

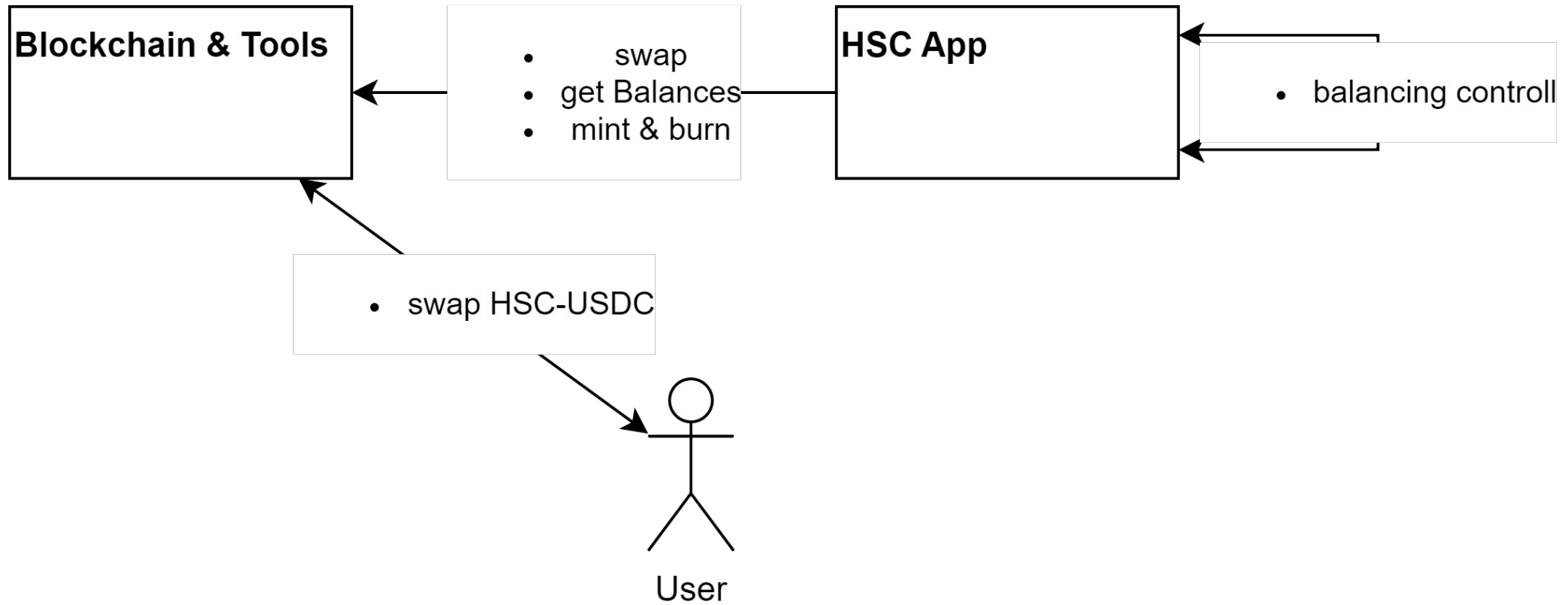


Blockchain HS24

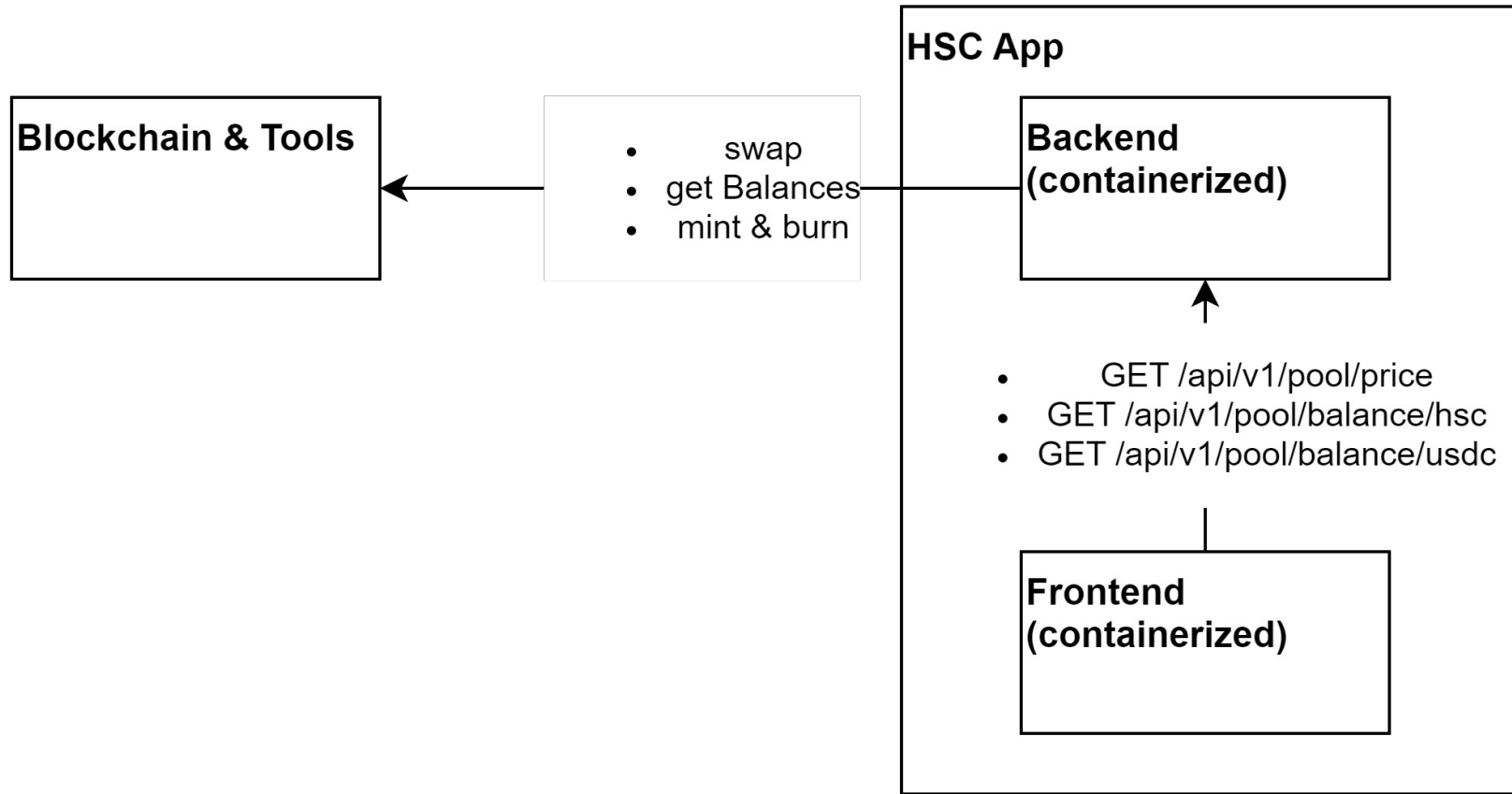
HS Coin

