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# Automated Builds CI+CD

By Alejandro Ávila Rodríguez

# Index

1. Automated Builds
2. CI/CD Pipeline
3. Elements of a CI/CD Pipeline
4. Why use a CI/CD Pipeline
5. Market Study
6. Setting Up a CI/CD environment with GitHub Actions
7. Bonus

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# 1. Automated Builds

# Automated Builds & DevOps

- DevOps: Group of techniques to deploy high-speed quality products
- Automated Builds: Process of converting files and other assets to a software product that works in its final form (traditional building) automatically.

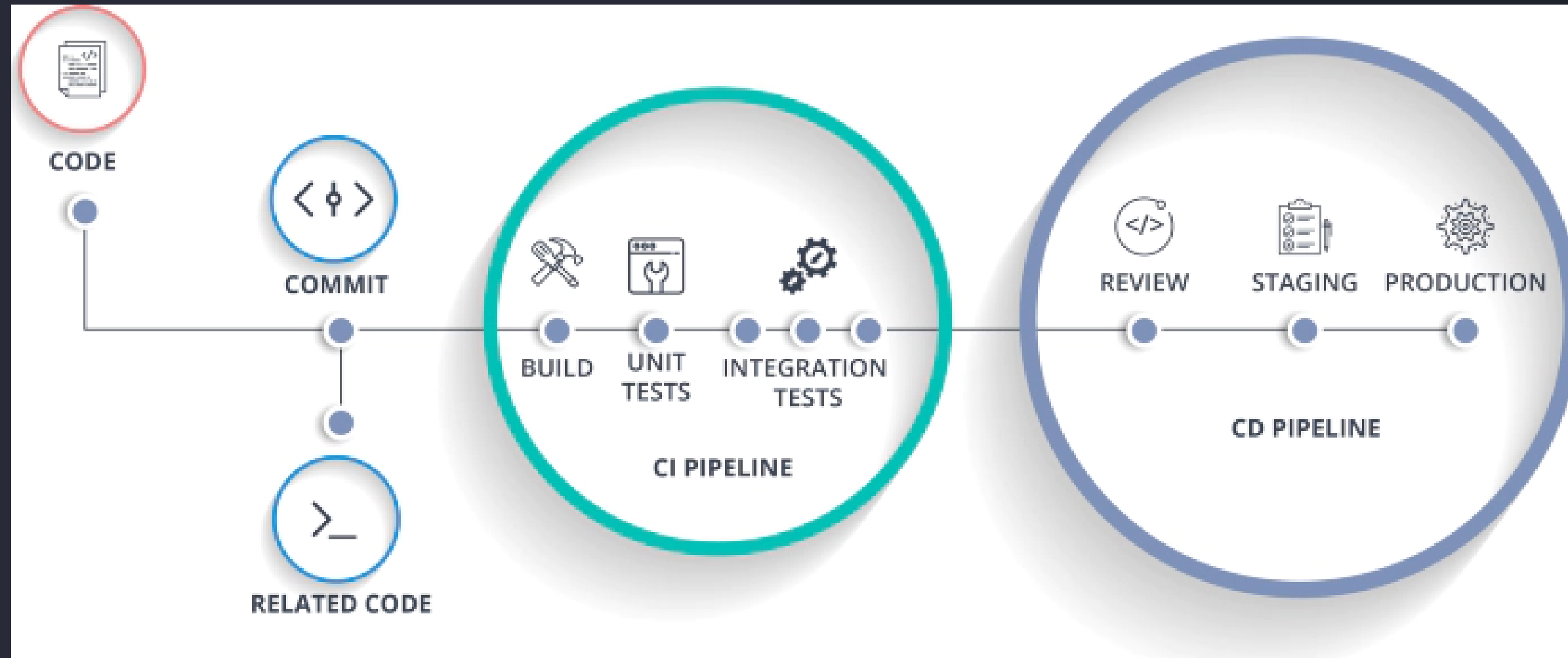


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## 2. CI/CD Pipeline

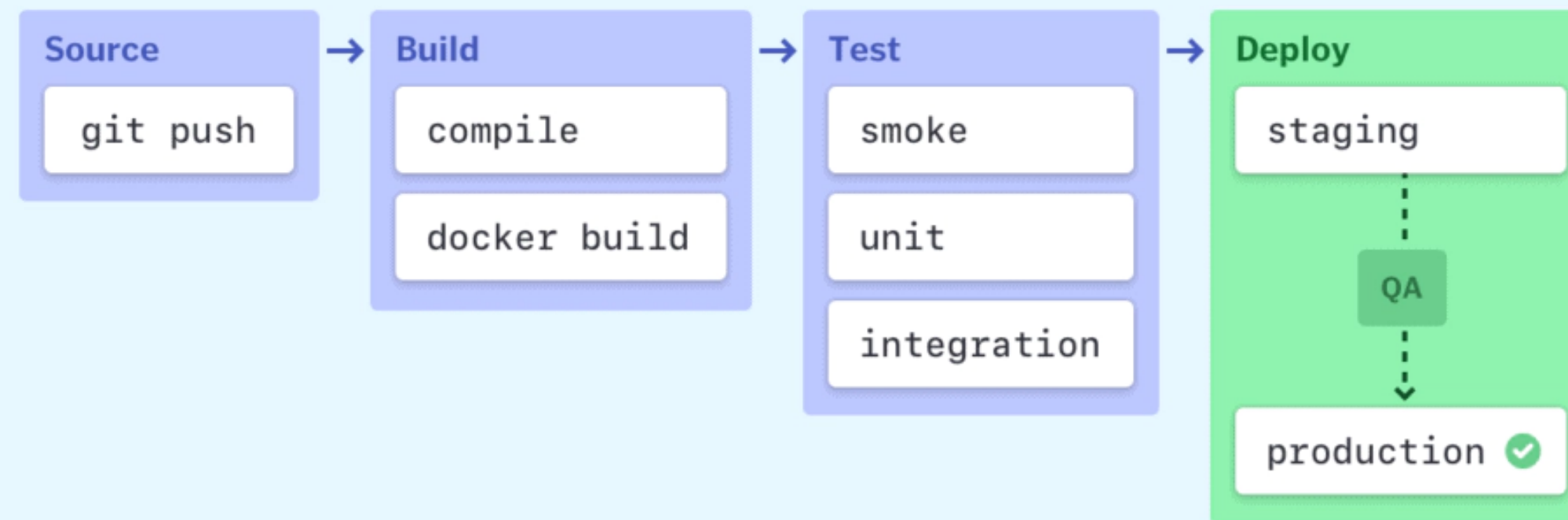
# What is CI

# What is CD



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### 3. Elements of a CI/CD pipeline



