



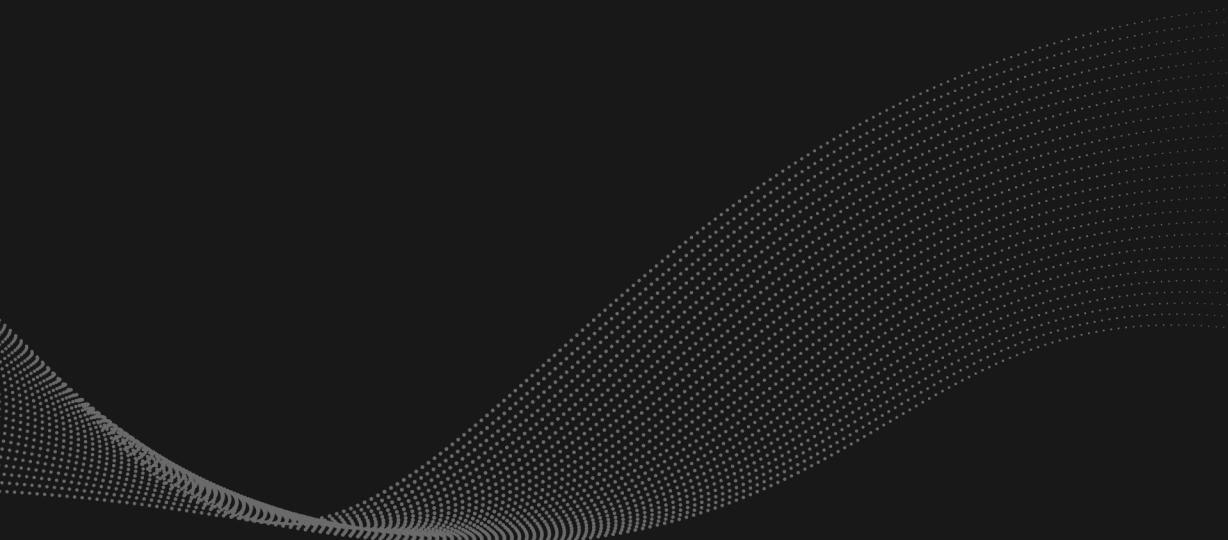
# Lab 02: ML Lifecycle Management

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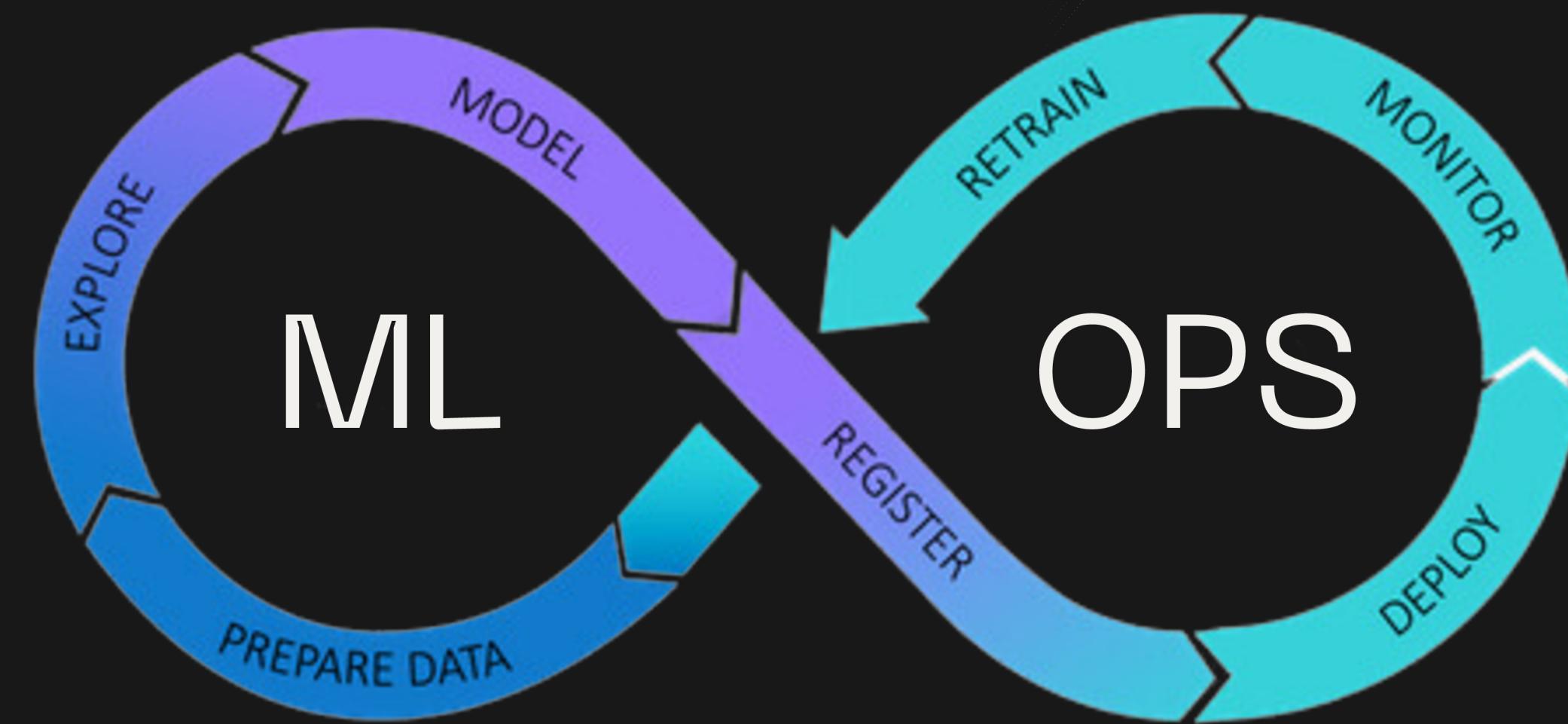
The MLOps Course

