

MICHIGAN STATE

UNIVERSITY

Beta Presentation

Blockchain Based Vaccine Passport System

The Capstone Experience

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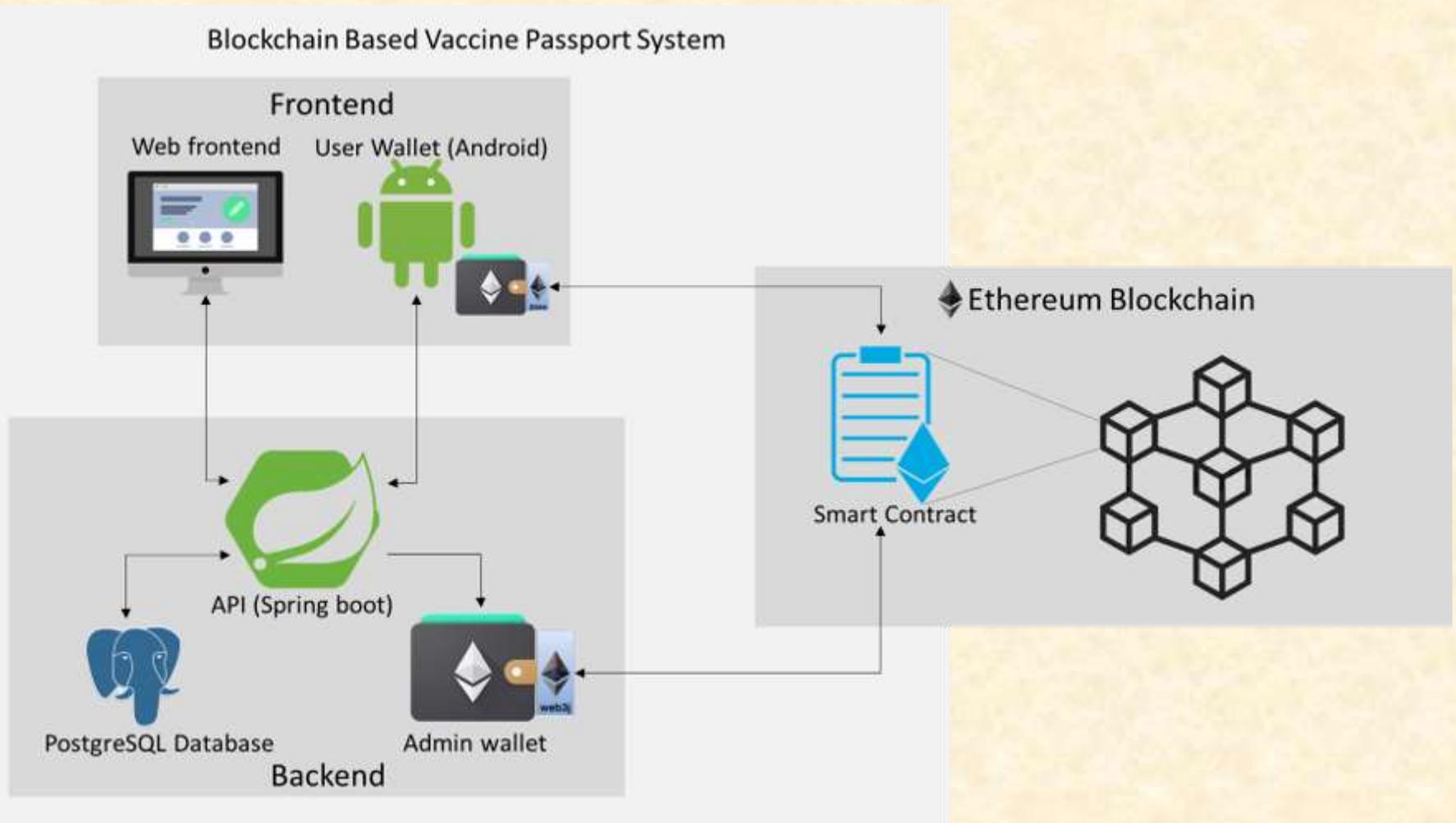
*From Students...
...to Professionals*

Project Overview

- Secure, verifiable "vaccine passports" are essential for public safety amidst the COVID-19 pandemic.
 - By verifying individual's vaccination statuses, the risk of spreading the virus via travel, sporting events, concerts, etc. can be minimized.
- By leveraging the immutable nature of the blockchain, secure digital "vaccine wallets" can be verified.
 - The goal of this project is to create a system that allows users to easily display vaccination status and request updates.
- The system should support users that don't want a wallet.
 - These users will not have the benefits of the blockchain.