Sylvester Homberger, Yannick Städeli und Roman Cvijanovic

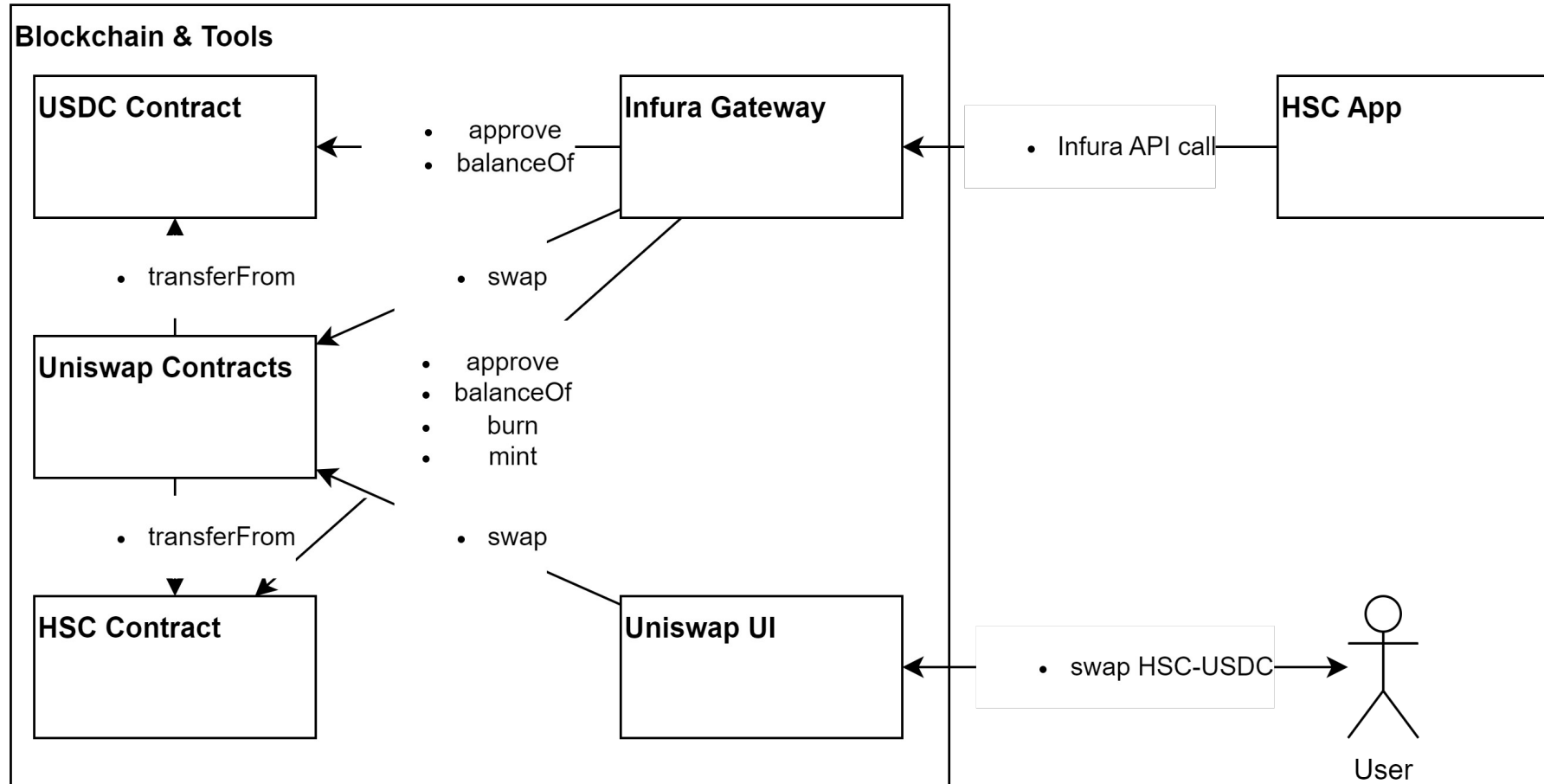
Context



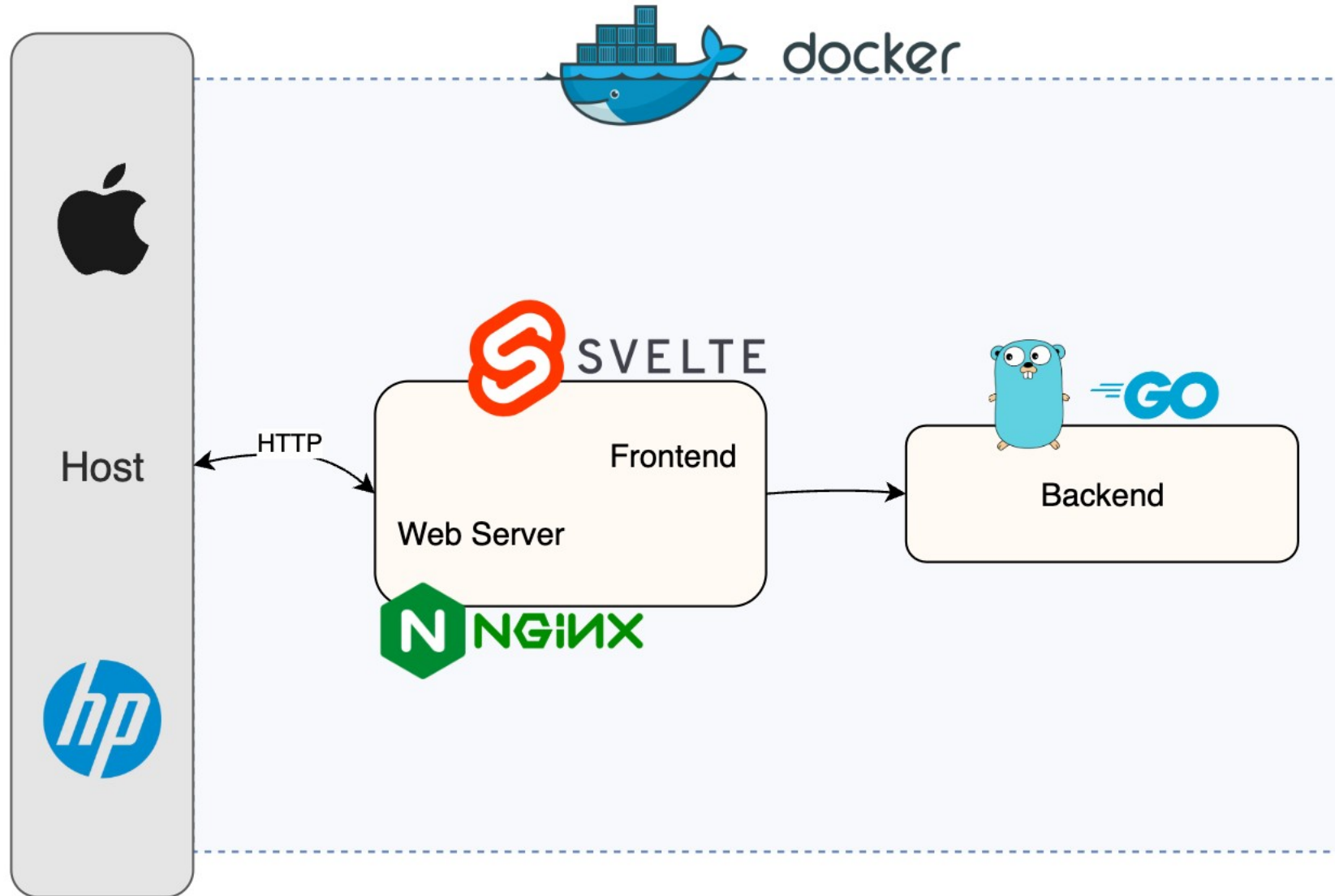
