



Technical and Deployment Architecture Part 3

Capstone: Photo Tourist Web Application

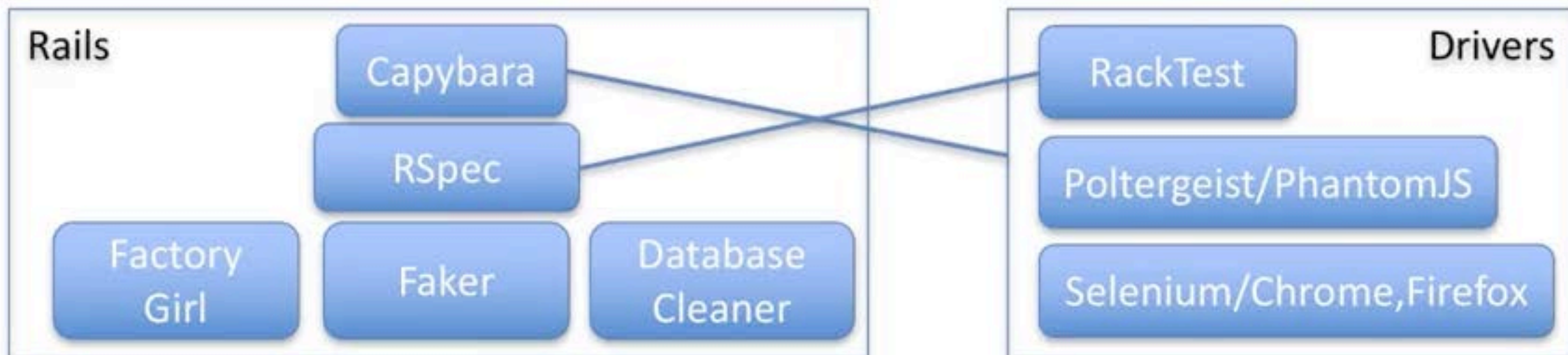
In this lecture, we will discuss...

- ✧ Technical Architecture
 - Testing
 - Development Tools
- ✧ Deployment Architecture
 - API and Database Deployment
 - Web Client Deployment

