

War Games (Into the Thunderdome)

Bob Fornal



Entrepreneur

Code-squid provides solid, in-depth frontend training that is supported with real-world code projects. Blessed husband and proud father of two.



Senior Solutions Developer Leading EDJE, Inc.

Passionate about learning, testing, mentoring, speaking, and personal growth.



What (and How) Are We Comparing?

What?

- Documentation
- Community
- Installation
- Build Tools
- Tooling
- Release Cycle
- Testing

How?

- Details (by Type)
- Overall Comparison
- Implementation (Project Size)

Library

- Set of reusable functions.

Framework

- Set of code that dictates project architecture.
- Provide standard way to build and test applications.

Library

Framework



Angular Details (1/2)

Framework

Area	Notes
Documentation	<ul style="list-style-type: none">• Based on John Papa's AngularJS Documentation.• Strong documentation on "why;" OPINIONATED.• Versioning back to v2.
Community	<ul style="list-style-type: none">• Smaller than Vue, then React.• Strong corporate support (Google).
Installation	<ul style="list-style-type: none">• ng CLI (with ng new); solid structure.
Build Tools	<ul style="list-style-type: none">• ng build.• Uses Webpack to bundle code, assets, and dependencies into optimized files for deployment.• ng [new generate serve build test lint].

Angular Details (2/2)

Framework

Area	Notes
Tooling	<ul style="list-style-type: none">• Library Creation: (to extend Angular functionality).
Release Cycles	<ul style="list-style-type: none">• A regular release schedule, allowing for planning and coordination of updates.• Major: every 6 months (May and Nov), Minor: 1-3 for each major release, and Patch Release: almost weekly.• Deprecation: Marked deprecated; deprecation phase lasts two major versions (minimum).
Testing	<ul style="list-style-type: none">• Test structure installed with each ng generate command.• Karma (test runner), Jasmine (testing framework), and Protractor (end-to-end testing).

Vue Details (1/2)

Area	Notes
Documentation	<ul style="list-style-type: none">• Only v2 and v3.• Solid documentation for beginner to advanced.
Community	<ul style="list-style-type: none">• Strong community of passionate developers.
Installation	<ul style="list-style-type: none">• <code>npm create vue@latest</code>
Build Tools	<ul style="list-style-type: none">• Vue CLI (average)

Vue Details (2/2)

Area	Notes
Tooling	<ul style="list-style-type: none">• Lightweight library to add interactivity to a website or enhance specific parts of an application.• Framework to build a complete web application.• Web Component Patterns.
Release Cycles	<ul style="list-style-type: none">• Limited corporate support means that supporting tools and libraries take time to catch up.
Testing	<ul style="list-style-type: none">• (Unit Tests) Recommends: Vitest; optionally: Jest• (Component Tests) Recommends: Vitest; optionally: Cypress• (E2E) Recommends: Playwright or Cypress; optionally: Nightwatch or WebdriverIO

React Details (1/2)

Library

Area	Notes
Documentation	<ul style="list-style-type: none">• Solid Documentation
Community	<ul style="list-style-type: none">• Strong corporate support (Facebook); translated into bootcamp use and lots of developer experience.
Installation	<ul style="list-style-type: none">• Next.js, Remix, Gatsby, Expo, (Next.js App Router); legacy: Create React App• Many options for installation; each is a different opinion.
Build Tools	<ul style="list-style-type: none">• React "lets you focus on code, not build tools."

React Details (2/2)

Library

Area	Notes
Tooling	<ul style="list-style-type: none">• Web Component Patterns.
Release Cycles	<ul style="list-style-type: none">• No set timeframe.• Strong plan for Stable Releases, Breaking Changes, Latest, Canary, and Experimental.
Testing	<ul style="list-style-type: none">• Recommended Tools: Jest and React Testing Library.

JavaScript Details (1/2)

Area	Notes
Documentation	<ul style="list-style-type: none">• MDN: thorough documentation.• http://vanilla-js.com/
Community	<ul style="list-style-type: none">• Who doesn't use JavaScript?
Installation	<ul style="list-style-type: none">• UNNECESSARY.
Build Tools	<ul style="list-style-type: none">• UNNECESSARY.

JavaScript Details (2/2)

Area	Notes
Tooling	<ul style="list-style-type: none">• Web Components: Foundational.
Release Cycles	<ul style="list-style-type: none">• Language specification (ECMAScript) and browser implementation and adoption.• ECMAScript: annual while browsers are independent and release on a rolling basis.
Testing	<ul style="list-style-type: none">• Can use Jest, Jasmine, or others.

General Comparison

Area	Angular	Vue	React	JavaScript
Documentation	SOLID	OK	SOLID	SOLID
Community	OK	SOLID	SOLID	SOLID
Installation	OK	OK	OK	n/a
Build Tools	SOLID	OK	SOLID	n/a
Tooling	SOLID	OK	SOLID	OK
Release Cycles	SOLID	POOR	OK	SOLID
Testing	OK	OK	OK	OK

Implementation Comparison

Area	Angular	Vue	React	JavaScript
Enterprise	SOLID	POOR	OK	POOR
Mid-Sized	SOLID	OK	OK	POOR
Small Team	OK	SOLID	SOLID	OK
Hackathon	POOR	POOR	POOR	SOLID
Individual	SOLID	SOLID	SOLID	SOLID

Build / Code Comparison

Area	Angular	Vue	React	JavaScript
Build Size	OK	SOLID	SOLID	SOLID
Lighthouse Score	SOLID	SOLID	SOLID	SOLID
Developer Tooling	SOLID	SOLID	SOLID	OK
Full Stack	SOLID	SOLID	SOLID	OK

