In this lecture, we will discuss…

- ✧ Choosing a development database
- ✧ Choosing a server application type
- ✧ Instantiating a server application
- ✧ Readying the database

← → C | 🔍 |
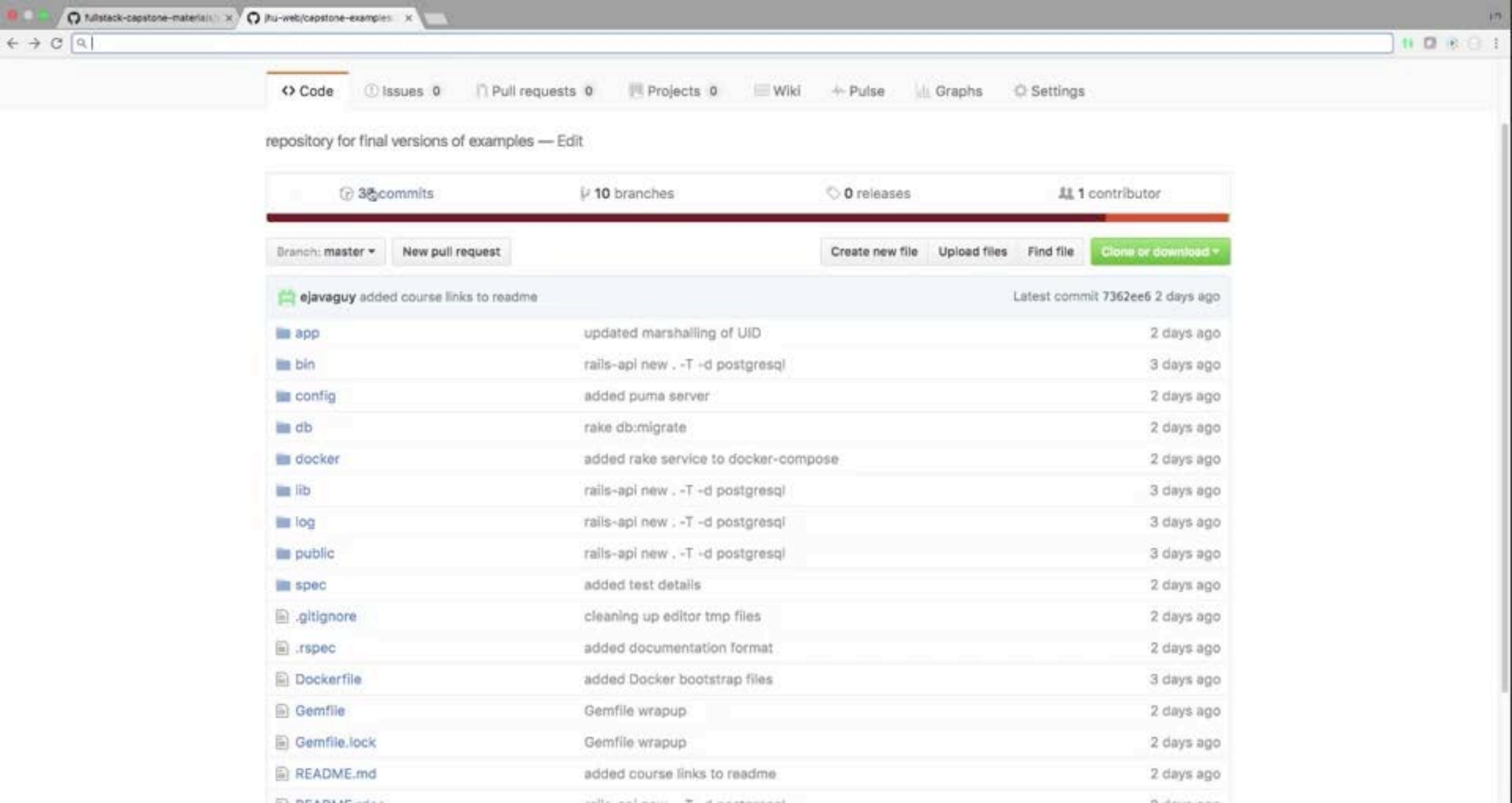
<> Code   ⓘ Issues   0   ⊓ Pull requests   0   ▥ Projects   0   ▦ Wiki   ⊹ Pulse   ╷╷ Graphs   ⚙ Settings

repository for final versions of examples — Edit

ⓒ 3&commits	⎇ 10 branches	◌ 0 releases	👥 1 contributor

Branch: master ▾   New pull request   Create new file   Upload files   Find file   **Clone or download ▾**