System Architecture



(User) User's Vaccine



MaxCogito Inc.

Walgreen's

Sign out

Vaccinated

Pfizer
EW0183

Pfizer
EW0183

2 Doses

History (3) →

Update ✎



(User) Request for update

MaxCogito Inc. Walgreen's
Sign out

[Submit](#)



vaccine_image.png

	Date of Vaccination*	Manufacturer*	Lot Number*	Location*	Dose Number*	
1.	<input type="text" value="2021-04-01"/>	<input type="text" value="pfizer"/>	<input type="text" value="EN6203"/>	<input type="text" value="CVS"/>	<input type="text" value="1"/>	<input style="background-color: black; color: white; border: none; border-radius: 50%; width: 20px; height: 20px; text-align: center; vertical-align: middle;" type="button" value="+"/>
2.	<input type="text" value="2021-04-22"/>	<input type="text" value="pfizer"/>	<input type="text" value="EN9264"/>	<input type="text" value="CVS"/>	<input type="text" value="2"/>	<input style="background-color: black; color: white; border: none; border-radius: 50%; width: 20px; height: 20px; text-align: center; vertical-align: middle;" type="button" value="-"/>
3.	<input type="text" value="2022-01-20"/>	<input type="text" value="moderna"/>	<input type="text" value="011121A"/>	<input type="text" value="Walgreen's"/>	<input type="text" value="3"/>	<input style="background-color: black; color: white; border: none; border-radius: 50%; width: 20px; height: 20px; text-align: center; vertical-align: middle;" type="button" value="-"/>