23 September 2025

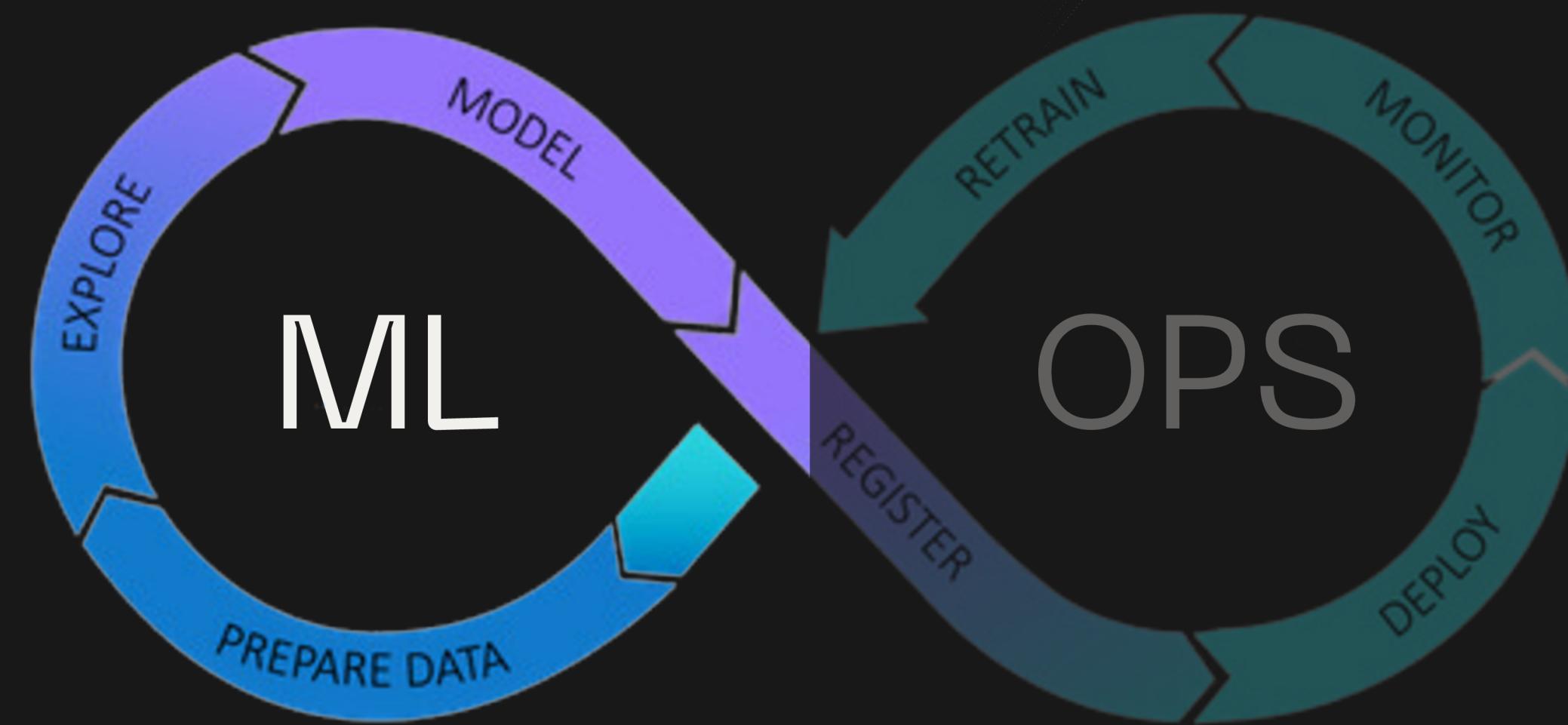
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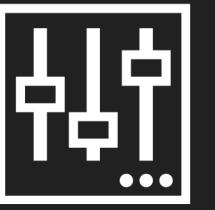
# MLOps Lifecycle



