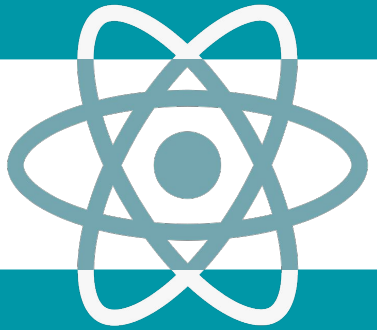
COESIONE ITALIA 21-27 PIEMONTE
Cofinanziato dall'Unione europea
REGIONE PIEMONTE



Programmazione Web

React

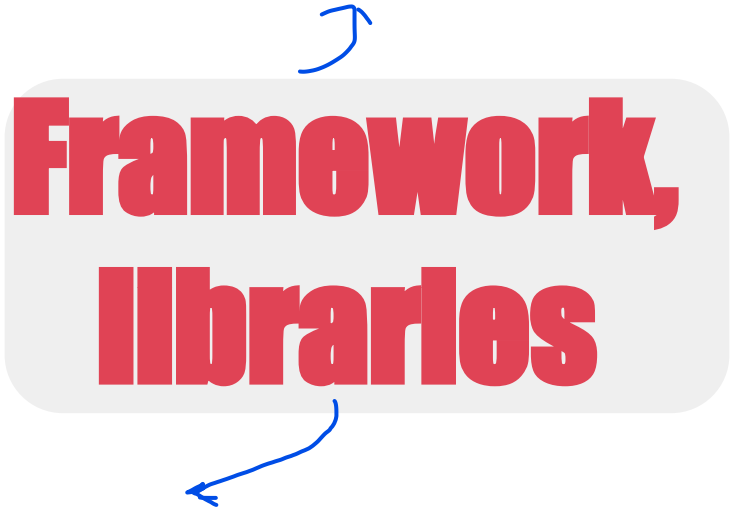
Davide Mantovani

synesthesia
the digital experience company

Intervento realizzato da
ITS TECNOLOGIE DELL'INFORMAZIONE E DELLA COMUNICAZIONE

Frameworks:

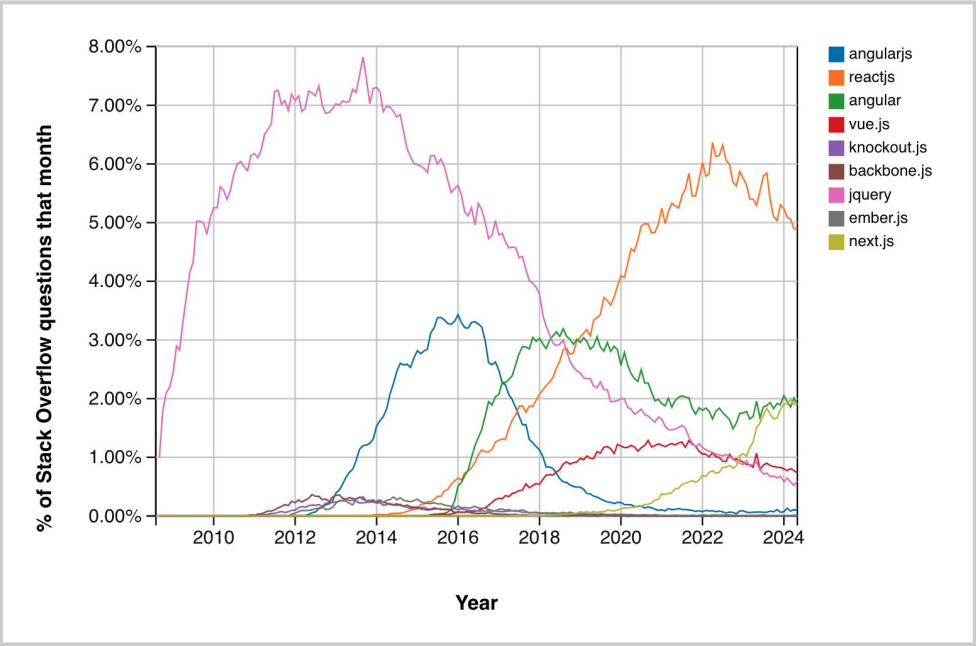
- Un ambiente strutturato COMPLETO per lo sviluppo.
- Impone un'architettura specifica DA SEGUIRE!
- Può essere l'unico strumento necessario per sviluppare un'app (esempio: Angular).