🛏 **ejavaguy** added course links to readme   Latest commit 7362ee6 2 days ago

📁 app	updated marshalling of UID	2 days ago
📁 bin	rails-api new . -T -d postgresql	3 days ago
📁 config	added puma server	2 days ago
📁 db	rake db:migrate	2 days ago
📁 docker	added rake service to docker-compose	2 days ago
📁 lib	rails-api new . -T -d postgresql	3 days ago
📁 log	rails-api new . -T -d postgresql	3 days ago
📁 public	rails-api new . -T -d postgresql	3 days ago
📁 spec	added test details	2 days ago
📄 .gitignore	cleaning up editor tmp files	2 days ago
📄 .rspec	added documentation format	2 days ago
📄 Dockerfile	added Docker bootstrap files	3 days ago
📄 Gemfile	Gemfile wrapup	2 days ago
📄 Gemfile.lock	Gemfile wrapup	2 days ago
📄 README.md	added course links to readme	2 days ago

updated controller to use view
ejavaguy committed 2 days ago

3247edb <>

rake db:migrate
ejavaguy committed 2 days ago

f085aad <>

rails-api g scaffold Foo name
ejavaguy committed 2 days ago

68edcfc <>

added rdbms test details
ejavaguy committed 2 days ago

385ef25 <>

added tzinfo-data for mswin
ejavaguy committed 2 days ago

ea8c62a <>

requirements listed
ejavaguy committed 2 days ago

beb6332 <>

rails g rspec:request APIDevelopment
ejavaguy committed 2 days ago

c894ae0 <>

initial rake db:migrate
ejavaguy committed 2 days ago

a237b51 <>

rails g rspec:install
ejavaguy committed 2 days ago

c8be127 <>

added rspec-rails gem
ejavaguy committed 2 days ago

4b43f52 <>

jbuilder
ejavaguy committed 3 days ago

16cf1e2 <>

isolated production from dev/test defaults
ejavaguy committed 3 days ago

8ca645e <>

pg Gemfile
ejavaguy committed 3 days ago

2f80eb2 <>

postgres config/database.yml

Some Questions Before We Start

- ✧ Which RDBMS database do we use?
  - Functional, lightweight administration
    - Non Database-centric examples
  - Production-capable, robust
    - Consistency between development and deployment
- ✧ Which server type do we use?
  - Full Rails
    - Using server-side web pages (e.g., ERB)
    - Nearly all features turned on by default (e.g., Views, Asset Pipeline)
  - Just the API
    - Using client-side web pages (e.g., Javascript, Angular)
    - Server primarily provides API to client-side web pages
    - Lighter-weight, requires manually turning on features as needed

Development Database: Simple or Consistent?

SQLite

✧ Requires no ... atabase server setup
- Easy to dep... time/trouble for

✧ Does not sup... opment
foreign key c... tion support
- Database s... ice between
not reported
- Requires de... ent and production

✧ Not supporte...
- Requires sh...
database at

```
source 'https://rubygems.org'

gem 'rails', '4.2.6'
gem 'rails-api'

gem 'jbuilder', '~> 2.0', '>=2.6.0'

group :development do
  gem 'spring', '~>2.0', '>=2.0.0'
  gem 'sqlite3', '~>1.3', '>=1.3.12'
end



group :production do
  gem 'pg', '~>0.19', '>=0.19.0'
end
```

Development Database: Simple or Consistent?

SQLite

⬥ Requires no database server setup
  - Easy to deploy examples
⬥ Does not support (ignores) foreign key constraints
  - Database schema design errors not reported when implemented
  - Requires debug
⬥ Not supported by Heroku
  - Requires shift to separate database at deployment

PostgreSQL

⬥ Requires database server installation
  - Worth the time/trouble for real development
⬥ Full production support
  - No difference between development and production
⬥ Fully supported by Heroku
  - Extremely easy to provision free instance

Development Database: Simple or Consistent?

SQLite

✧ Requires ___ setup
  • Easy to ___

✧ Does not ___ foreign ke___
  • Database schema design errors not reported when implemented
  • Requires debug

✧ Not supported by Heroku
  • Requires shift to separate database at deployment

PostgreSQL

___ base server
___ /trouble for ___ ent

___ support
  • No difference between development and production

✧ Fully supported by Heroku
  • Extremely easy to provision free instance

$ bundle --without production

Summary

✧ Covered Database and Server topics

✧ Ready to instantiate our server

What's Next?

• Create the application (live)