## **System Design Document**

## **Architecture**

React (Vite, MUI) frontend on port 3000 communicates with Express backend on port 5000. In-memory store ensures uniqueness, expiry, and analytics.

## **Key Decisions**

 $\label{logging} \ \ \text{Logging middleware, default validity 30 minutes, optional custom shortcode, client-side redirection, SPA routing.}$