Librerie:

- Un livello di utilità per aggiungere FUNZIONI specifiche.
- L'utente DECIDE come e dove utilizzarle.
- Coprono solo una parte del pattern MV* (esempio: React è una libreria).

Stackoverflow Trends



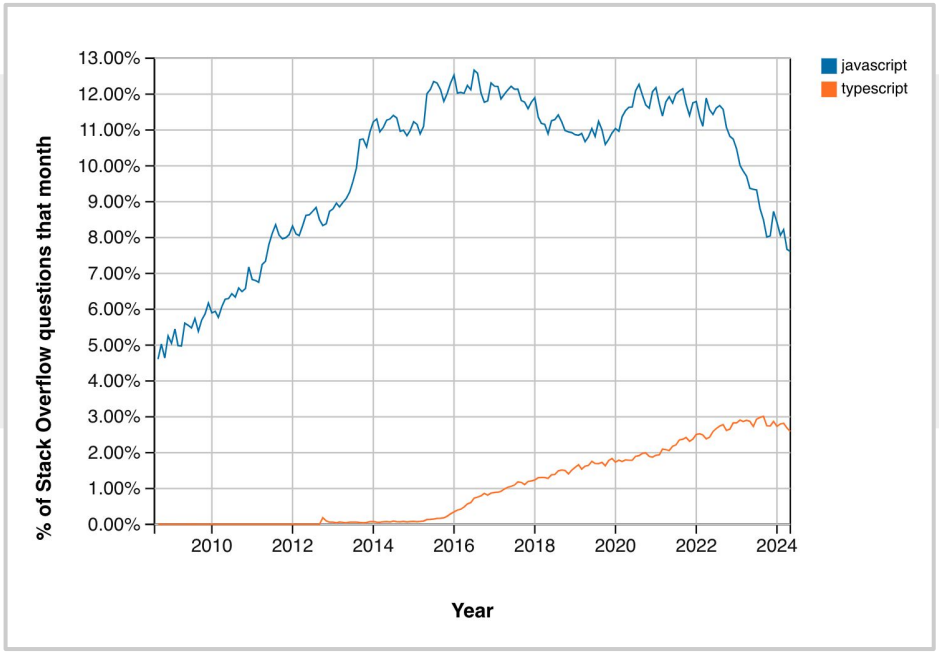
Frameworks and FE libraries

See here

Confronto chiave:

- un FRAMEWORK detta l'architettura dell'applicazione
- una LIBRERIA fornisce funzionalità riutilizzabili.

Stackoverflow Trends



[See here]

TypeScript (un superset di JavaScript) è sempre più diffuso grazie a funzionalità come tipizzazione statica e classi.

Javascript and Typescript

(Typescript is a superset of JavaScript which provides optional static typing, classes and interfaces)