# MLOps Lifecycle



# What is MLFlow?



Tracking



Packaging

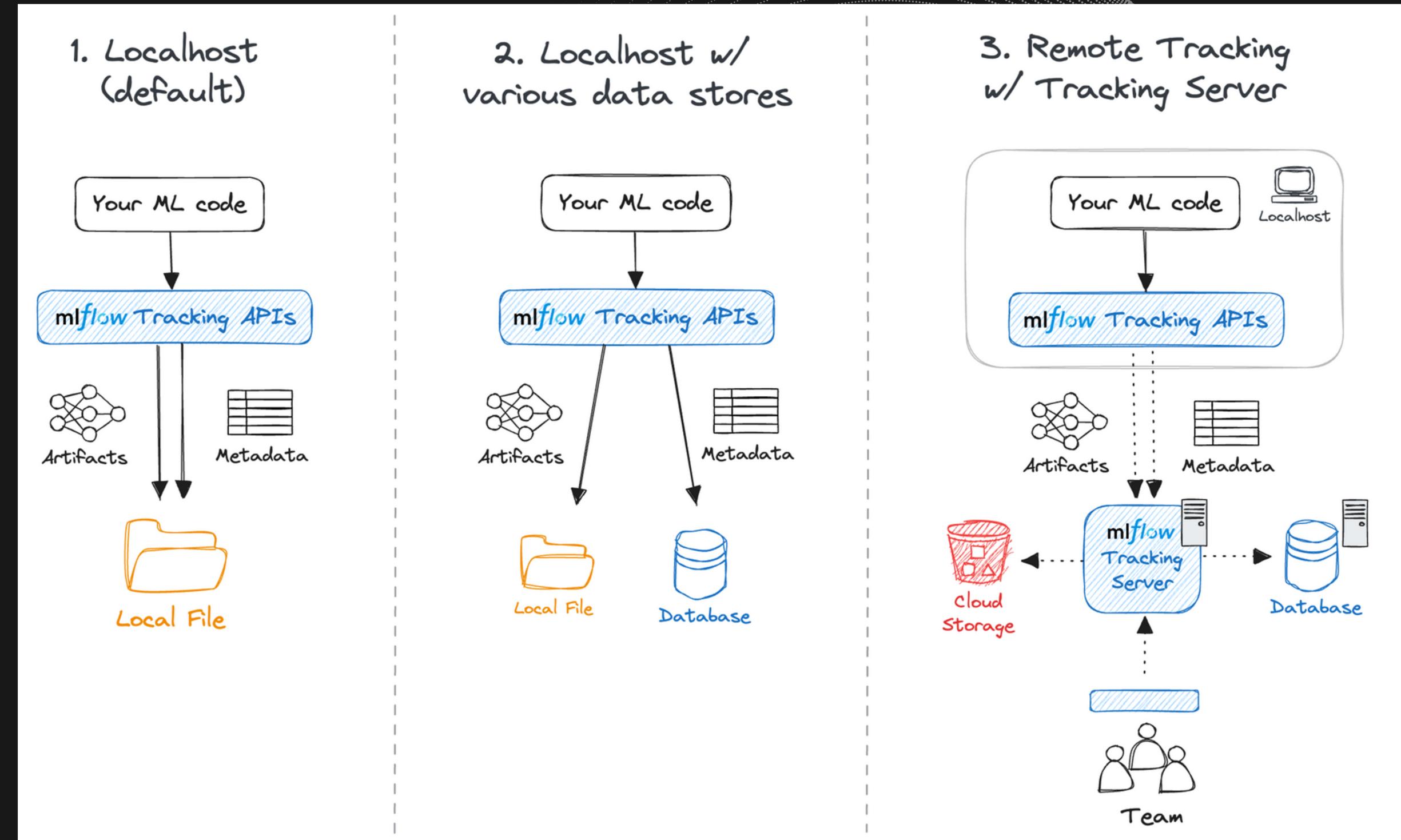


Models