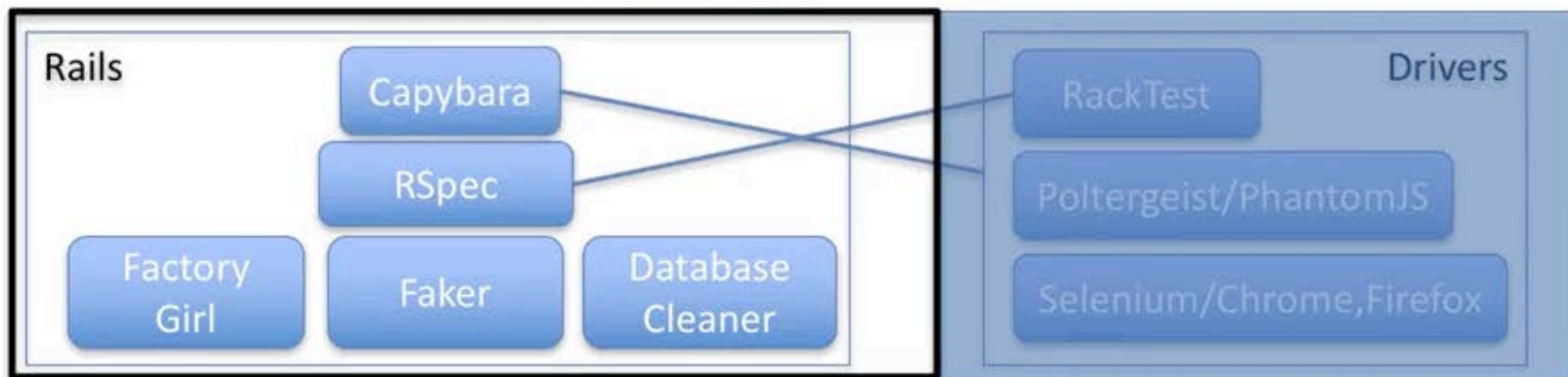
Technical Architecture



Testing



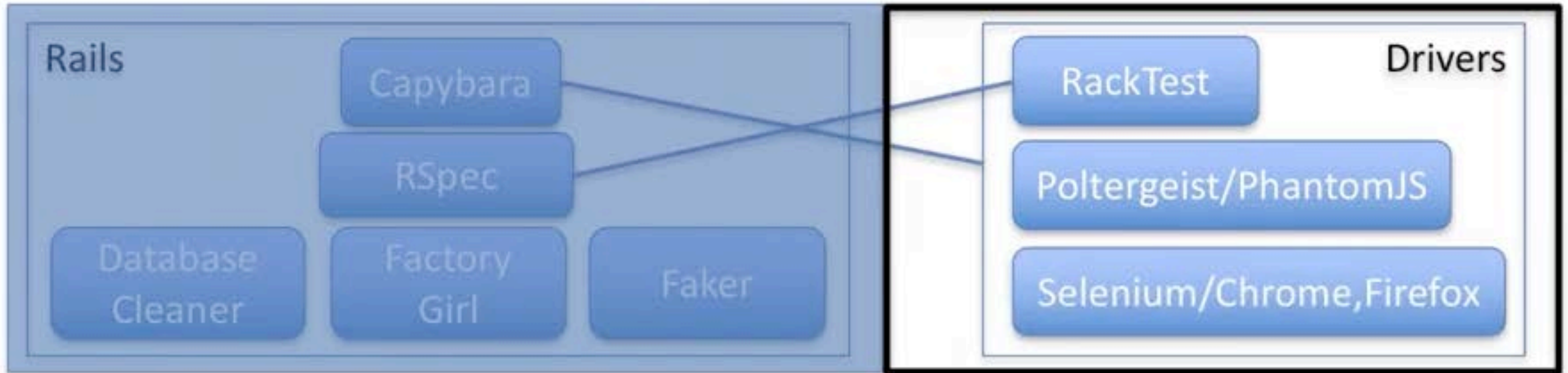
Testing (Rails)



- ✧ RSpec
 - Ruby test framework
 - Rich expression
 - Acceptance Test-planning
 - Test-driven development
- ✧ Capybara
 - Web UI Testing

- ✧ FactoryGirl
 - Builds/creates objects
- ✧ Faker
 - Generates fake data
- ✧ Database Cleaner
 - Strategies for clearing database

Testing (Web Drivers)



✧ RackTest

- Default web interface driver
- HTML and WS support
- No Javascript support
- Same process as test code

✧ Poltergeist/PhantomJS

- Headless Javascript Browser

✧ Selenium

- Driver for Chrome and Firefox

Development Tools

Rails

Rails Console

IRB Shell

PRY Shell

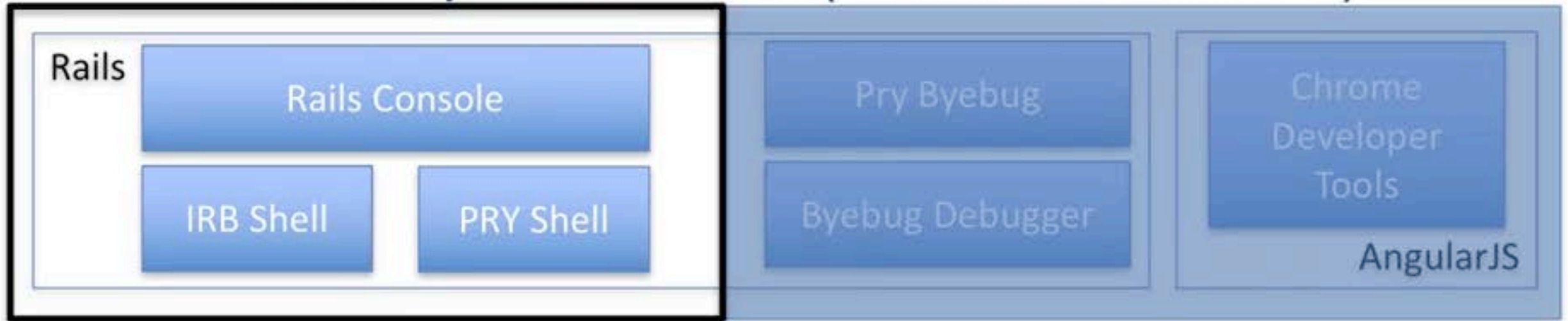
Pry Byebug

Byebug Debugger

Chrome
Developer
Tools

AngularJS

Development Tools (Command Shells)



- ✧ Rails console
 - Shell access to Rails resources

- ✧ IRB Shell
 - Default Rails Shell
 - Core Capabilities
- ✧ Pry Shell
 - Alternative to IRB
 - Feature Rich

Development Tools (Debuggers)