StateOfJS

State of JS 2023

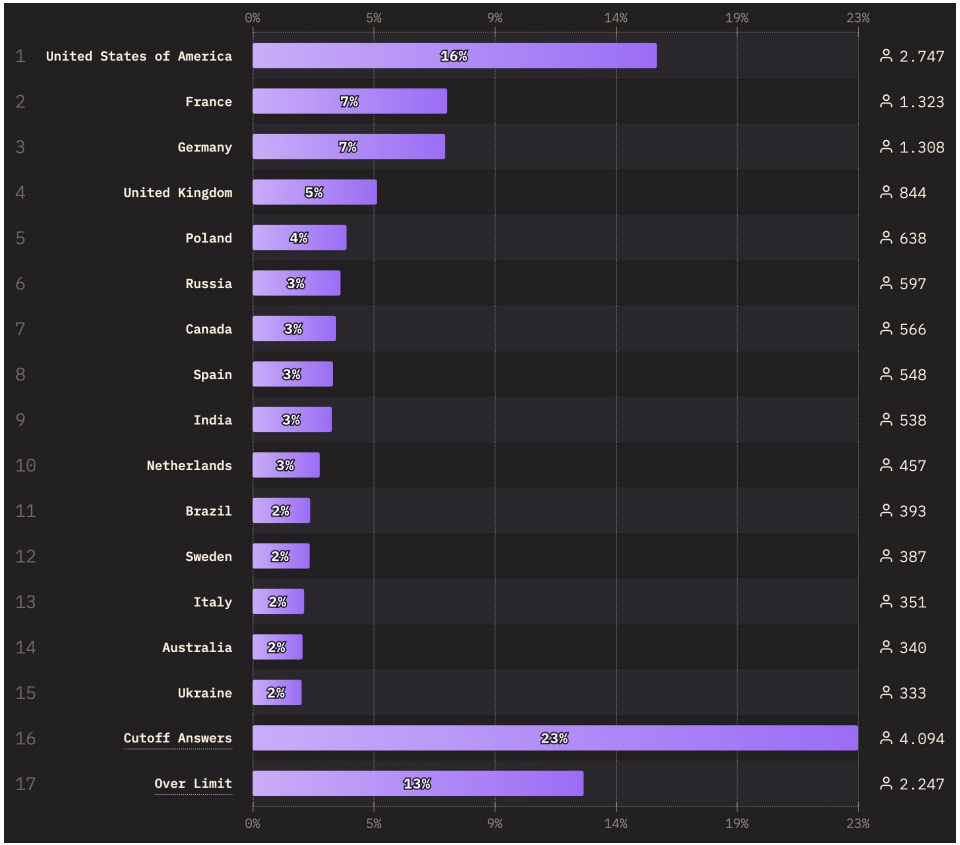
“This survey was created to identify upcoming trends in the web development ecosystem in order to help developers make technological choices.

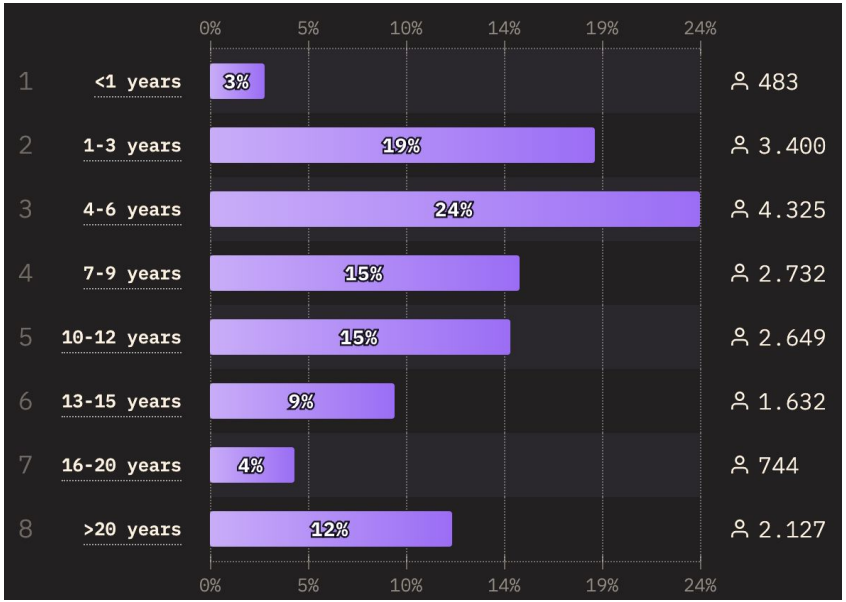
As such, the survey is focused on anticipating what's coming over the next few years rather than analyzing what's popular now, which is why features or technologies may sometimes be omitted even if they are currently widespread

It should also be taken as a snapshot of a specific subset of developers, and is not meant to speak for the entire ecosystem.”

StateOfJS 2023

statistica per stato e esperienza da dev (sono i votanti!)