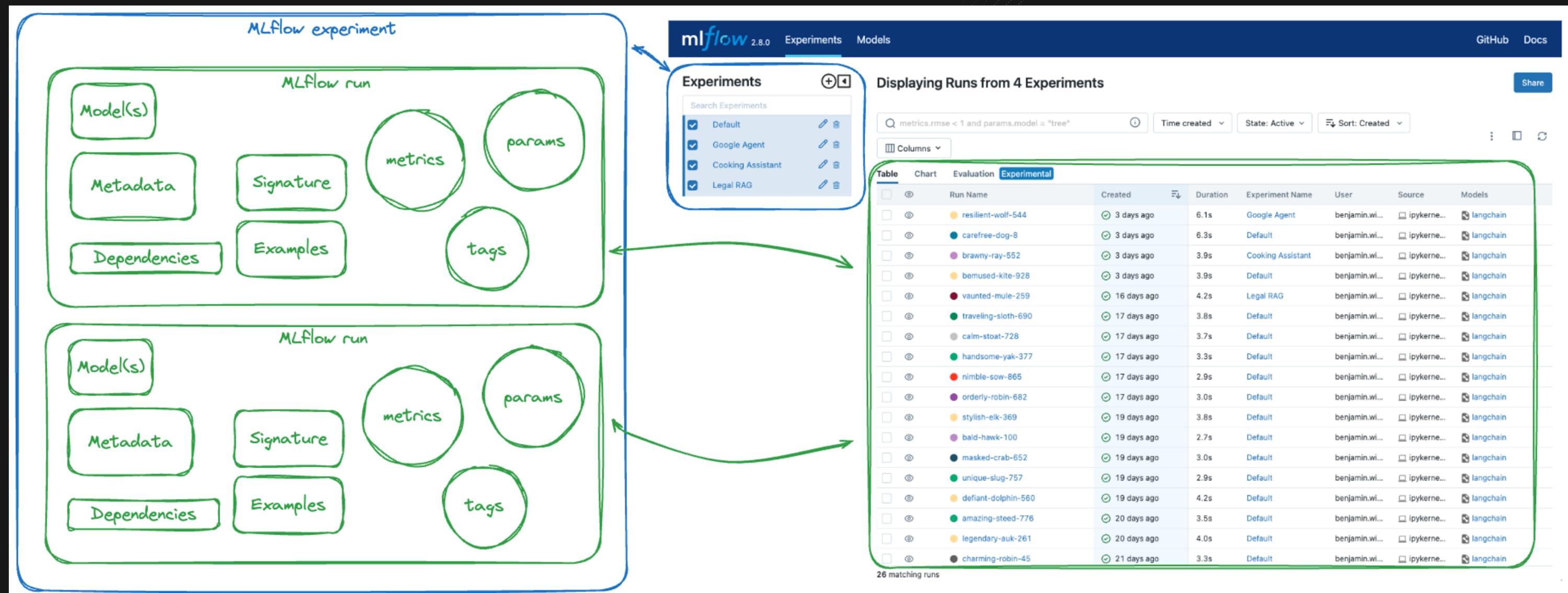


Model Registry

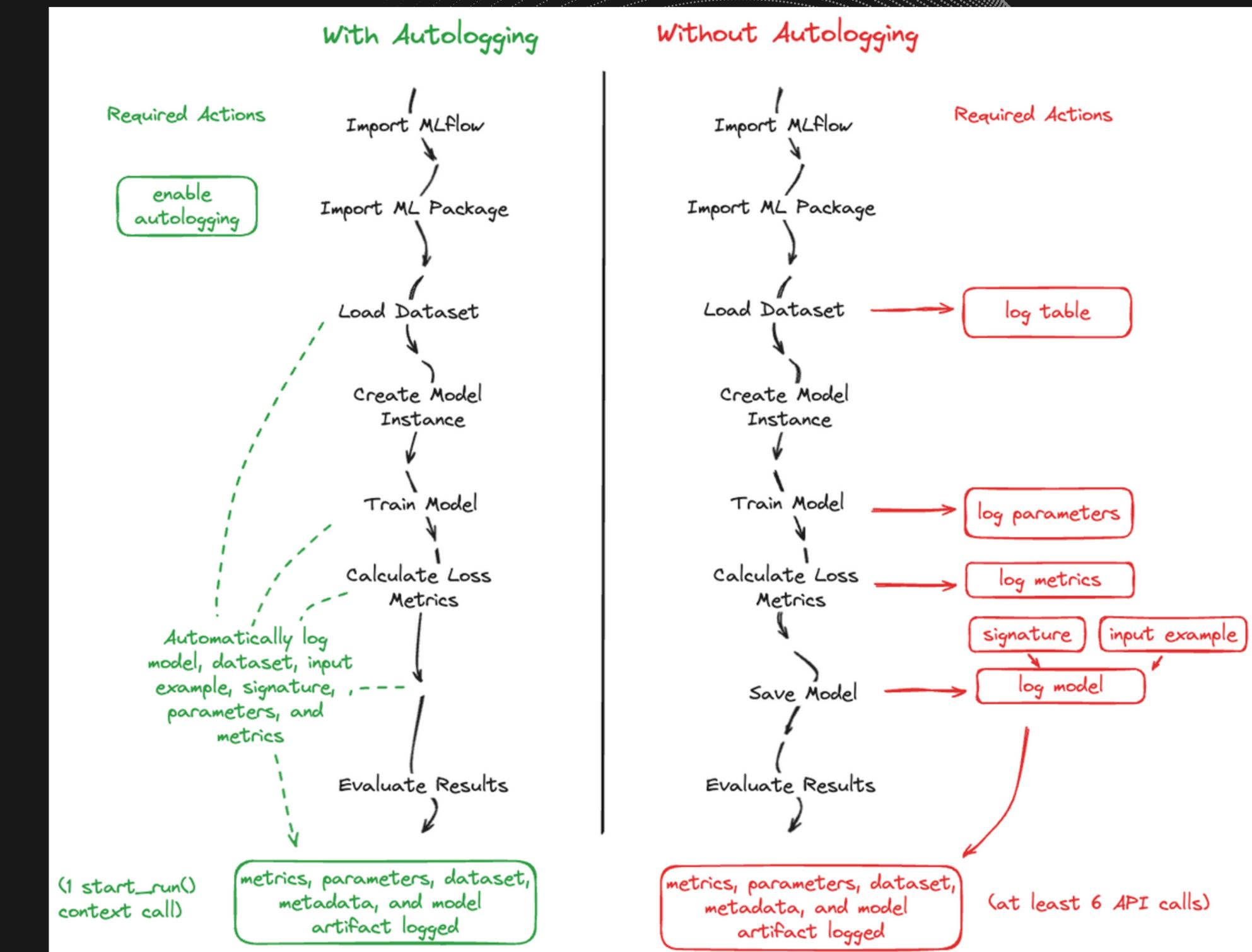
# Where does it run?



