



#### Phoenix 1.3 Intro

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### **Agenda**

- About Phoenix
- Http Request / Response
- Default Structure and files
- How to create basic pages from scratch
- Generators
- Context
- Important phoenix's topics
- Summary

### **About Phoenix**

- First commit Dec-2013[1]
  - Objectives of the web framework[2]:
    - Performance
    - Productivity
    - Fault tolerance
    - Distributed apps
    - Real Time apps

- [1] https://groups.google.com/forum/#!topic/phoenix-talk/l8kIhc\_LC7o
- [2] https://www.youtube.com/watch?v=s0RxjHs0cwk

## Development

#### Development[1]

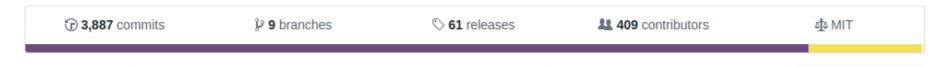
Jan 12, 2014 - Aug 15, 2017

Contributions to master, excluding merge commits

Contributions: Commits ▼



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[1] https://github.com/phoenixframework/phoenix

# HTTP Request/Response [1]

- HTTP Request
  - Cowboy (Plug adapter)
    - Phoenix Endpoint
    - Phoenix Router
    - Phoenix Controller
    - Phoenix Views
    - Phoenix Template

#### HTTP Response

[1]https://elixir-examples.github.io/examples/phoenix-framework-from-http-request-to-response

### Default Structure and Files

- mix phx.new hello (live coding)
  - assets (css, js, brunch)
  - \_build (compiled files)
  - config (environments)
  - deps (libraries of dependencies of the app)
  - lib (the code)
  - mix.exs (configuration of the application )
  - mix.lock (deps versions, and configurations)
  - priv ( i18n files, DB migrations, assets compiled)
  - README.md (Information about the project)
  - test (Test)

### Create Page

http://localhost:4000/hello



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## Create Page using params

http://localhost:4000/hello/Ruben



(live

#### Generators

mix help | grep phx (outside a phoenix project)

```
ramortegui@RA testing $ mix help | grep phx
mix local.phx  # Updates the Phoenix project generator locally
mix phx.new  # Creates a new Phoenix v1.3.0 application
mix phx.new.ecto  # Creates a new Ecto project within an umbrella project
mix phx.new.web  # Creates a new Phoenix web project within an umbrella project
```

mix help | grep phx (inside a phoenix project)

```
# Updates the Phoenix project generator locally
mix local.phx
mix phx.digest
                        # Digests and compresses static files
                        # Removes old versions of static assets.
mix phx.digest.clean
mix phx.gen.channel mix phx.gen.context
                        # Generates a Phoenix channel
                        # Generates a context with functions around an Ecto schema
mix phx.gen.embedded
                        # Generates an embedded Ecto schema file
mix phx.gen.html
                        # Generates controller, views, and context for an HTML resource
mix phx.gen.json
                        # Generates controller, views, and context for a JSON resource
mix phx.gen.presence
mix phx.gen.schema
                        # Generates a Presence tracker
                        # Generates an Ecto schema and migration file
mix phx.gen.secret
                        # Generates a secret
                        # Creates a new Phoenix v1.3.0 application
mix phx.new
mix phx.new.ecto
                        # Creates a new Ecto project within an umbrella project
mix phx.new.web mix phx.routes
                        # Creates a new Phoenix web project within an umbrella project
                        # Prints all routes
                        # Starts applications and their servers
mix phx.server
```

# Generators – phx.gen.html

mix phx.gen.html Users User users name:string

### Context

Thinking about design

### **Others**

- Tests (ExUnit)
- Deployments (server, heroku )
- Brunch (Assets management)
- Channels (bidirectional communication / PubSub)
- Ecto (DB abstraction)
- Graphql (Absinthe)

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### Summary

- HTTP Request/Response is based on transformation of the structure of %Plug.Conn{...}
- Generators are good as learning tools.
- Phoenix could be use to serve basic and/or complex web apps.

### References

- https://hexdocs.pm/phoenix/overview.html
- Halvorsen, Lance (2017). functional Web Development with Elixir, OTP, and Phoenix (Beta). Ebook. The pragmatic Bookshelf.

#### Thanks!

Q & A?

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