BlockChain powered CryptoCurrency reward system to promote sustainable development

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Assignment - 3

Problem Analysis, Factors Influencing and Control

Problem Definition

The aim of this project is to employ Blockchain technology to implement a reward based cryptocurrency network, which allows and motivates citizens to achieve sustainable development goals by contributing to their community. This contribution is measured through a proposed community interaction platform

Problem Analysis

In this particular problem statement we aim to address the issue of community contribution and participation to sustainable development goals. Thus, naturally the product must be designed in such a way that it is attractive and something that would be preferred by the public over present day systems.

We take advantage of the recently trending Q&A interaction forums and create a similar community interaction forum.

This is the simple task to be done to obtain the crypto coin obtained through the blockchain. This forum is implemented in such a way that it is similar to the currently existing forums, so that there is no learning curve, and it's equal, if not better, than the other famous forums.

Based on the contribution and participation in the forum, the users are

awarded coins based on their level of interaction.
These coins are mapped to the user using the backend, and they are assigned a coin ID.
This coin is given an idea such that the coin may not be misused in any other way for any monetary benefit.
The coins can thus be only used by the user with that I'd, and in the place where the coins are accepted.

Through the frontend, the user may access their wallet and see the amount of their coins in hand.
These coins are accepted in our own sustainable development shop.
This shop was implemented by hand with payment capabilities.
Users may purchase different sustainable development products and pay for it based on the number of coins present in their wallet.

Factor Influencing

The factors influencing this issue are purely based on the acceptance of this service by the public, and the successful participation of end users with sustainable development activities and products.
Some factors include:

1. The continuous and welcomed participation of users in the community interaction forum. This is necessary for the cryptocurrency to launch so that users can make use of it. This particular factor is crucial as the users would need to participate here in order to accrue their coins and purchase sustainable development products.

2. The availability and production of crypto coins. At the moment the coins are produced in a low number and do not require dedicated resources. However, if multiple different products must be added in order to scale this project, the feasibility must be present.

3. The availability of preferred and desired products in sustainable development store. This particular factor is the end goal and what is necessary for users to participate and achieve sustainable development goals. Hence, the interface and products must be preferred by the public.

4. The tracking and storing of coins. Each coin must be mapped to a particular ID number. This is done such that the coins may be assigned to their user securely and combat malicious intentions. The coin must be secure to avoid any attempts to obtain monetary benefits. Thus, the coin details must be properly tagged and stored for each of the users.

Control

The above discussed factors come together to provide seamless functioning of the service frameworks.
In order to achieve this, certain control parameters are necessary to be specified.

Some parameters include:
1. Security for the crypto coins. This is necessary in order to address user storage and malicious intention prevention.

2. User authorization. Authorization and ID based authentication is necessary in order to avoid any misuse of the cryptocurrency.

3. Production of coins. Coins must be produced at a fixed rate, and based on the level of contribution of the user in the interaction forum. This is necessary such that any misuse of coins by some kind of repeated action taken by malicious users to obtain large amounts of coins by unfair methods.

4. Secure production of coins and debiting of coins in the sustainable development store. This is necessary such that there are not unfair use of placebo coins in the store and that the coins are used one time only, and cannot be used anywhere again. This is necessary to map the ID of the coin to the user and the purchase as well.

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