# Tracking philosophy



# With(out) autologging



# Model Registry

**Registered Models**

Create Model

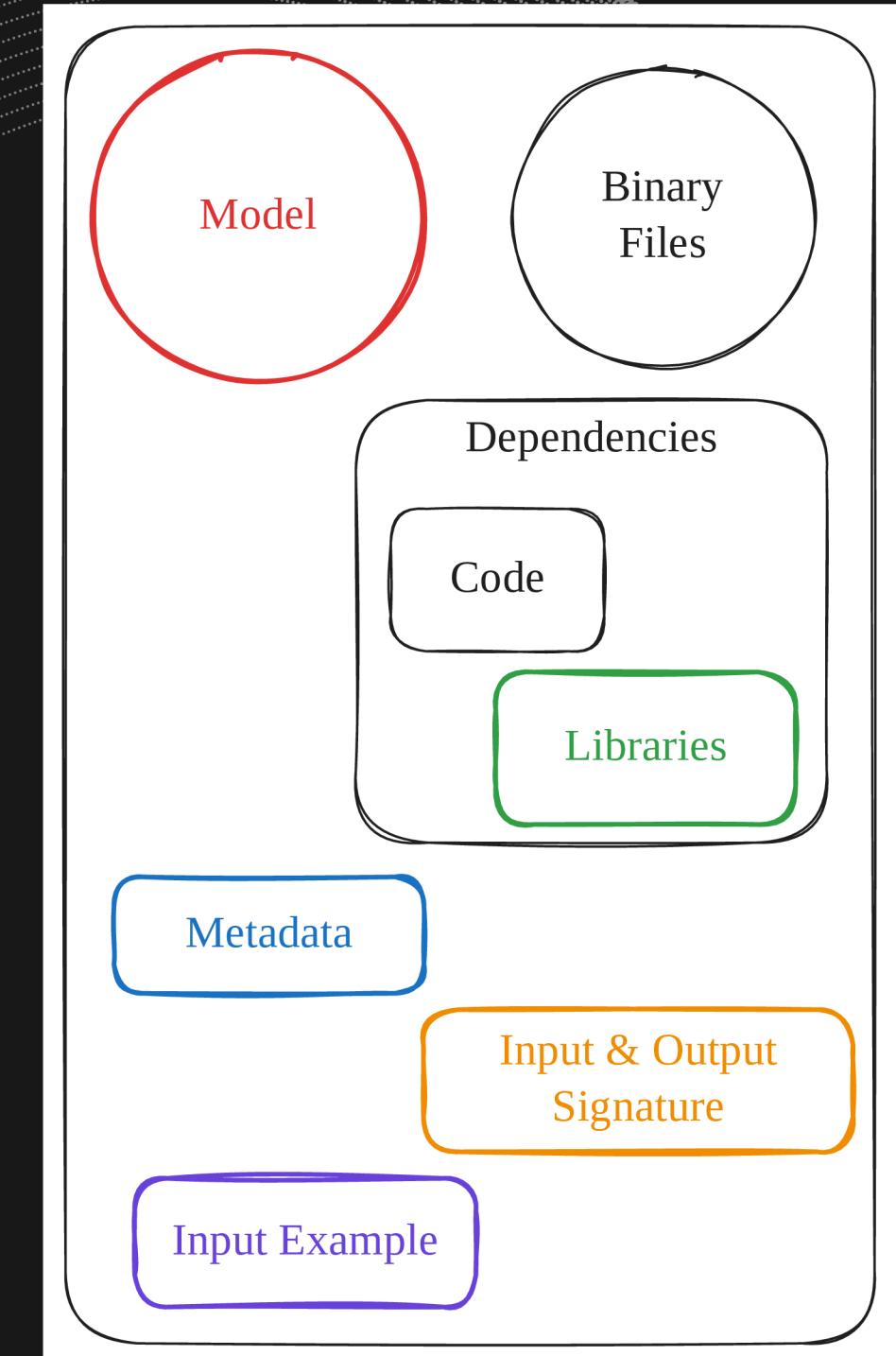
Filter registered models by name o... ⓘ Q

