Nanotransaction Startup

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Project Overview

- Project is being run as a startup.
- We are creating a 3rd party paywall for content providers that allows their users to access content in a pay-per-view style.
- Blockchain technology will be used to store transactions and maintain user anonymity.

Project Deliverables

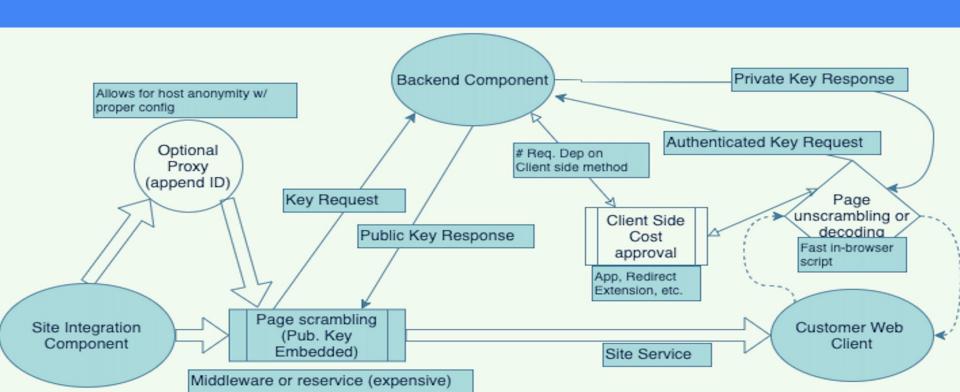
Our goal is to deliver:

- 1. Product website for potential clients, users, and investors.
- 2. User Web Client
- 3. Site Integration Component
- 4. Nanotransaction API/Decentralized Application

Primary Technical Hurdles

- Understanding Blockchain technology.
 - What is it? How does it work?
 - What implementation options are available?
 - What implementation best meets the needs of our project.
- Understanding how to implement Smart Contracts and decentralized applications(dapps).

High Level Process Flow



Tool Set

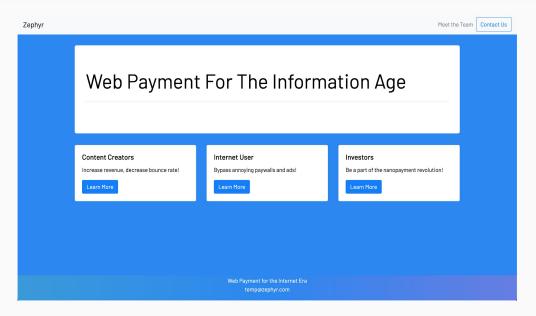
- Nanotransaction API/Backend
 - Blockchain creation from scratch
 - Build upon existing blockchain platforms
 - Centralized database
- Site Integration Component
 - Module on Business Page
 - Browser Extension
 - Transactional Web Page

Blockchain Implementation Routes

- Blockchain Creation from Ground Up
 - Data structure elements to capture transactional data
 - Data integrity checks, chained elements to have immutable property
 - Validation of transactions to create new elements in chain
 - Consensus algorithms to ensure blockchain state truth
 - Endpoint to interact with blockchain
 - Blockchain distribution for decentralized property
- Build Upon Existing Platform (dApp)
 - Consensus algorithms to ensure blockchain state truth
 - Creation of smart contracts (Business logic to store transaction data)
 - Endpoint to interact with dApp

Product Site Demo

https://zephyr-dev.herokuapp.com/



Perceived Challenges

Creating a blockchain from scratch

- -Building from scratch would take a lot of time, which may limit us.
- -Increase our amount of research by a factor of a lot.
- -We must accept the fact we may not get as far as we want.

Perceived Challenges Continued

Using already established blockchain

- -Create a dApp for reliability and time saving.
- -Still continue researching, but not as much.
- -Must learn outside programming language, like solidity.

Perceived Challenges - Front End

Browser Extension

- -Much cleaner and potentially more appealing to users.
- -May have a 'mental' cost associated with it.

Website Redirection

-Not as nice looking