Two-Factor Authentication - Class Diagram

Blockchain Network

Two-Factor Auth Smart Contract

+ serviceName: string
+ serviceUrl: string

+ constructor(serviceName, serviceUrl)
+ authenticateUser()

<<library contract>> OpenZeppelin Ownable

<<library contract>> OpenZeppelin Context

User Initiates a contract transaction

Listen for Contract Events
web3.js

User

1. User Login

Contract Event Listener

+listenForEvent(address)

E-Trade Frontend

Secure REST API

E-Trade Backend

DB Library

Datastore