Intro to Elixir Phoenix LiveView

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Overview

- Elixir
- Phoenix
- LiveView
- Demo

Elixir

Elixir is a dynamic, **functional language** for building scalable and maintainable applications.

Elixir leverages the **Erlang VM**, known for running low-latency, distributed, and fault-tolerant systems. Elixir is successfully used in web development, embedded software, data ingestion, and multimedia processing, across a wide range of industries.

Phoenix

Phoenix is a web framework written in Elixir. It is similar to Ruby on Rails in that it is a server-side MVC framework. However, due to the concurrency model of the Erlang VM, Phoenix can use WebSockets to provide **real-time** capabilities.

LiveView

LiveView provides rich, real-time user experiences with **server-rendered** HTML.

LiveView ~Clones

- Java: Medusa
- C#: Blazor
- PHP: LiveWire
- Ruby: StimulusReflex
- Python: Django Reactor
- Go: Live
- Haskell: Replica
- JavaScript: React Server Components

aka "Live Apps"

- Stateful live running application on the server
- Can handle out of band updates

ElixirConf 2021

⇒ Chris McCord, "The Future of Full-Stack"

"LiveView changes the frontiers of what you can **reasonably** accomplish in an application.

There's no complexity tax to pay for making features realtime and dynamic, so whatever makes sense to be realtime or dynamic gets to be. Not further thought required."

LiveBeats "a full-stack Phoenix reference app"

Tiny Demo App

Bibliography

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- Phoenix Framework: https://www.phoenixframework.org/
- Phoenix LiveView: https://hexdocs.pm/phoenix_live_view/Phoenix.LiveView.html
- "The Future of Full-Stack" ElixirConf 2021, Chris McCord https://www.youtube.com/watch?v=Of1phFsC4ZI
- LiveBeats: https://fly.io/blog/livebeats/
- LiveBeats GitHub repo: https://github.com/fly-apps/live_beats
- GitHub Repo for the Demo: https://github.com/ottobar/tech-confluence-intro-to-live-view
- Denver Erlang & Elixir Slack: https://bit.ly/DenverBeamSlack

Thank You!