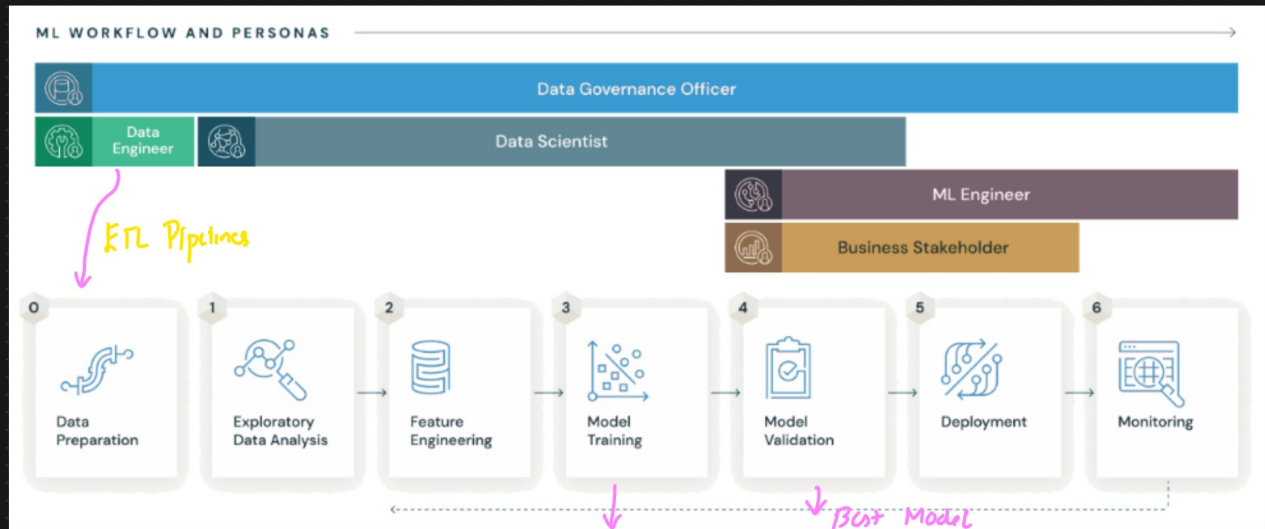


## MLFLOW

- 1) Core Components of MLFlow
- 2) Why Use MLFLOW
- 3) Who Uses MLFlow
- 4) Usecase of MLFlow

### lifecycle of DS Project



MLFLOW → Accuracy, Error, Training, Tilt,

Data Scientist Leverage MLFLOW for:

↓  
UI ← Best Model → Deploy.

- 1) Experiment tracking and hypothesis Testing
- 2) Code structuring
- 3) Model packaging and dependency management.
- 4) Evaluating hyperparameter tuning

Setup.py ⇒ package

→ Train Model → parameters

↳ Tracks Hyperparameter Tuning

↳ Visualization Graphs.

- 5) Compare the results of Models retraining over time.

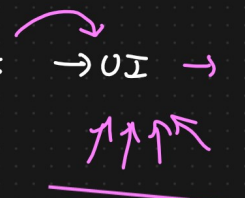
### Mlops Professional

- 1) Manage the lifecycle of trained models, both pre and post deployment.
- 2) Deploy models securely to the production environment
- 3) Manage deployment dependencies.

## Prompt Engineering Users

- 1) Evaluate And Experiment with large language models
- 2) Create custom prompts and experiment.
- 3) Deciding on the best base model suitable for project Requirement.

## Use Cases

- 1) Experiment Tracking → Track parameters And metrics → UI →
  - 2) Model Selection And Deployment
  - 3) Model performance monitoring.
  - 4) Collaborative Project.
- 
- ```
graph LR; A[Experiment Tracking] --> B[Track parameters And metrics]; B --> C[UI]; C --> D[Model Selection And Deployment]; C --> E[Model performance monitoring]; C --> F[Collaborative Project];
```