Container: HSC App



Container: Blockchain & Tools



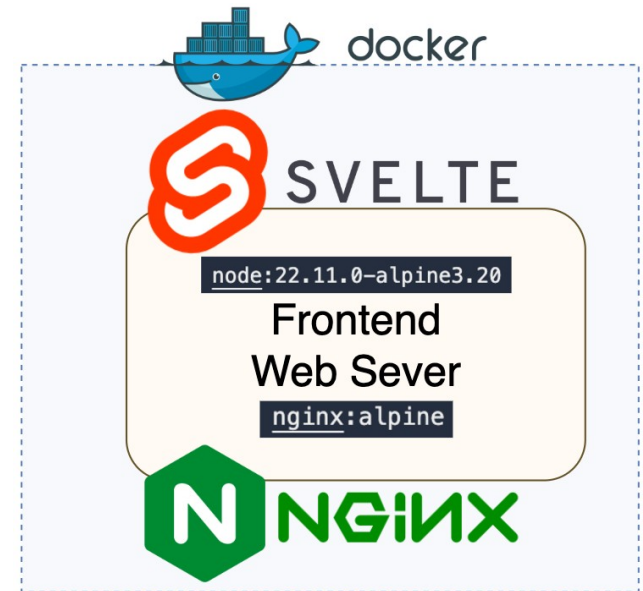
Docker Architecture



