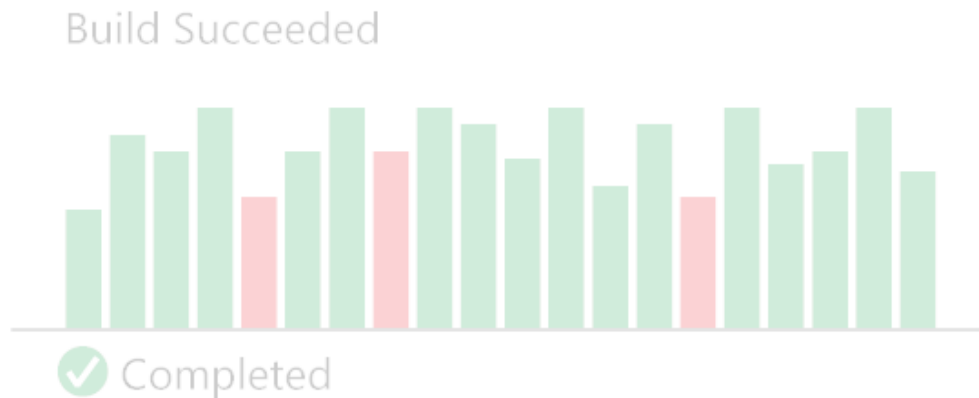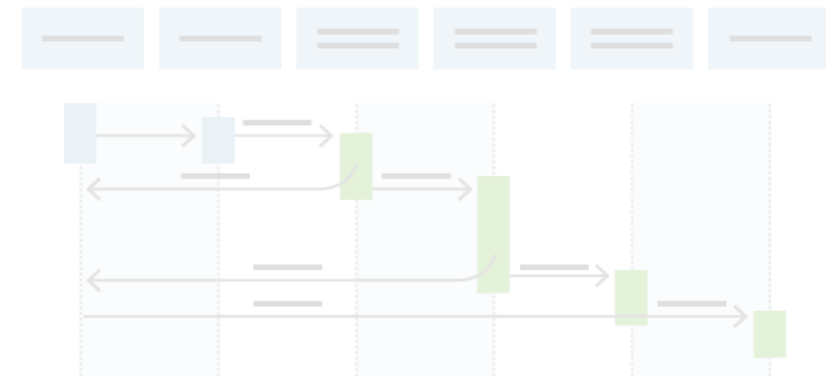# Udapeople

Building with CI/CD

CI/CD Definitions

Continuous Integration (CI)

is the process of automating the build and testing of code every time, a team member commits changes to version control. CI encourages developers to share their code and unit tests by merging their changes into a shared version control repository after every small task completion. Committing code triggers an automated build system to grab the latest code from the shared repository and to build, test, and validate the full master branch (also known as the trunk or main). Source

Continuous Delivery (CD)

is the process to build, test, configure and deploy from a build to a production environment. Multiple testing or staging environments create a Release Pipeline to automate the creation of infrastructure and deployment of a new build. Source

Benefits of CI/CD

- Superior Code Quality
- Reduced Changes & Review Time
- Accelerated Release Cycles
- Fault Detection & Isolation
- Enhanced Test Reliability
- Reduced Backlog
- Improved Mean Time To Resolution

- Cost Deduction
- Enhanced Transparency & Accountability
- Streamlined Communication
- Frequent Updates & Maintenance
- Boosted Customer Satisfaction
- Enhanced Performance Metrics