# Introduction to CI/CD

1. What is CI/CD?

* Automating the stages of app development
* Continuous Integration -> Continuous Delivery -> Continuous Deployment
* Continuous Integration: Build -> Test -> Merge
* Continuous Delivery: Automatically release to repository
* Continuous Deployment: Automatically deploy to production

1. Why this matters?

* Testing and deploying apps 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)

1. CircleCI?

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

1. Alternatives

* Jenkins
* Travis CI
* Bamboo
* Gitlab CI
* Team city
* Etc.

# Understanding CI/CD Automation

1. Step 1: automate the training, testing, and deployment
2. CircleCI environment variables required

* RAILWAY\_TOKEN

1. Step 2: Automate the model building and publishing

* PIP\_EXTRA\_INDEX\_URL
* KAGGLE\_KEY
* KAGGLE\_USERNAME
* GEMFURY\_PUSH\_URL