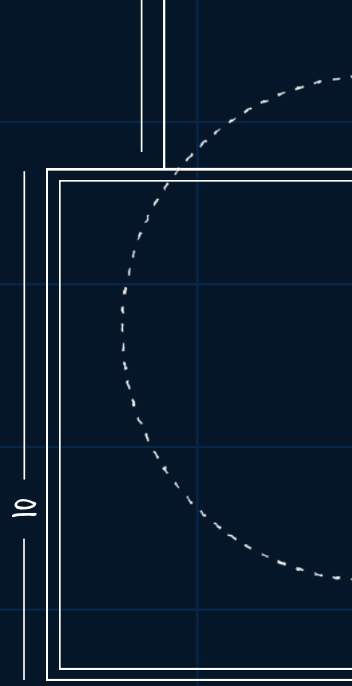
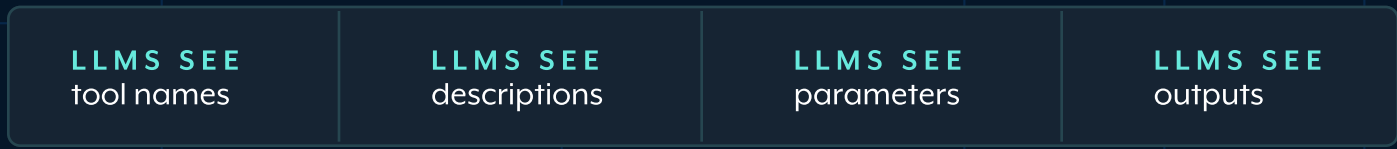


Building for LLMs



You can have the right scope, the right principles — and still ship tools that break. Here's what actually fails, and how to fix it.



Hard to choose	Parameters don't map	Too much data	Outputs lack meaning	Outputs aren't usable
<p>Overlapping tool names force the model to guess between equally valid options.</p>	<p>Generic inputs force interpretation before action. Each parameter should match how users express intent.</p>	<p>Unbounded results bury signals and waste context. More data doesn't improve reasoning — it makes it harder.</p>	<p>Different outcomes require different decisions. Status alone isn't enough — the model needs to know why.</p>	<p>Raw IDs and loose structure force reinterpretation before the next step. That's where errors enter.</p>
<p>BAD</p> <pre>search_customers find_customers</pre>	<p>BAD</p> <pre>search (query, filters, opts)</pre>	<p>BAD</p> <pre>returns 500 rows no truncation</pre>	<p>BAD</p> <pre>status: success data: []</pre>	<p>BAD</p> <pre>{ id: "a3f9x" }</pre>
<p>GOOD</p> <pre>search_customers get_customer (ID)</pre>	<p>GOOD</p> <pre>search (name, date, status)</pre>	<p>GOOD</p> <pre>bounded results has_more: true</pre>	<p>GOOD</p> <pre>nothing_found permission_denied</pre>	<p>GOOD</p> <pre>structured fields reusable in next call</pre>
<p>Make the right choice obvious.</p>	<p>Reflect how people ask.</p>	<p>Return bounded, usable data.</p>	<p>Communicate meaning, not status.</p>	<p>Enable the next step without guessing.</p>

BEFORE SHIPPING ANY TOOL, ASK

- Does the name make the right choice obvious?
- Do parameters map to how users express intent?
- Are results bounded with clear truncation signals?
- Do outputs distinguish meaningfully different states?
- Can the model use the output directly in the next step?

THE THROUGH-LINE

MCP tools aren't just functions. They are interfaces for reasoning.

If the model has to guess at any step — selection, input, output, or interpretation — reliability breaks. Design for the model doing the reasoning, not the developer building the system.