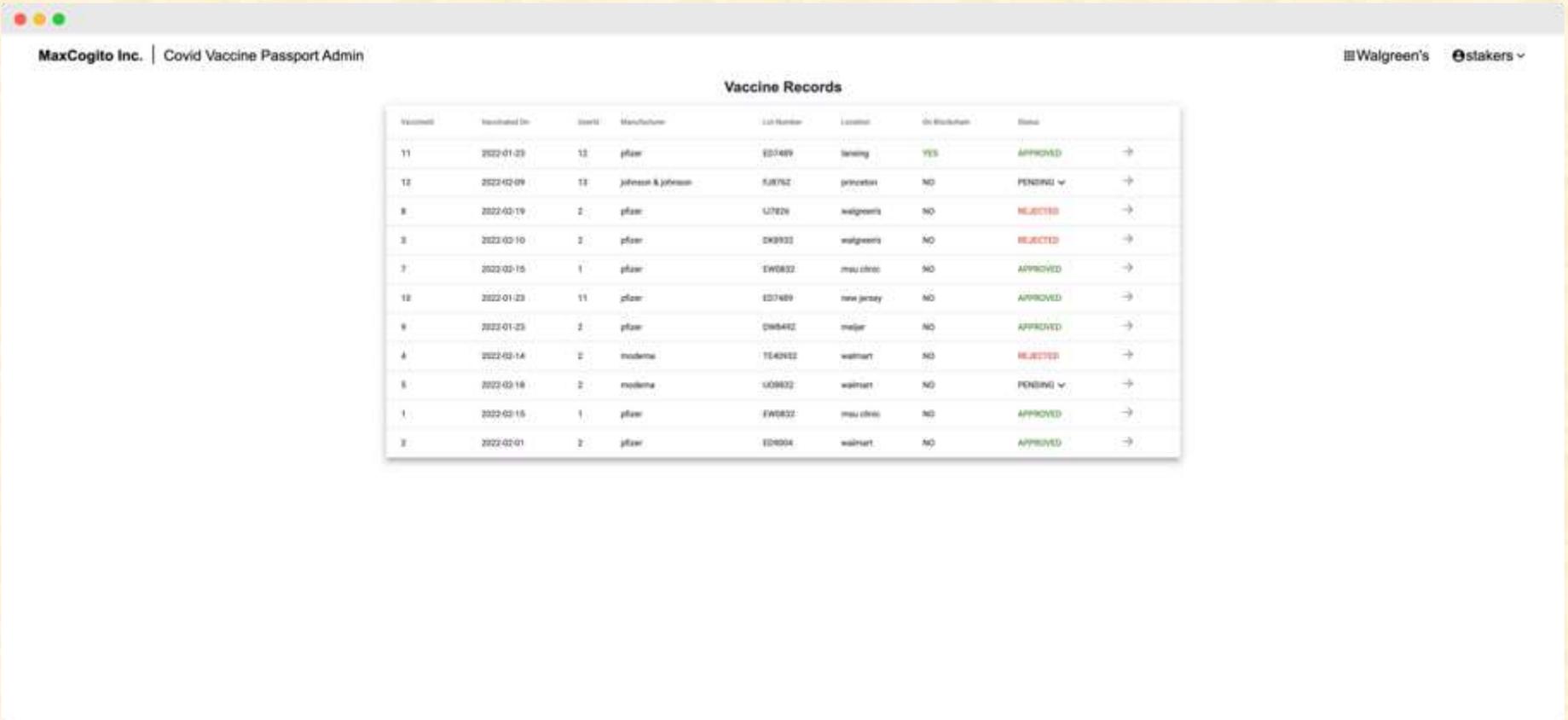
(Admin) Account Status Approval Request

Users

ID	Username	First Name	Last Name	Email	Phone Number	Status
2	ad	Den	Dj	ad@max.edu	800133299	APPROVED
1	ad@max	Daniel	Ady Djan	ad@max@max.edu	303479942	APPROVED
9	adwin@gmail.com	Sarah	N	adwin@gmail.com	704239718	PENDING
10	dan@gmail.com	Danny	Dan	dan@gmail.com	849329033	APPROVED
11	ben@gmail.com	Beneth	ben	ben@gmail.com	318329962	APPROVED
8	carl@gmail.com	Carl	carl	carl@gmail.com	804302322	APPROVED
12	alex@gmail	Alex	Habib	alex@gmail	804234432	APPROVED
13	luca@maxcogito.com	Lucas	S	luca@maxcogito.com	647028434	APPROVED
14	max@maxcogito.com	Max	Max	max@maxcogito.com	804272345	APPROVED
15	drew@maxcogito.com	Drew	S	drew@maxcogito.com	348242237	APPROVED



(Admin) Vaccine Status Approval Request



The screenshot displays the 'Covid Vaccine Passport Admin' interface. At the top left, it says 'MaxCogito Inc. | Covid Vaccine Passport Admin'. At the top right, there are logos for 'Walgreen's' and 'stakers'. The main content area is titled 'Vaccine Records' and contains a table with the following data:

VaccineID	Vaccinated On	DoseID	Manufacturer	Lot Number	Location	On Shelf/Status	Status	Action
11	2022-01-23	12	pfsaer	ED7489	lansing	YES	APPROVED	→
12	2022-02-09	13	johnson & johnson	5J8752	princeton	NO	PENDING	→
8	2022-02-19	2	pfsaer	U7826	walgreens	NO	REJECTED	→
3	2022-02-10	2	pfsaer	DK8932	walgreens	NO	REJECTED	→
7	2022-02-15	1	pfsaer	EW0832	msu clinic	NO	APPROVED	→
18	2022-01-23	11	pfsaer	ED7489	new jersey	NO	APPROVED	→
9	2022-01-23	2	pfsaer	DN8432	meijer	NO	APPROVED	→
4	2022-02-14	2	moderna	TE4232	walmart	NO	REJECTED	→
6	2022-02-18	2	moderna	U08832	walmart	NO	PENDING	→
1	2022-02-15	1	pfsaer	EW0832	msu clinic	NO	APPROVED	→
2	2022-02-01	2	pfsaer	ED8004	walmart	NO	APPROVED	→



What's left to do?

- Features
- Stretch Goals
 - Processing Picture
 - Filtering in Admin Wallet
 - Moving to an AWS
- Other Tasks
 - Mobile App



Questions?

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