

## FRONT-END TOOLCHAIN

	DEV TOOL	DESCRIPTION	EASY DESCRIPTION
LANGUAGES	<a href="#">HTML5</a>	Base MARKUP structure for the React app.	Where everything <b>SITS</b> on the screen.
	<a href="#">CSS3</a>	STYLING for layout, themes, and responsive design.	How everything <b>LOOKS</b> on the screen. (colors, fonts, spacing, animations)
	<a href="#">Javascript (ES6+)</a>	Core programming language (under the hood) <-- translated by Babel	How everything <b>REACTS</b> on the screen.
	<a href="#">JSX (Javascript XML)</a>	React's HTML-in-JS syntax for components <-- how its written in source	More <b>LINGUISTICALLY INTUITIVE</b> than OG JS.
LIBRARIES/ FRAMEWORKS	<a href="#">React.js (v18)</a>	Main UI framework for building interactive, reusable components that make up the EchoLogz interface.	Makes components <b>DYNAMIC</b> .
	<a href="#">ReactDOM</a>	Renders React components to the DOM.	Makes react components <b>VISIBLE</b> on the screen.
	<a href="#">Electron.js</a>	Wraps the front-end in a cross-platform desktop app container / desktop shell	Turns the website-style app into a real <b>DESKTOP PROGRAM</b> that can be opened like any other app on your computer.
	<a href="#">Babel</a>	Transpiles (translates + compiles) JSX + modern JS syntax for compatibility	<b>TRANSLATES</b> new JS to old JS for the browser to understand. • NOTE: Replaced by Vite before Deployment ( <a href="#">SEE Build / Deployment Toolchain: Vite</a> )
	<a href="#">CDN (unpkg)</a>	CONTENT DELIVERY NETWORK (unpkg.com): Hosts packages (source code) such as React, ReactDOM, Babel so browsers can load them directly without local installation.	External network source for front-end dependencies during prototyping. • NOTE: Replaced by locally bundled versions created by Vite before Deployment ( <a href="#">SEE Build / Deployment Toolchain: Vite</a> )
STYLING TOOLS	<a href="#">Google Fonts (Inter)</a>	Google Fonts is an open-source font hosting service. The Inter font family is a modern, highly legible typeface designed for screens. You can load it via a link or CSS import.	<b>MODERN VISUAL IDENTITY</b> : Typography shapes readability and branding identity. • Introduces external dependency (network resource the front-end must load).
	<a href="#">Responsive Design (Media Queries)</a>	Media queries are CSS rules like @media (max-width: 980px) that let the interface change depending on screen size.	How the app <b>ADAPTS</b> and maintains responsiveness across devices or window sizes.
	Custom CSS Component Library	Collection of hand-crafted, reusable visual elements defined in style.css • This acts as lightweight design system — even without Tailwind.	<b>ENFORCES STYLES</b> : consistent spacing, shapes, and visual rhythm across the UI
	<a href="#">CSS Modules (optional)</a>	Keeps styles private to one component so they don't leak into others.	WHY: Makes it easy to keep all panels / buttons consistent w/out writing long custom CSS rules everywhere.
	<a href="#">Tailwind (optional)</a>	Lets you style things quickly with small, ready-made utility classes.	WHY: Speeds up styling by using quick utility classes instead of custom CSS
	<a href="#">Styled Components (optional)</a>	Lets you write CSS directly inside your JavaScript files (good for dynamic styling).	WHY: Lets each React component carry its own styling rules for easier maintenance
VERSION CONTROL	<a href="#">Git</a> + <a href="#">GitHub</a>	Code versioning and collaboration.	
IDE / WORKSPACE	<a href="#">VS Code</a> (KL)	Main development environment.	
	<a href="#">Sublime Text</a> (DH)	Quick editing of HTML, CSS, and JavaScript files	

	<a href="#">JetBrains IDE</a> (DH)	Each language has its own JetBrains IDE <ul style="list-style-type: none"> <li>• Smart autocomplete</li> <li>• Strong integration w/ frameworks (React, Django, etc.)</li> </ul>	
	(AJ)		
	(AC)		
	(JH)		