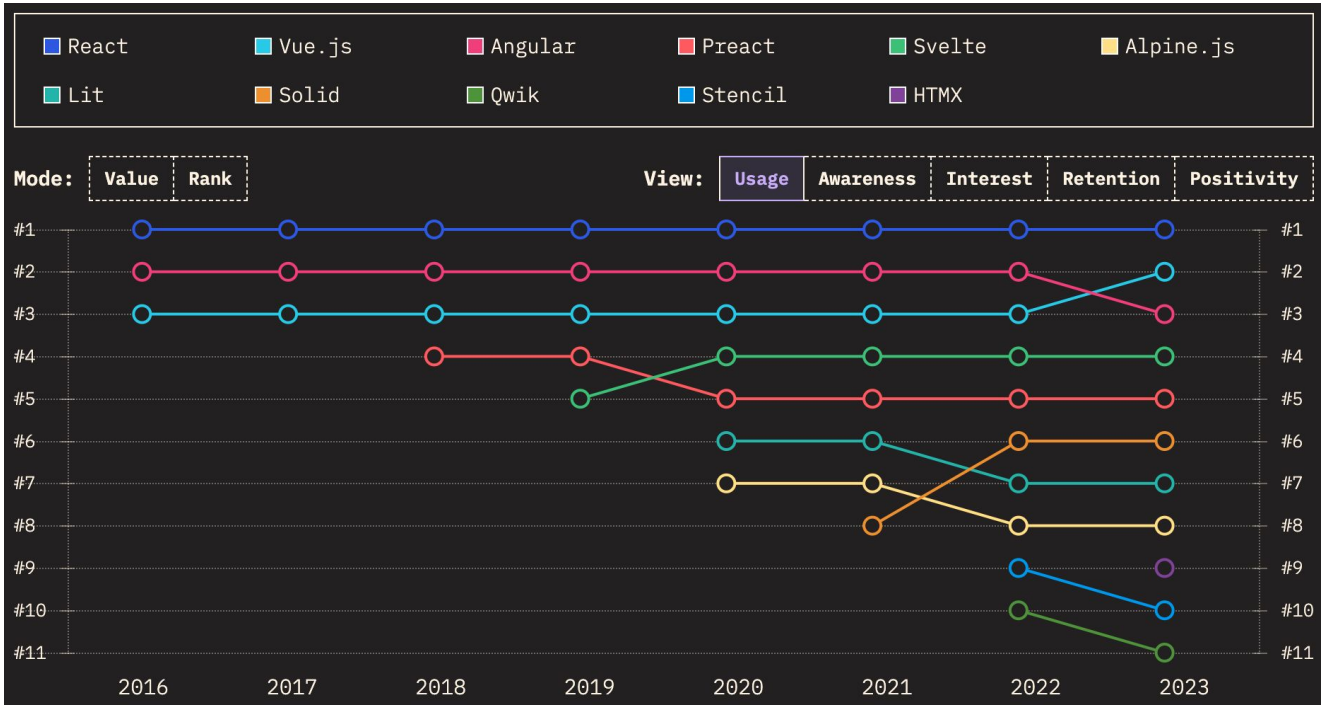




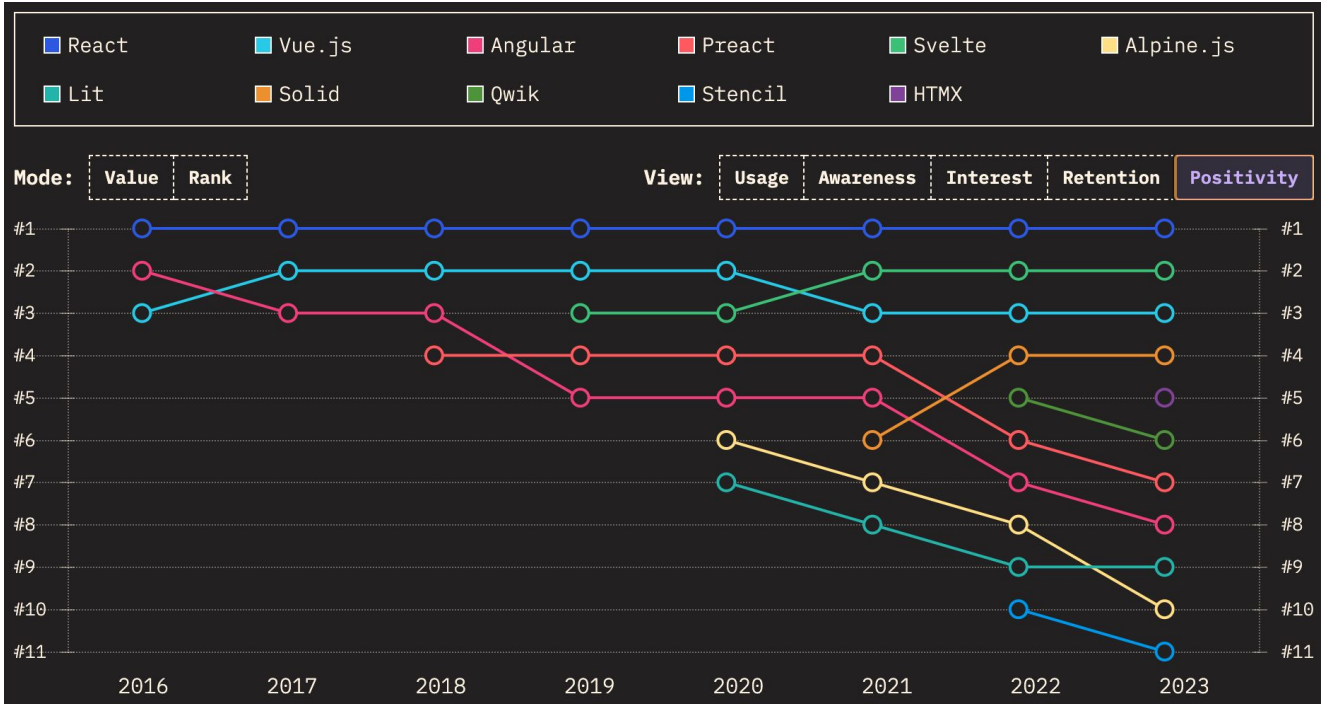
State of JS 2023

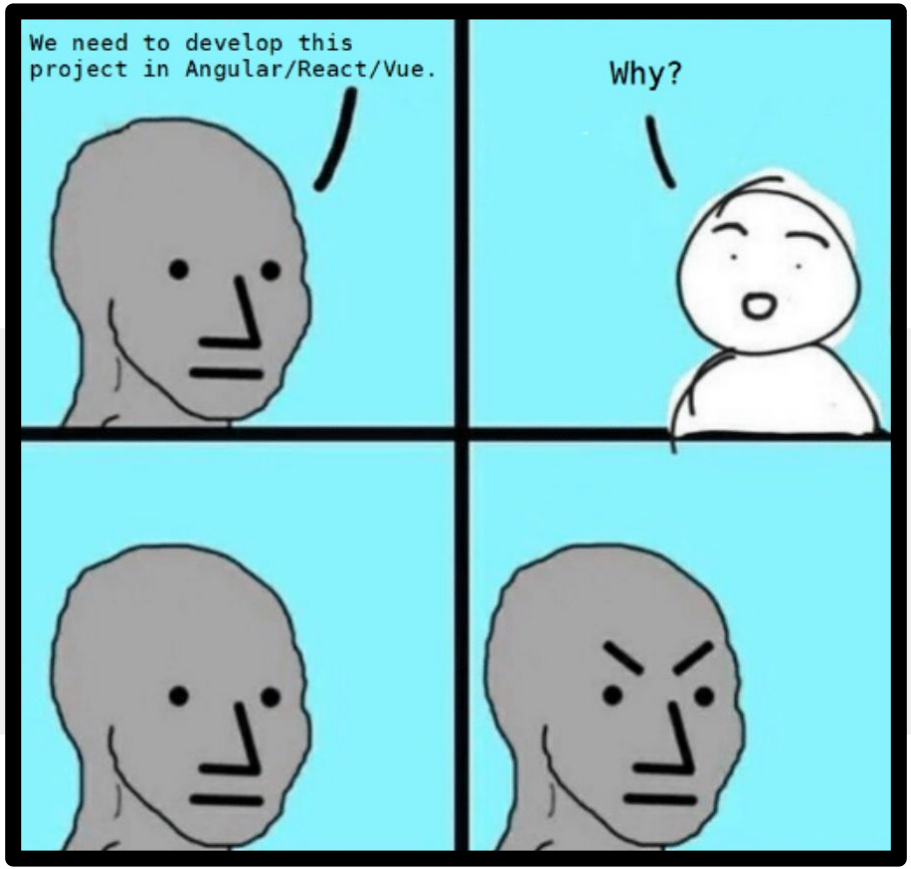
StateOfJS 2023 - Usage

per USO, react 1 posto fino ad oggi!



StateOfJS 2023 - Positivity




We need to develop this project in Angular/React/Vue.
Why?

Librarles vs Frameworks