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# Why use a CI/CD Pipeline



# Why use a CI/CD Pipeline

- More time to code
- QA team
- Automatic Testing
- Error notification
- Efficiency

# MARKET STUDY: CHOOSING THE BEST CI/CD TOOL

Name	Minutes/month	MB
GitHub Actions	2000	500 MB
Jenkins	∞ *	∞ *
Circle CI	2500 credits/week**	Depends on the OS
GitLab	400	10GB

*\*You host the infrastructure*

*\*\*Credits are used instead of minutes, the credit usage depends on the type of platform*

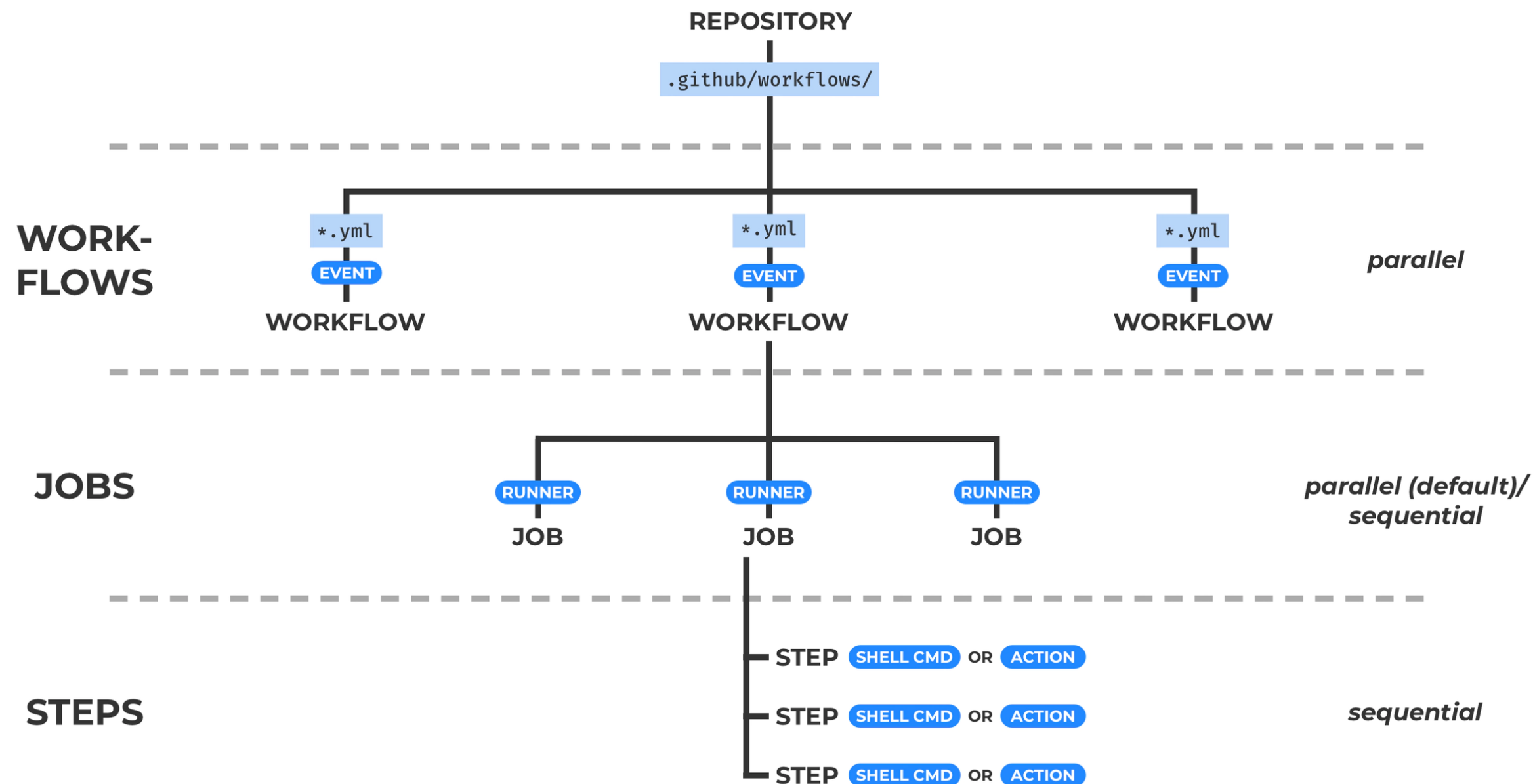
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# GitHub Actions

# Basic Concepts of GitHub Actions



GitHub Actions



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# Setting Up Actions

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## Bonus: Automatic Releases