# Section 8: Continuous Integration and Deployment* (CI/CD)

## *Also referred to as Delivery

# What is CI/CD?

## "Automating the stages of app development"
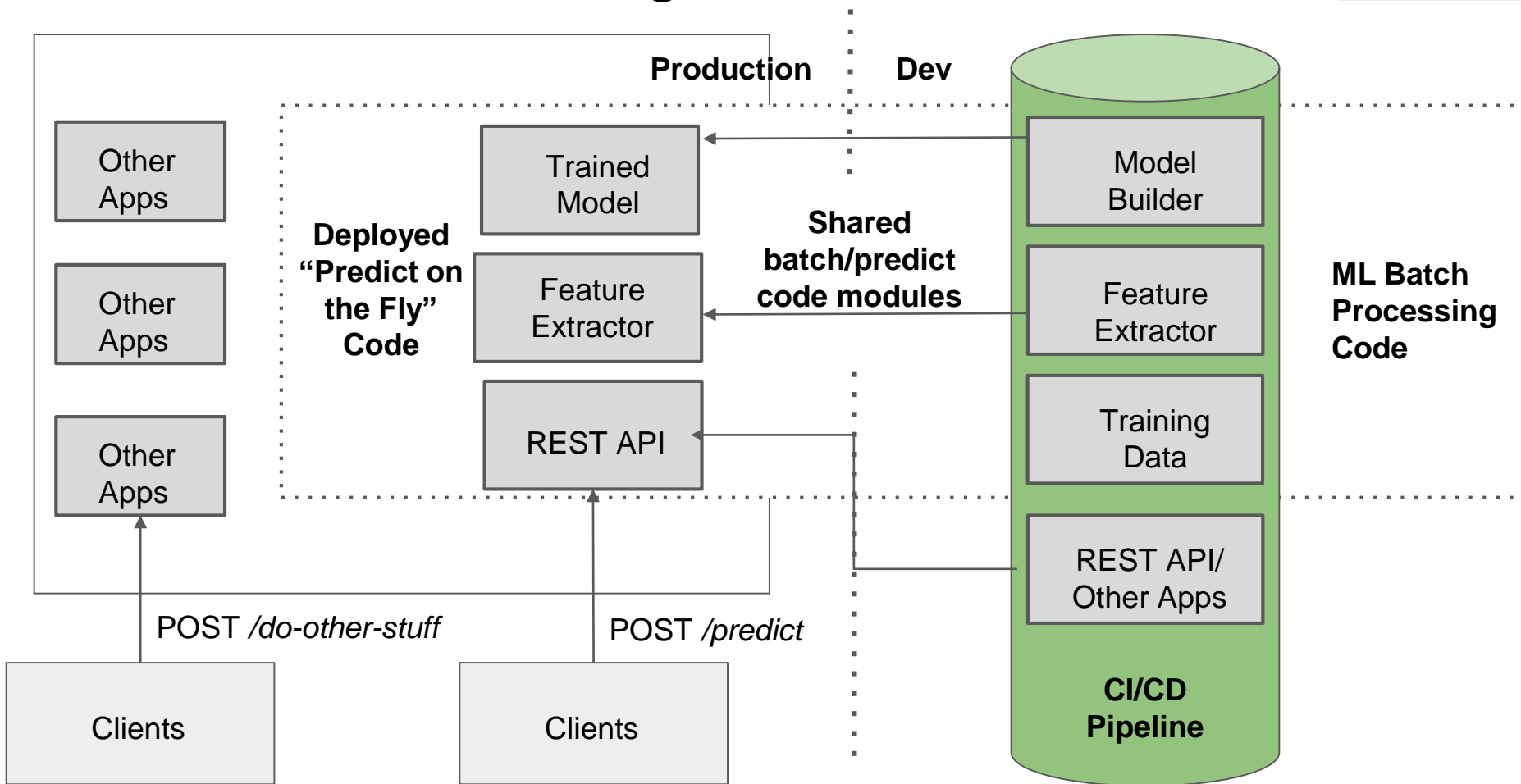
# Why Does This Matter?

Testing and deploying our applications according to the CI/CD method means:

- The system in an "always releasable" state
- Faster, regular release cycles
- Building and testing is automated
- Delivery and deployments are automated (at least to some extent)
- Visibility across the company (and audit log)

# What we will be Covering in this Section

**Production** | **Dev**

Other Apps

Other Apps

Other Apps

**Deployed "Predict on the Fly" Code**

Trained Model

Feature Extractor

REST API

**Shared batch/predict code modules**

Model Builder

Feature Extractor

Training Data

REST API/ Other Apps

**CI/CD Pipeline**

**ML Batch Processing Code**

POST *do-other-stuff*

POST *predict*

Clients

Clients

# **Why CircleCI?**

In this course we will be using CircleCI

- Hosted platform
- Easy github integration
- One free project
- Many great features
- Trusted by many top companies

# Alternatives CircleCI

There are many amazing CI/CD platforms

- Jenkins
- Travis CI
- Bamboo
- Gitlab CI
- Team City
- Etc.

It doesn't really matter which one you use - so long as you use one!

# Let's Get Started!

## See you in the next section