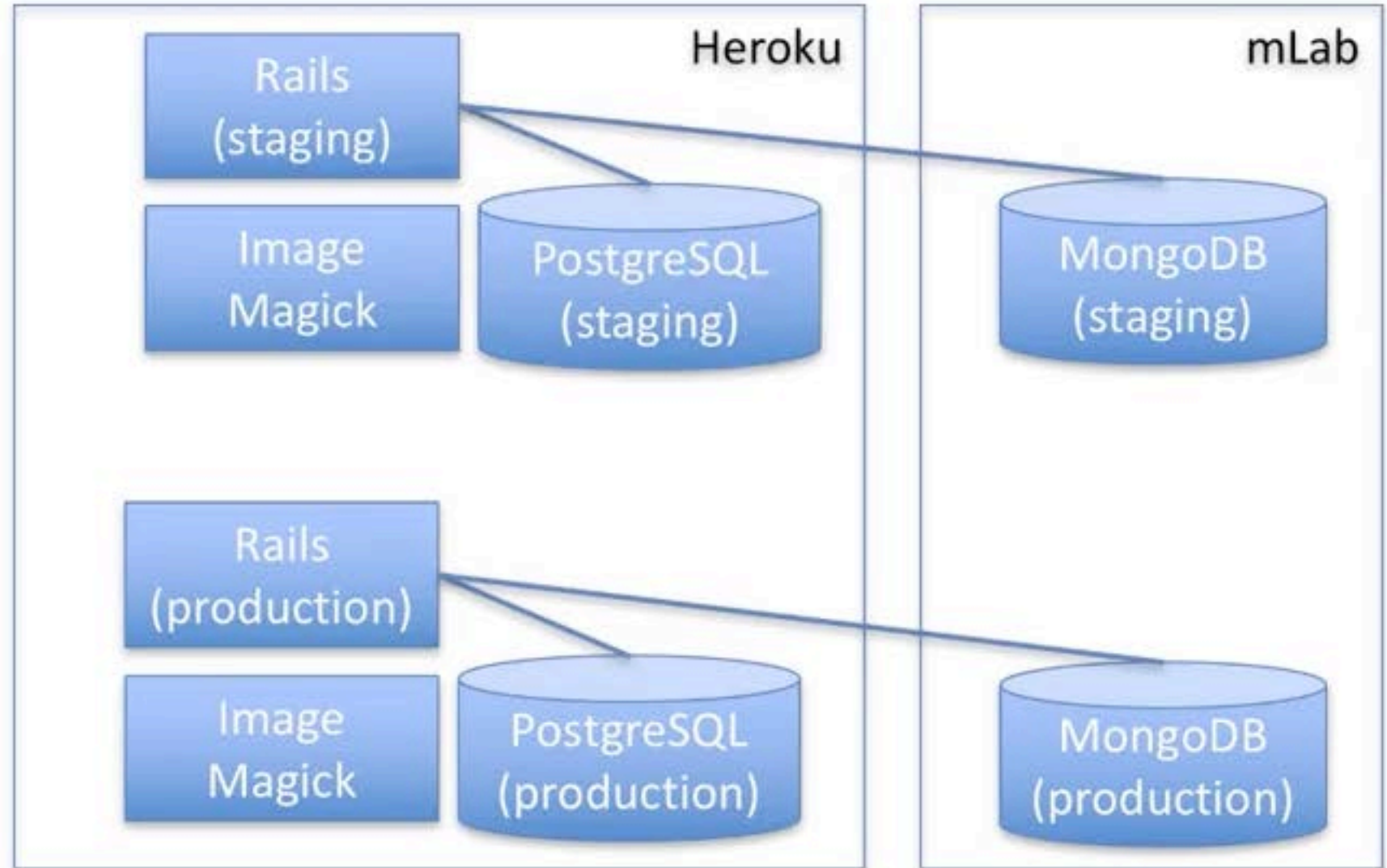
- ✧ Byebug
 - Interactive debugger
 - Byebug breakpoints
- ✧ Pry-Byebug
 - Pry integration with Byebug
 - `binding.pry` breakpoints

- ✧ Chrome Developer Tools
 - DOM Elements
 - Console log messages
 - Network activity

API Deployment(s)