Name ⚡↑	Latest version	Aliased versions	Created by	Last modified	Tags
iris_model_dev	Version 17			2023-09-25 12:50:...	—
iris_model_prod	Version 11	@ champion : Version 11 +3		2023-10-26 17:10:...	—
iris_model_staging	Version 11			2023-09-25 12:46:...	—
iris_model_testing	Version 1			2023-09-27 13:17:...	—
mnist_model_dev	Version 12			2023-09-25 12:39:...	—
mnist_model_prod	Version 8	@ challenger : Version 8 +1		2024-01-19 10:35:...	—
mnist_model_staging	Version 8			2023-09-25 12:51:...	—

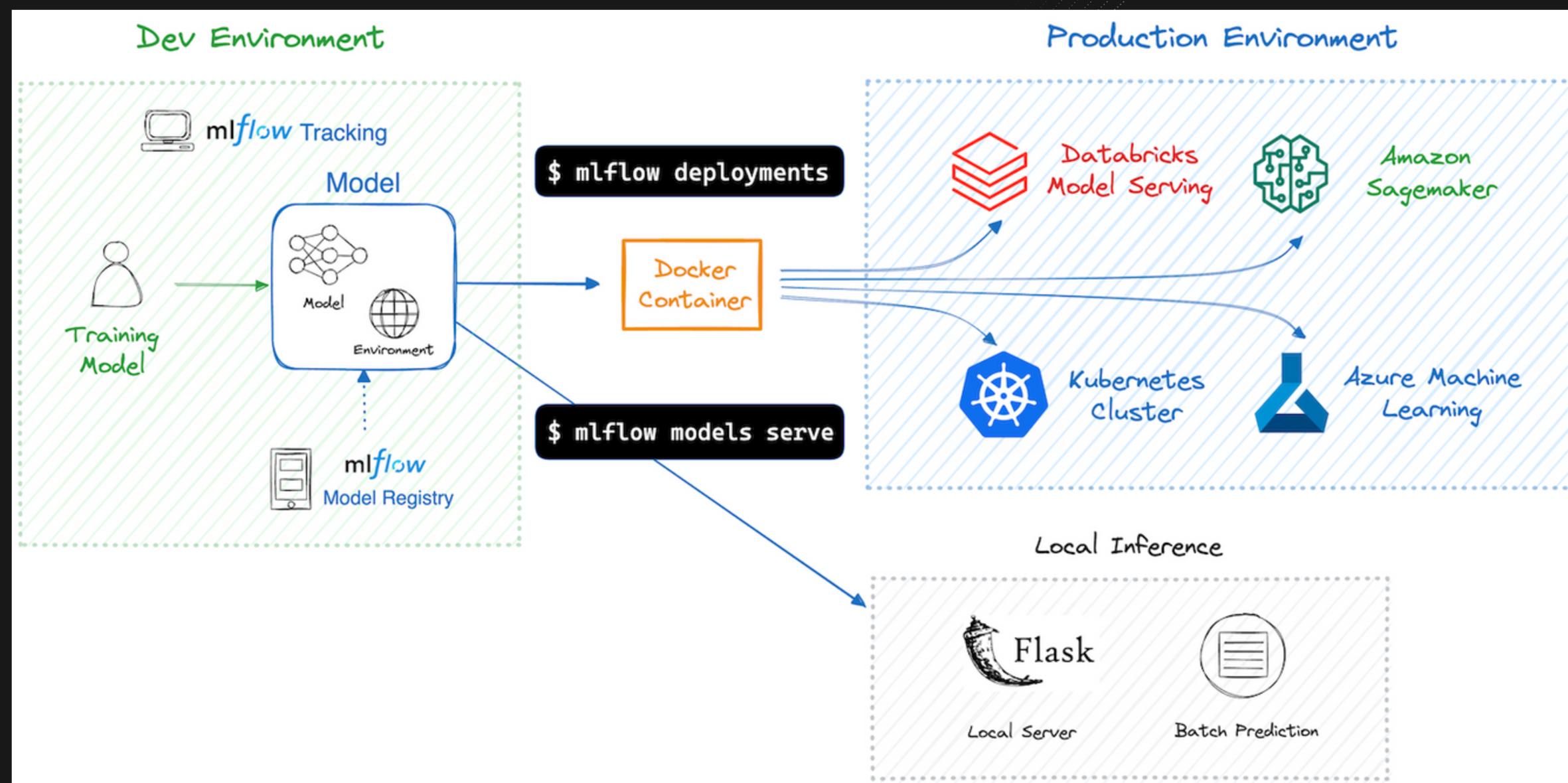
# Model format

- flavors
- environment

```
my_model/
└── MLmodel
└── model.pkl
└── conda.yaml
└── python_env.yaml
└── requirements.txt
```

