

# CI/CD Pipelines

## Instructor

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MLOps Engineer at Typewise

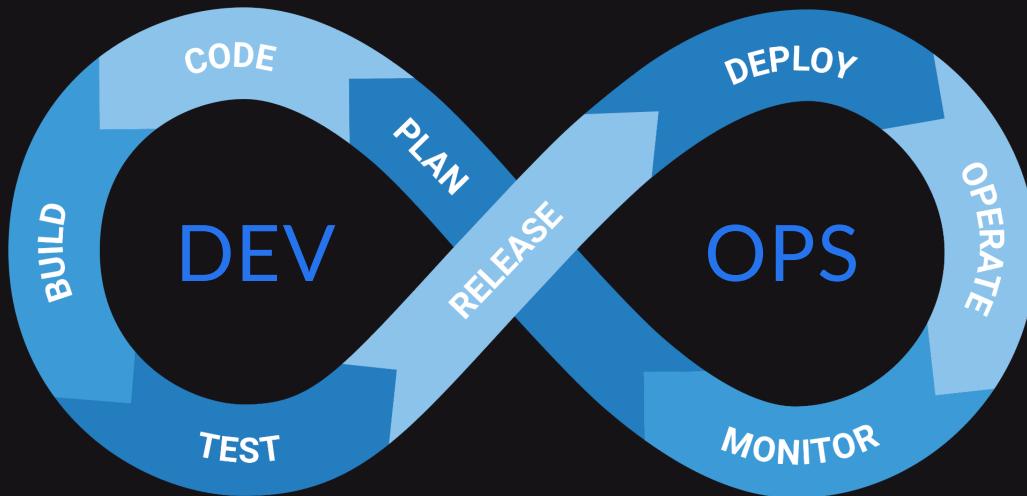
Ex-Head of Engineering - YC-backed startup

Certified AWS Cloud and Kubernetes Engineer

Open source contributor



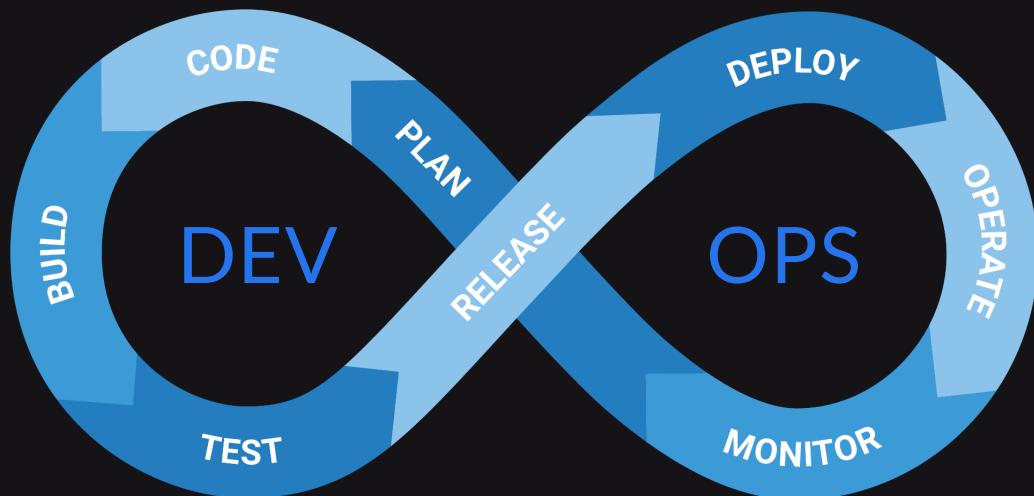
# Software Lifecycle



## Continuous Integration - CI DEV TEAM

- Plan the project scope
- VC for collaboration
- Centrally build and package
- Testing
- Release