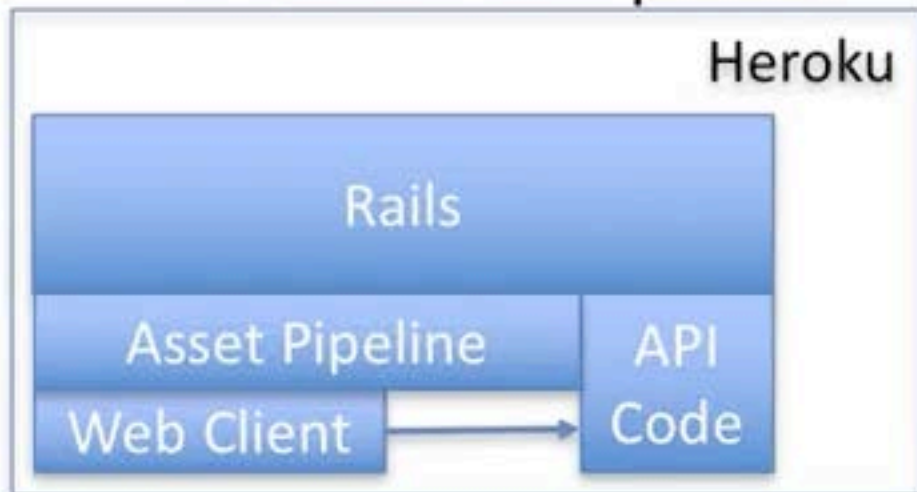
Staging
<https://git.heroku.com/afternoon-river-92915.git>

Production
<https://git.heroku.com/infinite-refuge-37673.git>



Web Client Deployment Options

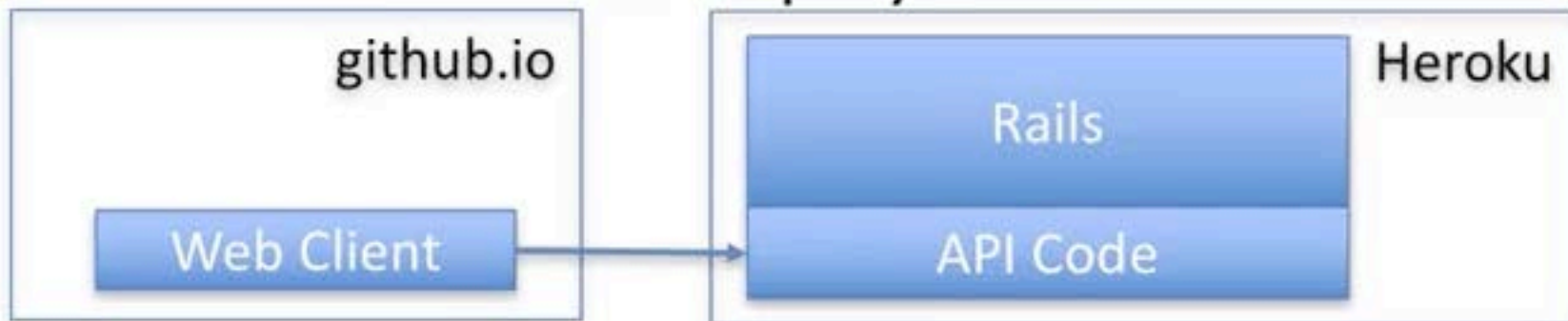
Rails Asset Pipeline



External Deployment in /public

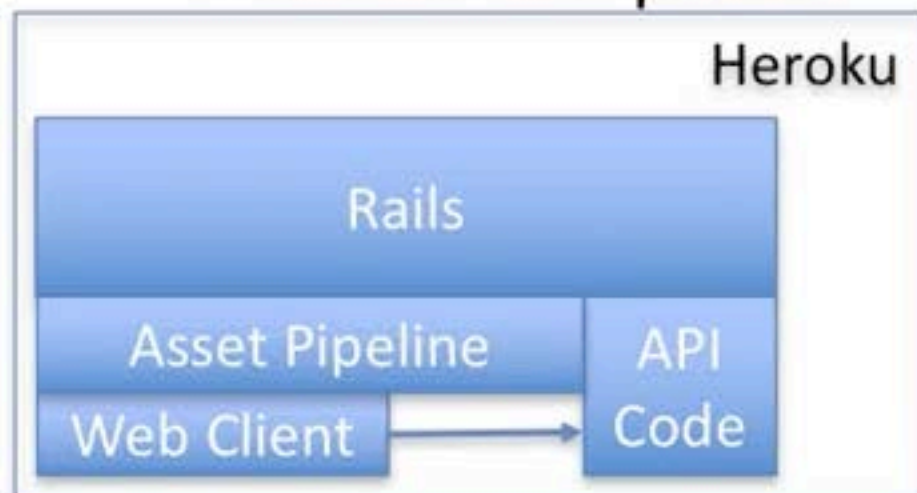


External Deployment



Web Client Deployment Options

Rails Asset Pipeline



Summary

- ✧ Technical
 - Testing
 - Development
- ✧ Deployment

What's next?

- ✧ Development Environment Setup