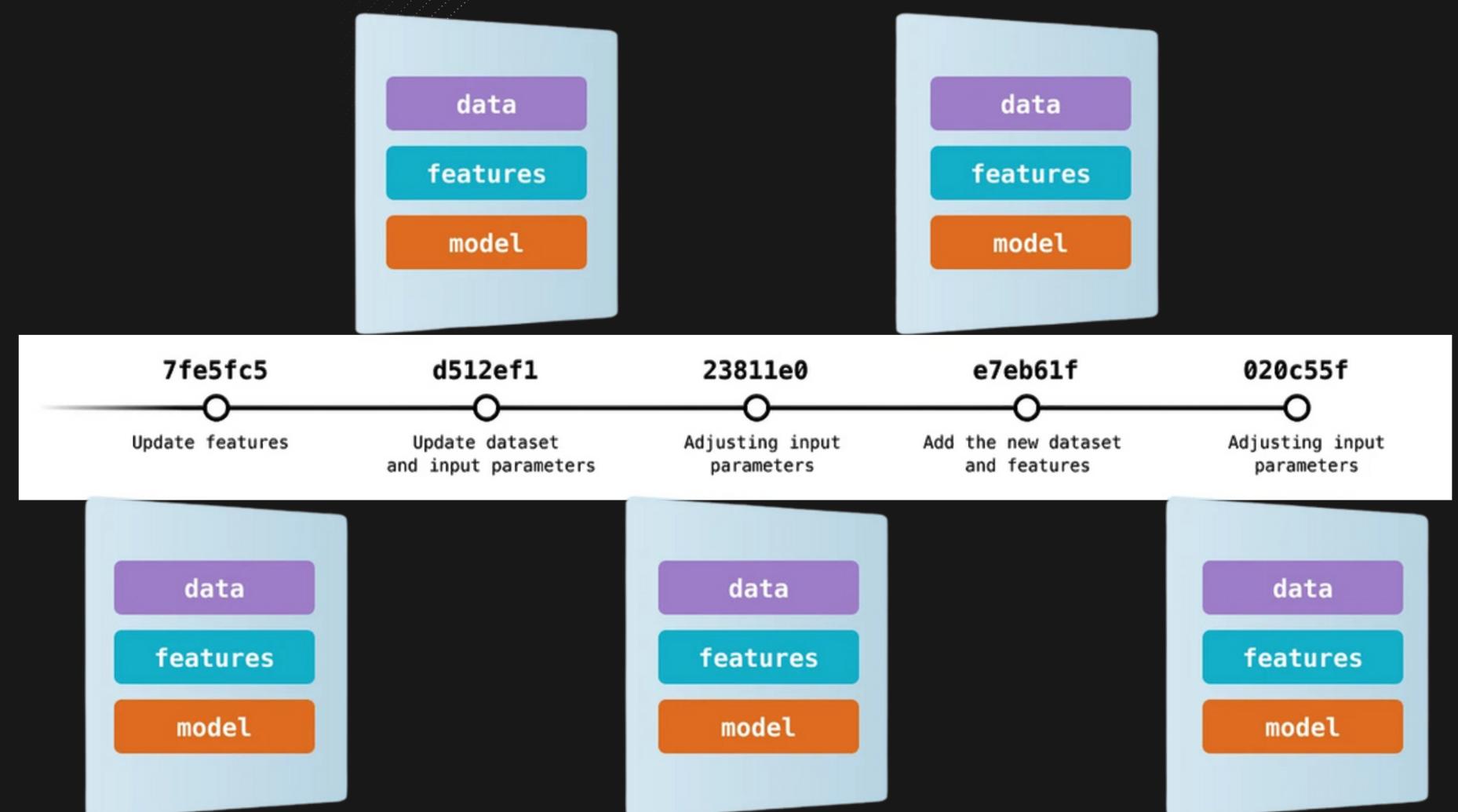


# Deployment



# What is DVC?

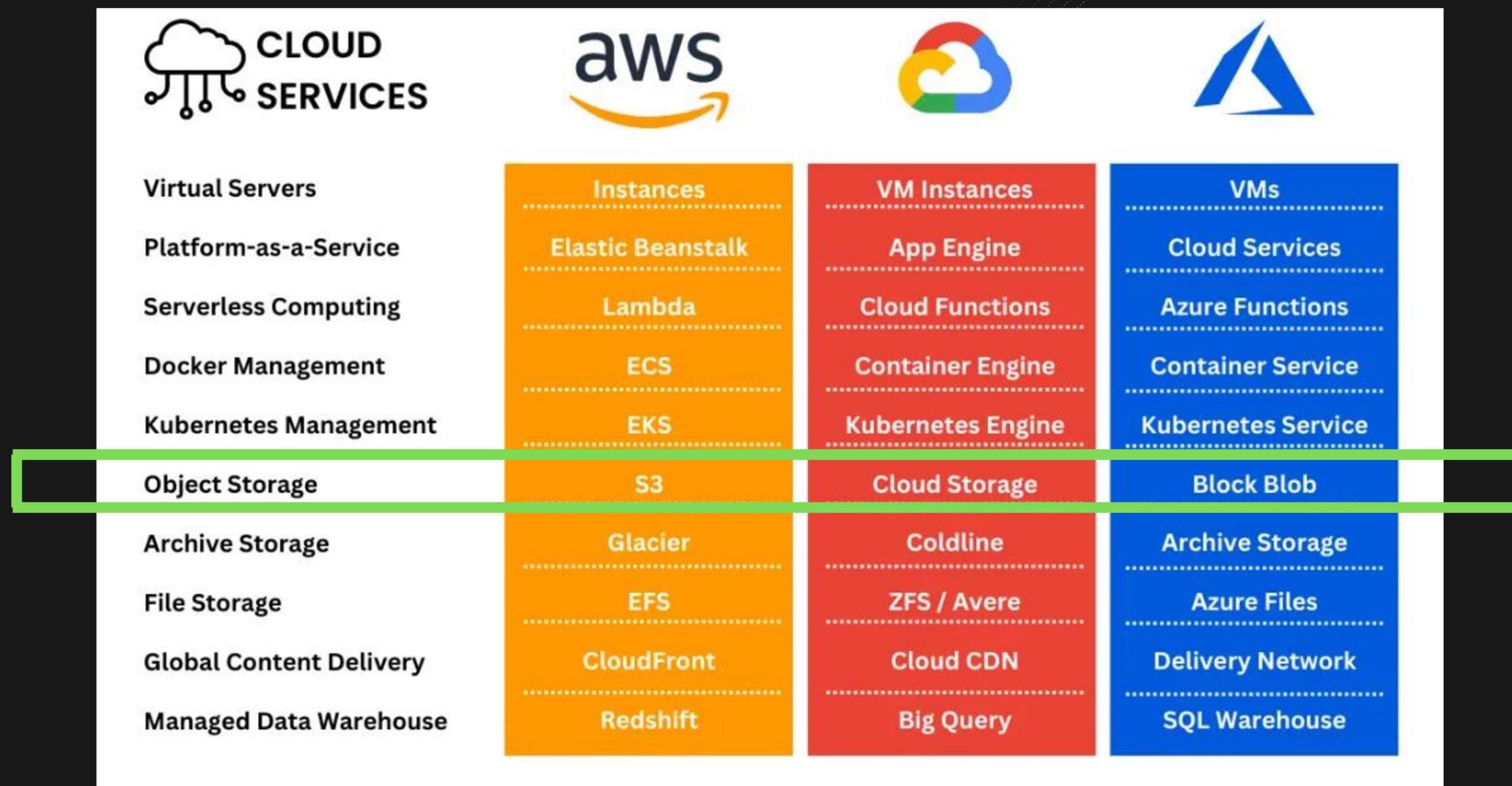
- versioning data on git
- versioning through *codification* (metafiles)
- storing on-prem or in cloud



# Why use cloud providers?

- access to resources
- flexibility, scalability

# AWS, GCP, Azure



# Machine Learning Services



Azure ML



Vertex AI



Amazon  
SageMaker

# Key Takeaways



experiment tracking  
MLflow



data version control  
DVC



remote storage  
Azure, GCP, AWS