Frontend



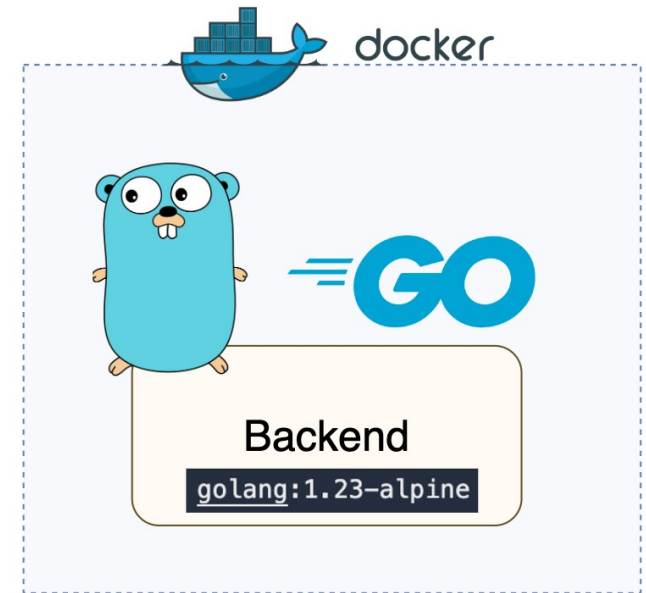
- Svelte & Type Script
- UI Libraries:
 - shadcn-svelte
 - chart.js



