Definition (Catalogue). A *catalogue* is a span in **Pos**. It thus consists of 3 posets **I**, **F**, **R**. We call them implementation space, functionality space, and requirements space, respectively. We need to define two maps $\mathsf{prov} : \mathbf{I} \to \mathbf{F}$ (an implementation **prov**ides a functionality) and $\mathsf{req} : \mathbf{I} \to \mathbf{R}$ (an implementation **req**uires resources):

$$
\begin{array}{ccc}
 & \mathbf{I} & \\
{\color{green}\mathsf{prov}} \swarrow & & \searrow {\color{darkred}\mathsf{req}} \\
\mathbf{F} & & \mathbf{R}
\end{array}
$$