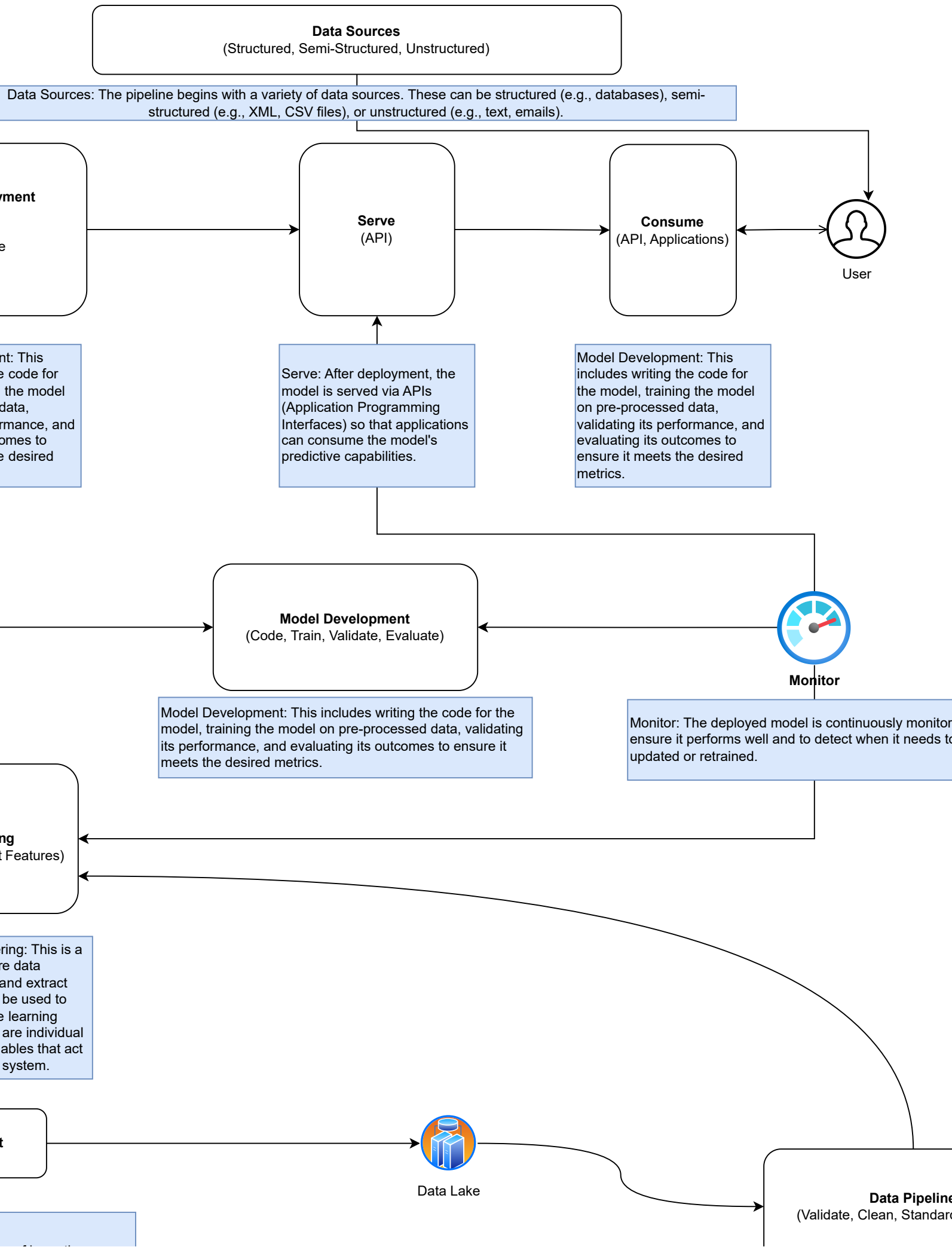crucial step wher
scientists select
features that will
train the machine
model. Features
independent vari
like input in your

Ingest

Ingest:

Data Science Workflow

Data Sources
(Structured, Semi-Structured, Unstructured)

Data Sources: The pipeline begins with a variety of data sources. These can be structured (e.g., databases), semi-structured (e.g., XML, CSV files), or unstructured (e.g., text, emails).

yment

e

nt: This
e code for
 the model
data,
rmance, and
omes to
e desired

Serve
(API)

Serve: After deployment, the model is served via APIs (Application Programming Interfaces) so that applications can consume the model's predictive capabilities.

Consume
(API, Applications)

User

Model Development: This includes writing the code for the model, training the model on pre-processed data, validating its performance, and evaluating its outcomes to ensure it meets the desired metrics.

Model Development
(Code, Train, Validate, Evaluate)

Monitor

Model Development: This includes writing the code for the model, training the model on pre-processed data, validating its performance, and evaluating its outcomes to ensure it meets the desired metrics.

Monitor: The deployed model is continuously monitor ensure it performs well and to detect when it needs to updated or retrained.

ng
t Features)

ring: This is a
re data
and extract
 be used to
e learning
are individual
ables that act
 system.

Data Lake

Data Pipeline
(Validate, Clean, Standard

red to
o be

e
dize, Curate)

Data ingestion is the proces
transferring, loading, and pr
later use or storage in a dat
typically involves a data lak
stored in its native format.

Data Pipeline: This is a set of data
Validated data from the data lake g
standardization, and curation to pre

processing steps.
oes through cleaning,
epare it for analysis.