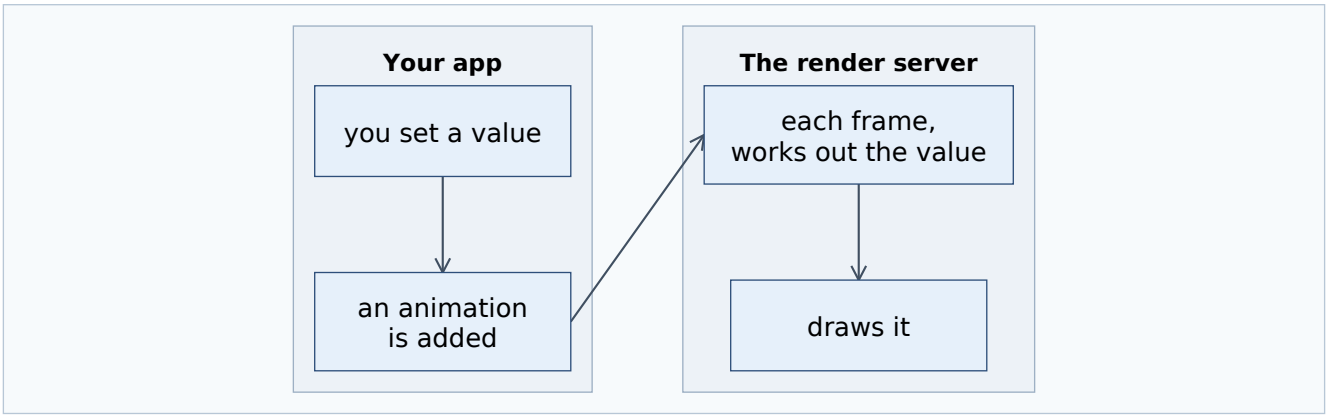
Subgraphs and more links in PDF diagrams

A page and its PDF come from the same Markdown, so a diagram has to work in both. In the browser a `mermaid` block runs through the mermaid runtime. In the PDF it is drawn by MarkdownPDF in pure Swift, with no runtime at all, so it reads a subset of the language. TileDown 0.12.1 widens that subset.



What the PDF now draws

- **Subgraphs.** `subgraph id["Title"]` with its nodes and `end` is a titled frame around them, and `direction` inside it lays the group out left to right or top to bottom on its own. A link can join a node inside a group, a node outside, or a group.
- **Plain, dotted and invisible links.** `A --- B` joins two nodes without an arrowhead, `A -.- B` does the same dotted, and `A ~~~ B` draws nothing and only shapes the layout.
- **Chains.** `A --> B --> C` on one line is one edge for each pair, each keeping its own label and line.
- **Line breaks.** `<br/>` in a label starts a new line, where it used to be printed as text.
- **Tall diagrams.** A diagram taller than the page is shrunk, as a wide one already was, and prints its source only when it does not fit at the smallest size.

Subgraphs do not nest, and a node belongs to one group. A diagram that uses something outside the subset still prints as visible source, never a wrong picture.