# Software Lifecycle



## Continuous Deployment - CD OPS TEAM

- Deployment on environments
- Operate using tools
- Continuous monitoring

# CICD in LLMs

CI

## Data Scientist / ML Engineer

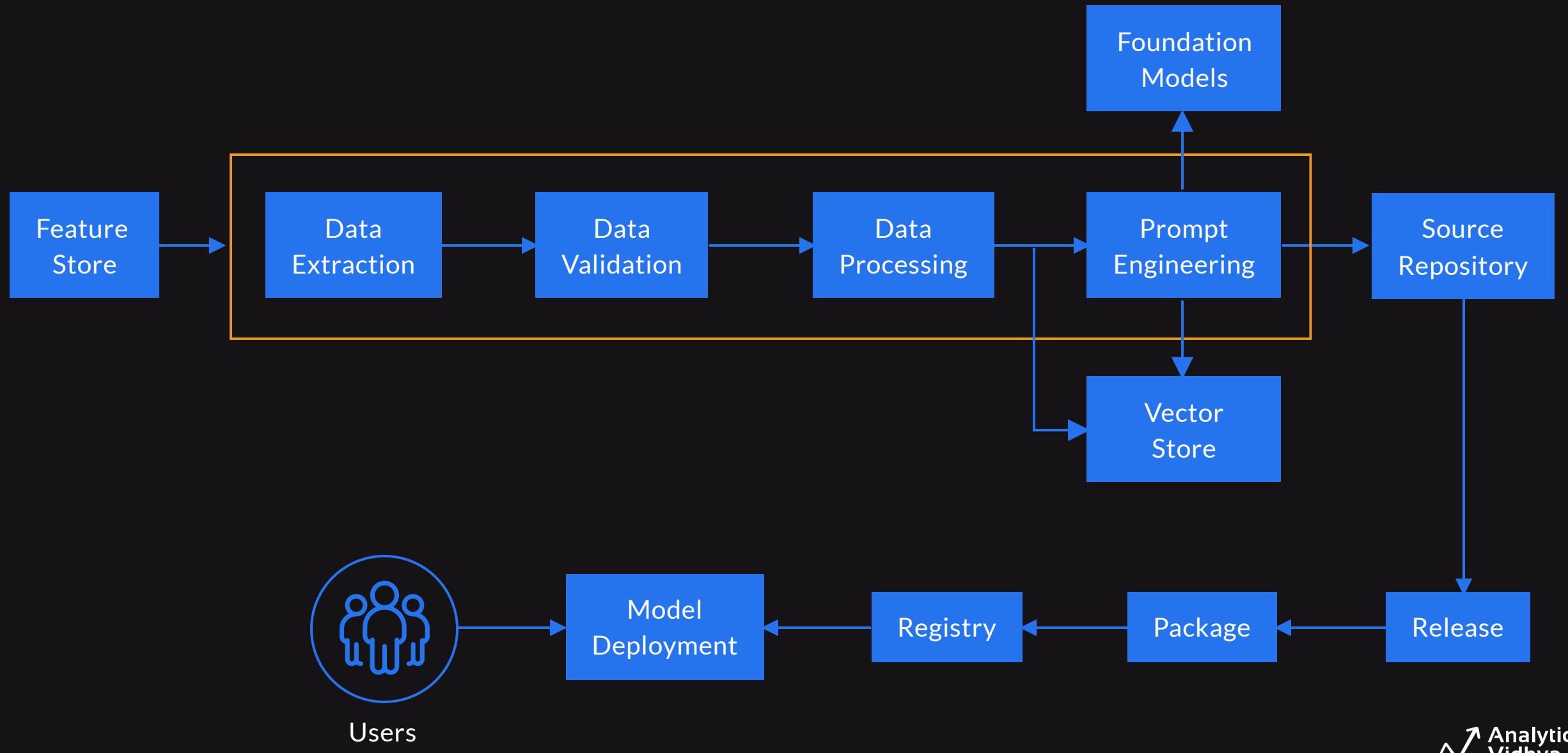
- Business use case problem framing
- Data store, Data Pipelines
- VC and easy collaboration
- EDA - exploratory data analysis
- Prompt engineering
- Training - distributed and scaled
- Reproducible experiments
- Continuous model feedback
- Re-training