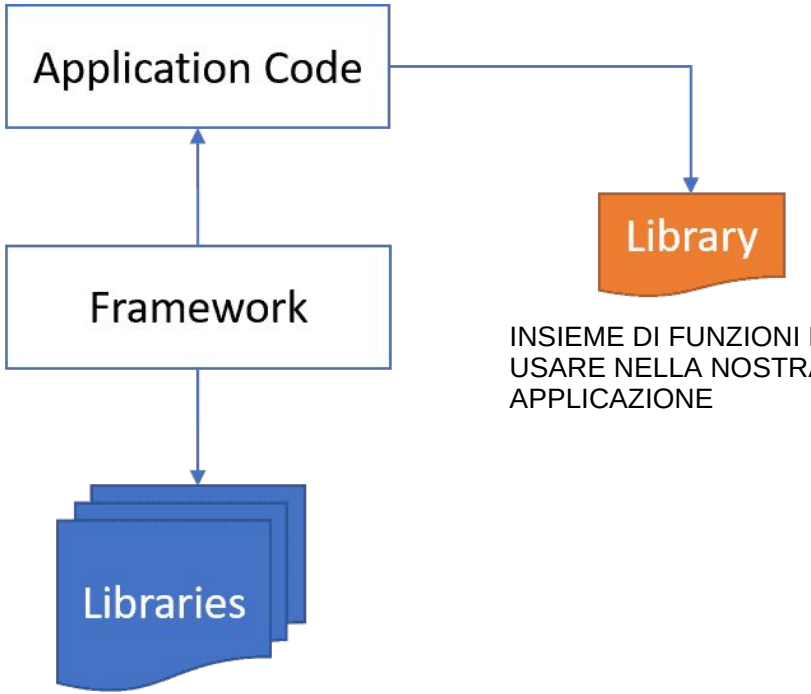
Library

--> It's a utility layer
--> Lets the user choose which feature to use and where
--> It's part of a development stack
--> Covers only part of the MV* pattern

Framework

--> It's a complete structural environment
--> Enforces the user to follow strict patterns
--> Can be the single tool needed to develop a complete app
--> Covers all MV* pattern

Librarles vs Frameworks



INSIEME DI TANTE LIBRERIE USATE DAL FRAMEWORK

INSIEME DI FUNZIONI DA USARE NELLA NOSTRA APPLICAZIONE

A **framework** dictates the architecture of an application, while a **library** provides reusable functions.

