COVID-19 SUPPLY CHAIN

AFC - Blockchain Technologies

Team Members

Andrea Trianni
1806198

Responsibilities:

Front-End
Project Set-Up
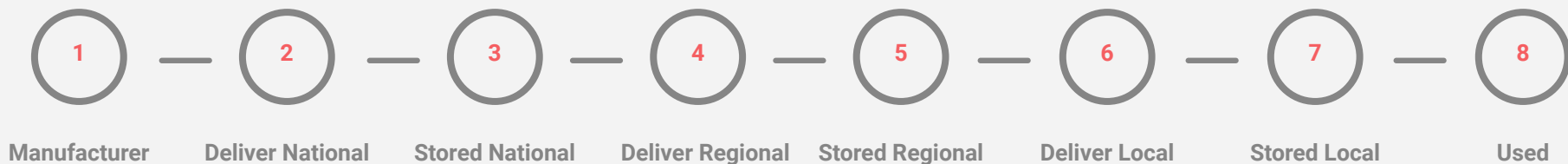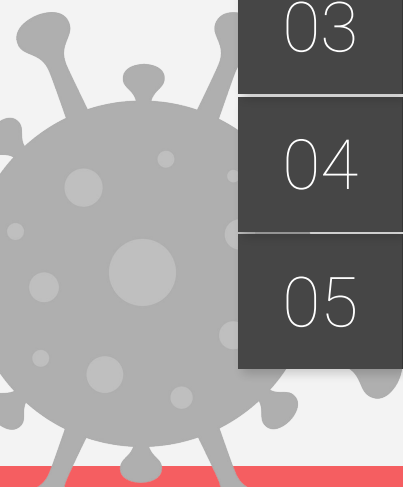Back-End Unit Test

Marco Adriani
1530783

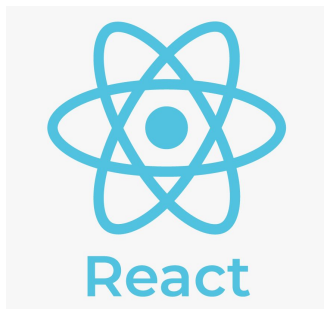**Responsibilities:**

Back-End
Deliverables

Cold Chain:

1	2	3	4	5	6	7	8
Manufacturer	Deliver National	Stored National	Deliver Regional	Stored Regional	Deliver Local	Stored Local	Used

Actor of the system:

01 | **Manufacturer**
- Who produce the vaccines (in batch).
- Who practically starts the chain.

02 | **Couriers and Logistics**
- Moves batches across locations and Facilities
- Responsible for delivery and logistics

03 | **Facilities**
- Store the batches of vaccine.
- They can be 'National' or 'Regional'

04 | **Vax Hub**
- Doctor injects the vaccines to the patients.
- Who practically terminate the chain.

05 | **Administrator**
- Add actor to the chain
- Administrate permissions of the actors.
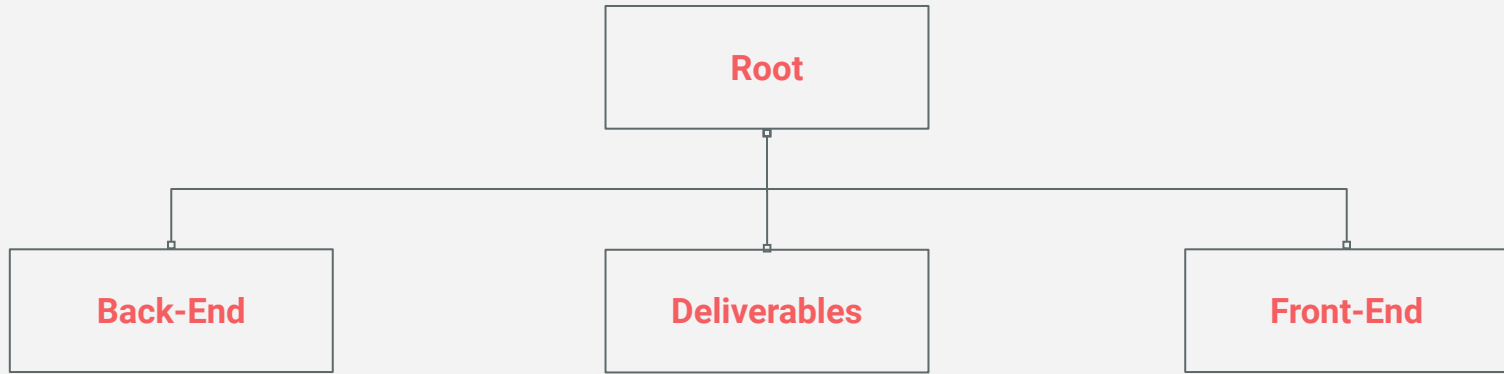
WHY BLOCKCHAIN ?

- **Tamper-proof** tracking of the supply chain.
- **Security**: decentralized control of the supply chain in order to avoid and prevent abuses from some actor.
- **Full transparency**: all partners have the responsibility to upload their information and data. A digital collection of accurate data improves accountability and trust between partners.

In real world scenario ?	
PERMISSIONED	not all writers are fully-trusted.
PUBLIC	public verifiability required.