CD

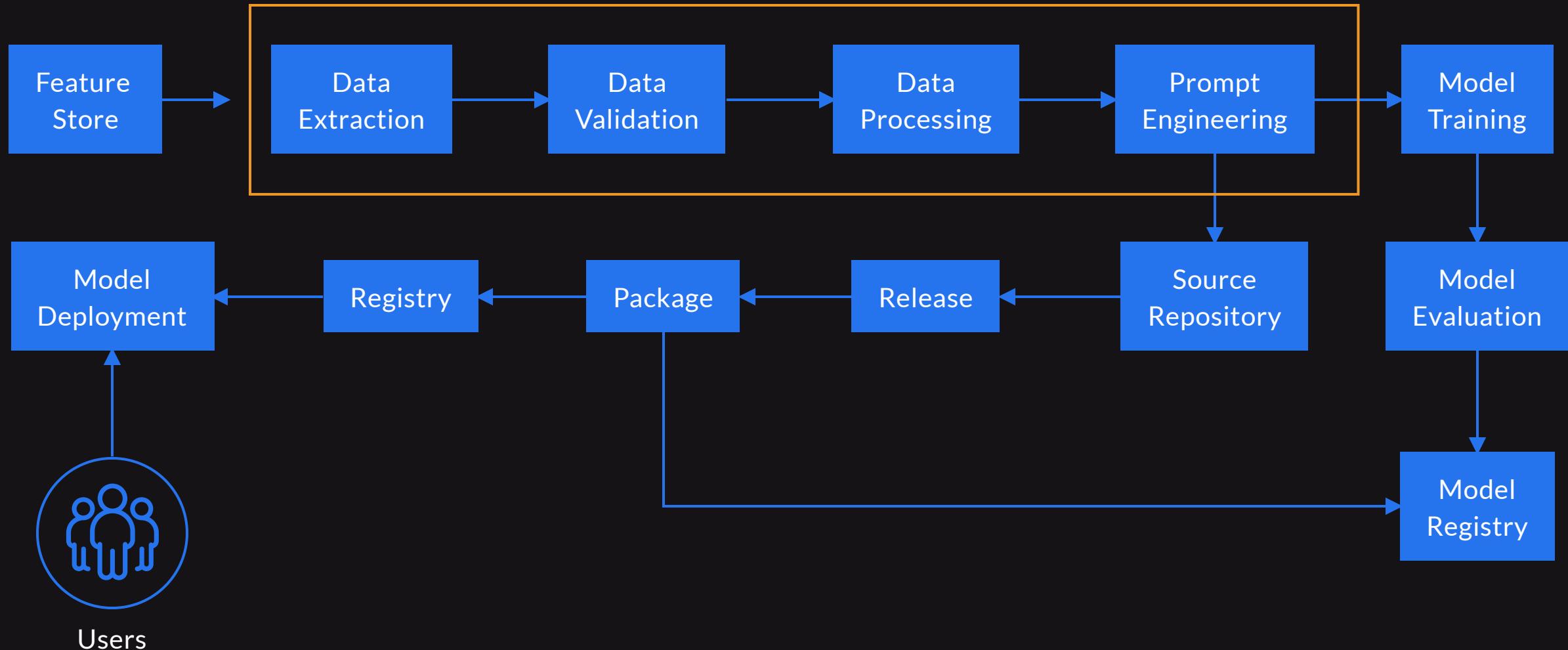
## LLMOps Engineer

- Containerize models
- Security of servers and infrastructure
- Optimize startup and inference times
- Deployment
- Scaling models
- Monitor model performance