Librarles vs Frameworks

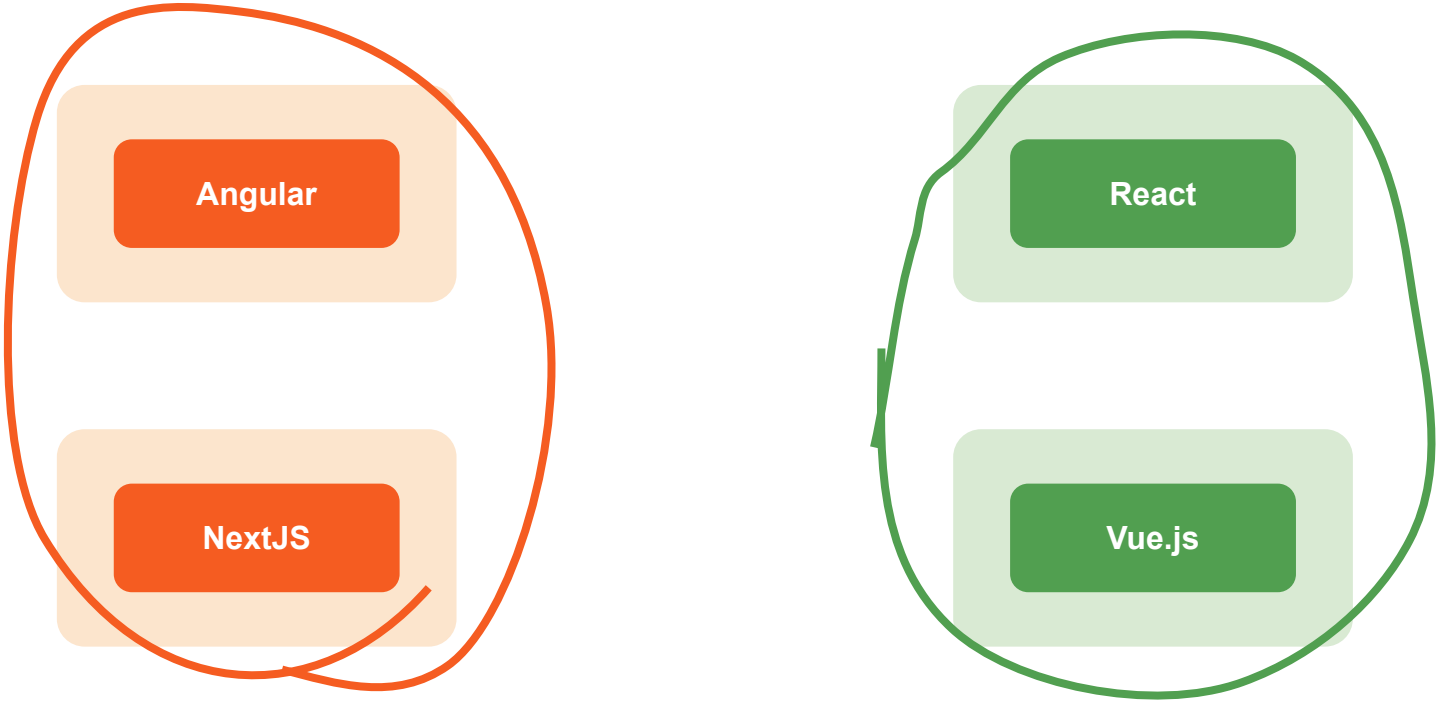
Angular

NextJS

React

Vue.js

Librarles vs Frameworks



Alright, but how to choose?

PERCHE USARE UN FRAMEWORK E QUALE USARE? DOMANDA IMPORTANTE!!

How to choose

1. Project Requirements

- **Complexity**: Simple website or complex app? Keep it simple and maintainable.
- **Scalability**: Will it grow over time? Choose a structured approach and architecture.
- **Performance**: Need for speed and efficiency? Choose SSR or static frameworks.

2. Skill Level & Learning Curve

- **Beginner, fast prototypers**: Consider Vue.js or React.
- **Intermediate to Advanced**: Look into NextJS, Nuxt or Angular.

3. Community & Support

- **Community Size**: Larger = more resources (React, Angular).
- **Documentation**: Check for quality (React and Vue.js are known for excellent documentation).

4. Integration

- **Compatibility**: React and Vue.js are easy to integrate incrementally.

5. Performance

- **Rendering Speed**: Efficient DOM updates (React → virtual DOM, Svelte → compiled output).
- **Bundle Size**: Smaller is better (Svelte, Vue.js, React Suspense).

6. Future Proofing

- **Longevity**: Active maintenance (React → Facebook, Angular → Google, Vue.js → strong core team).

7. Prototyping

- **Experiment**: Build small prototypes to test suitability.