# Process & Tooling

Simplifi'ED & IT Challenge - Etienne Deneuve

# 12 Factors

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I. Codebase

• One codebase tracked in revision control, many deploys

II. Dependencies

• Explicitly declare and isolate dependencies

III. Config

• Store config in the environment

IV. Backing services

Treat backing services as attached resources

V. Build, release, run

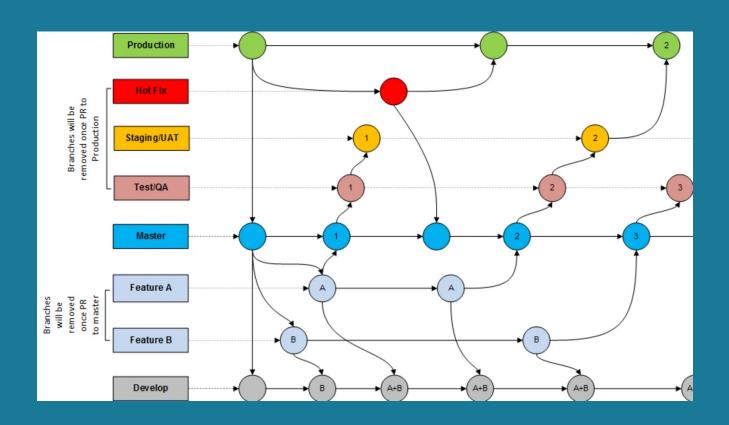
• Strictly separate build and run stages

12 Factors

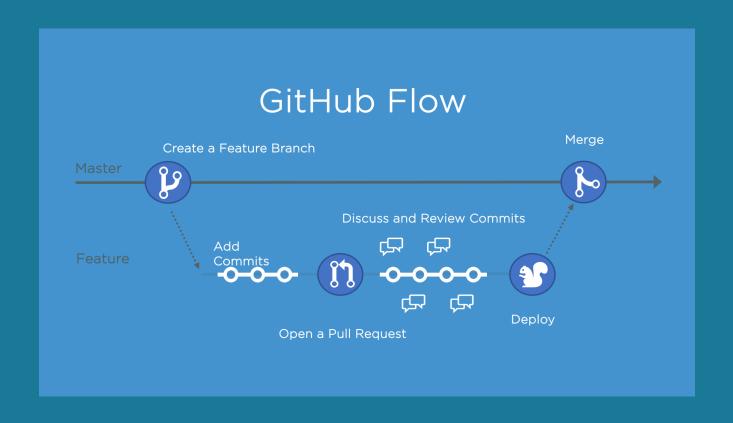
**VI. Processes** • Execute the app as one or more stateless processes VII. Port binding • Export services via port binding VIII. Concurrency • Scale out via the process model IX. Disposability • Maximize robustness with fast startup and graceful shutdown • Keep development, staging, and production as similar as X. Dev/prod parity possible XI. Logs • Treat logs as event streams XII. Admin processes • Run admin/management tasks as one-off processes

### Git Flow Flows

#### Git Flow



#### Github Flow



Demo

**Git Hooks** 

CI/CD/CD & GitOps