

## How it Works (tech-stack)

---

Smart contracts:

- Developed with Hardhat's smart contract development environment
  - Lets me compile, deploy, and test my smart contracts on any blockchain.
- Node.js Javascript runtime environments
  - Lets me run Javascript code outside of a web browser
- Yarn package manager for Node.js
  - Better developer experience in my opinion
- Mocha test runner
- Chai assertions with Waffle's smart contract specific assertion matchers
  - Lets me test my smart contracts and do test driven development.
- Ethers.js to interact with the blockchain network and my smart contracts
- Typescript compiler and ts-node
  - Lets me write code that looks like Javascript but with data type rules enforced
- @typechain/hardhat
  - Automatically generates typing for my smart contracts. Very helpful for writing my tests.
- Alfajores-forno test network
  - Lets me deploy my smart contracts to the Celo test blockchain network

Excel spreadsheets:

- Excel formulas
  - Lets me write functions that automatically generate values when I change the inputs in the excel sheet