# CI pipeline with Foundation Models

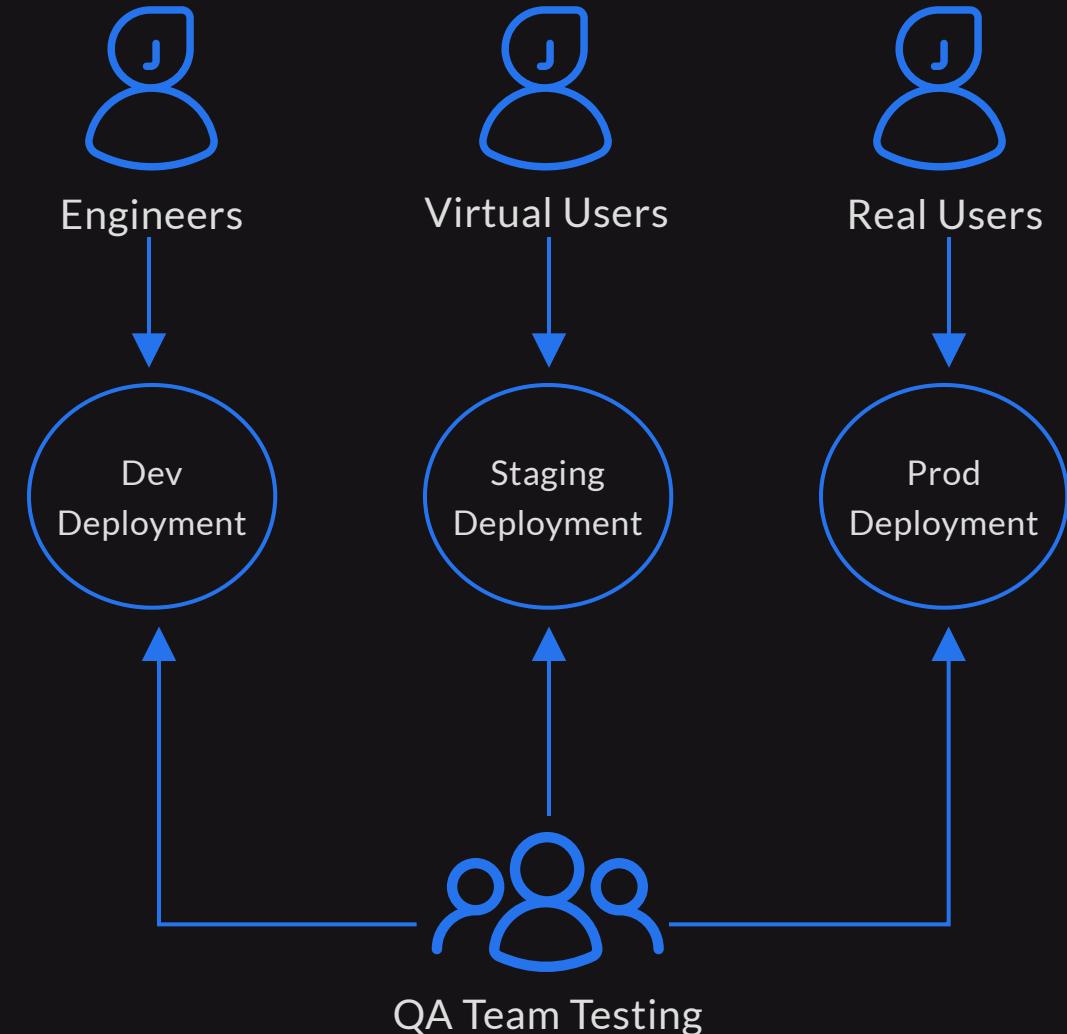


# CI pipeline with Model Training



# Advantages of CI/CD pipelines

- Automated infrastructure creation
- Releasing to multiple environments
- Cost of each environment
- Multi-stage testing
- Security best practices
- Monitoring infrastructure changes



# Thank You

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