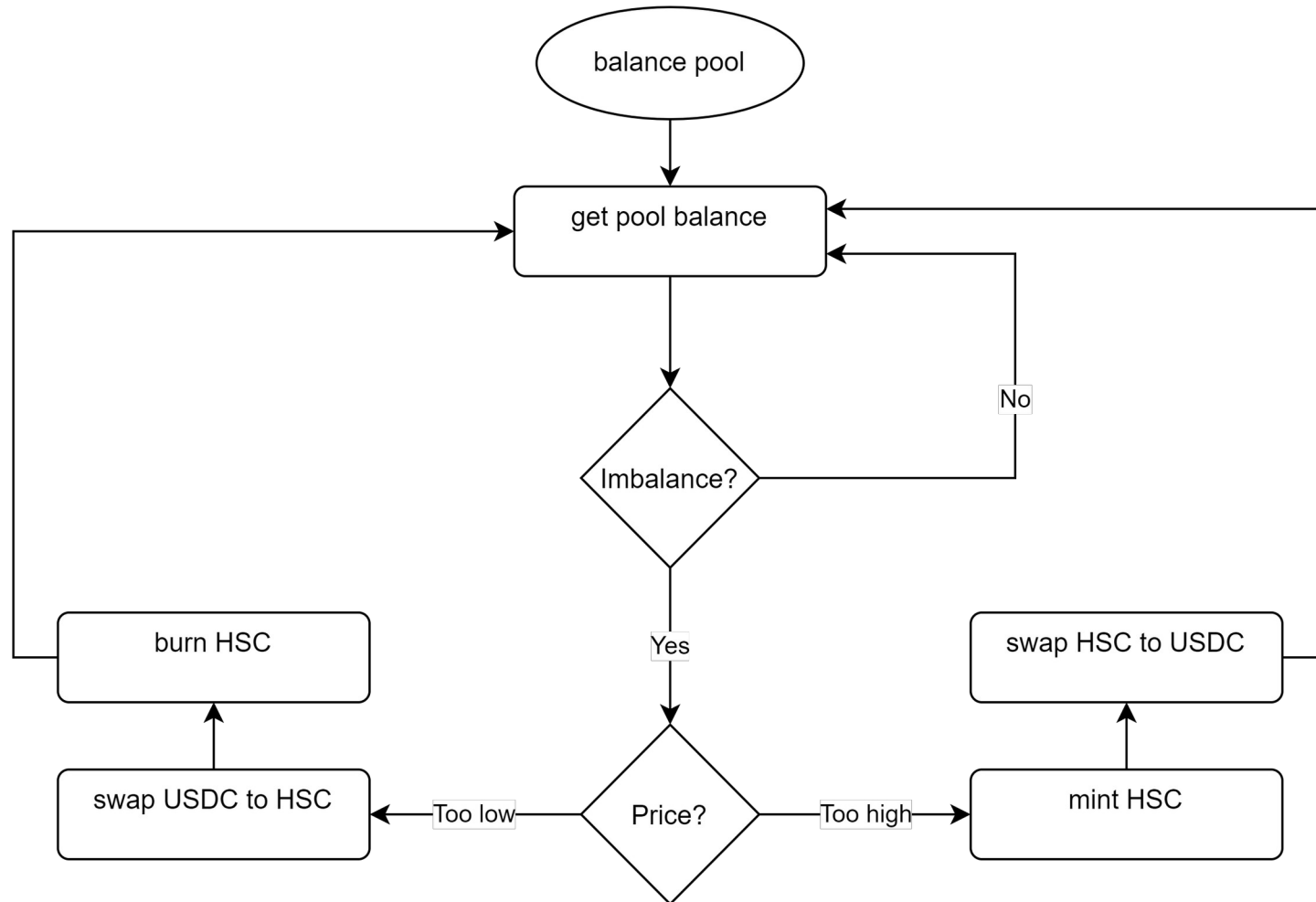
Backend



- Golang
 - gin
 - logger
 - go-ethereum



Balancing Mechanism



Design Decisions – Repository



- Mono Repo
 - suitable for project size
 - easier to maintain
- Gitlab
 - CI/CD - GitLab runner
 - GitLab container registry

Design Decisions – Smart Contract



- Solidity
 - Openzeppelin
 - solidity showcased in lectures
- Infura over self hosted node
 - Easier
- why USDC?
 - USDC 's rate is 1:1 with usd
 - USDC is a low volatility transfer-asset to USD

Design Decisions – App



- Golang
 - two members are using it in their SA
 - great tooling
 - ease of use
- Svelte
 - two members are using it in their SA
 - perfect for smaller project
 - easier and more light weight then Vue or React

Design Decisions – Blockchain Tools



- Uniswap
 - outsourcing because of time constraints
 - tried with Sushiswap, but had issues importing our coins
- Infura
 - Very easy to setup
 - Very high free daily usage limit



Demo