TECHNOLOGY STACK

REPOSITORY STRUCTURE

A taste of use cases.
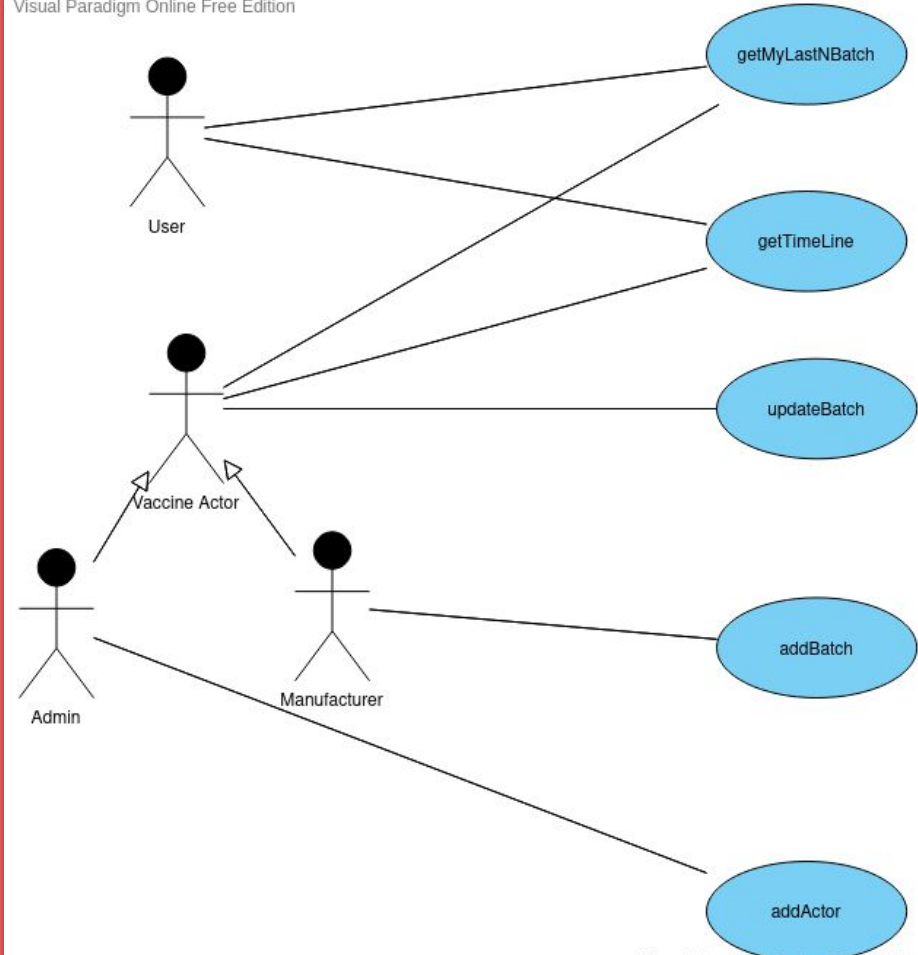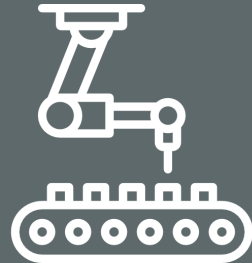
How the contract works.
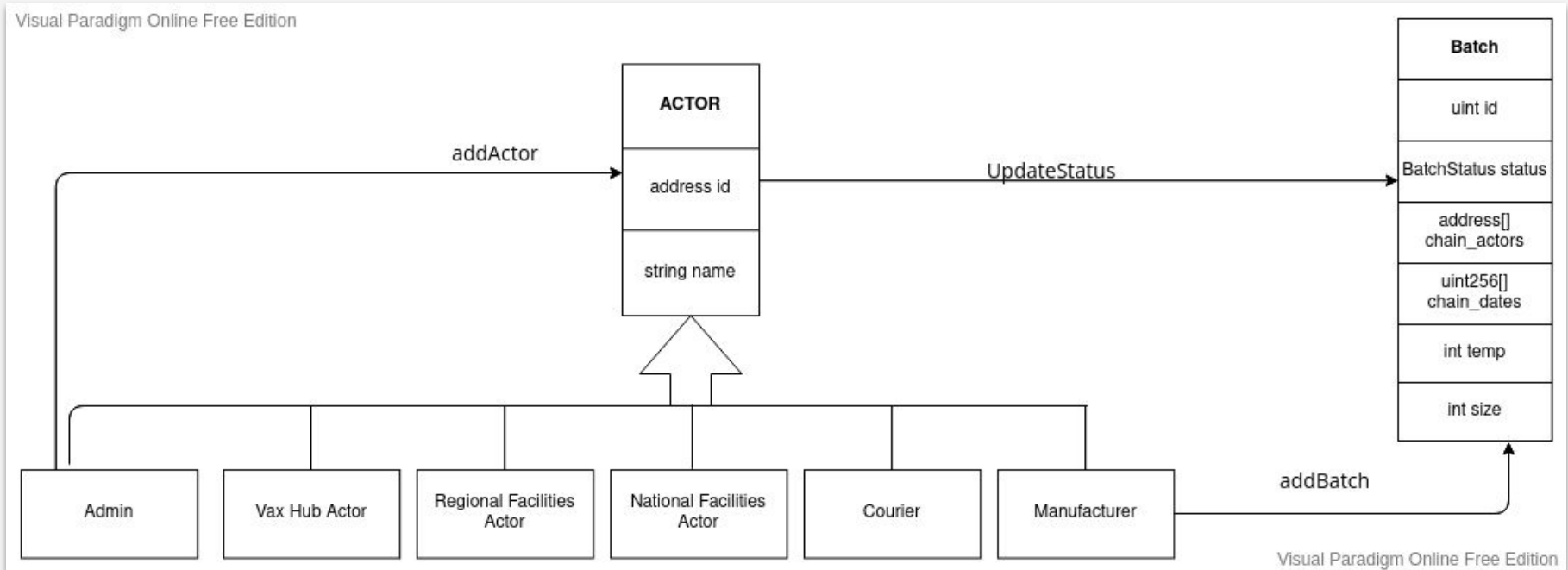
Limitation & Improvements

Add and Integrate Green Pass support.

Integrate with RFID system in production line

THANK YOU!