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Project Synopsis

FUNDBLOCK

(A BLOCKCHAIN BASED CHARITY FUNDING PLATFORM)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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Introduction

With the development of Internet technology, there are more and more information access channel for people, and philanthropy has become more open and transparent. Many problems in the process of philanthropy have been exposed. According to media reports, some people sold relief supplies, which showed the confusing daily management of charitable funds and materials. At the same time, online crowdfunding has become a new way for the public to participate in public welfare undertakings. The crowdfunding platform has established a database for the project, a proper monitoring of the project is also an important part of the risk automatic control mechanism of the public welfare crowdfunding platform. Improving the transparency of philanthropic information is an important way to improve credibility for traditional donation and internet crowdfunding. Using Internet technology, a traceability system can be established to increase the transparency of charities technically. For this purpose, this paper proposed a new model of charity system based on blockchain technology.

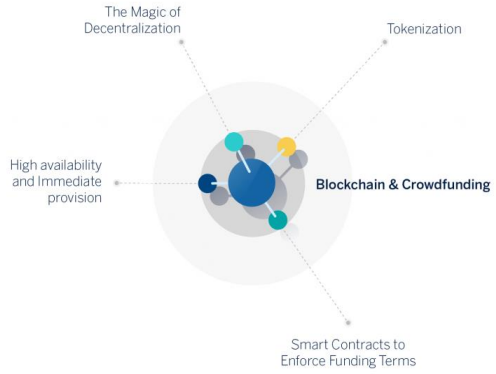
Problem Statement

In existing charity applications everything is done manually, so it is very difficult to maintain the records. It's also very difficult to find the activities. It is a Long-time process. It takes more time to prepare for various events within a short time.

The biggest problem faced is transparency, where people can rightly exercise their Right to Information by asking for a record of expenditure by the charity

Even if such applications are available, they are inaccessible to smaller organisations with a good user interface for ease of access.

Proposed Solution



In order to address the above mentioned problem in block chain technology we are proposing a solution to solve the problem of transparency of fund allocation of donor so that we can bring the trust of donors to donate more for many noble causes.
In our proposed project there are three roles: donors, beneficiaries and admin. The charity organizations get the information to seek help and create charity projects through the platform.

Donation-based crowdfunding is a way to source money for a project by asking a large number of contributors to individually donate a small amount to it. In return, the backers may receive token rewards that increase in prestige as the size of the donation increases. For the smallest sums, however, the funder may receive nothing at all in it.

Crowdfunding is a proposed solution used to authorise individuals, groups and bring a change in the standard of living of the needy. It will help in bridging gaps and allows humankind to take a step forward. However, you must be very alert while making donations and raising funds. It’s always a good idea to look for credibility and the root cause/agenda before raising or donating funds.

Scope of a project

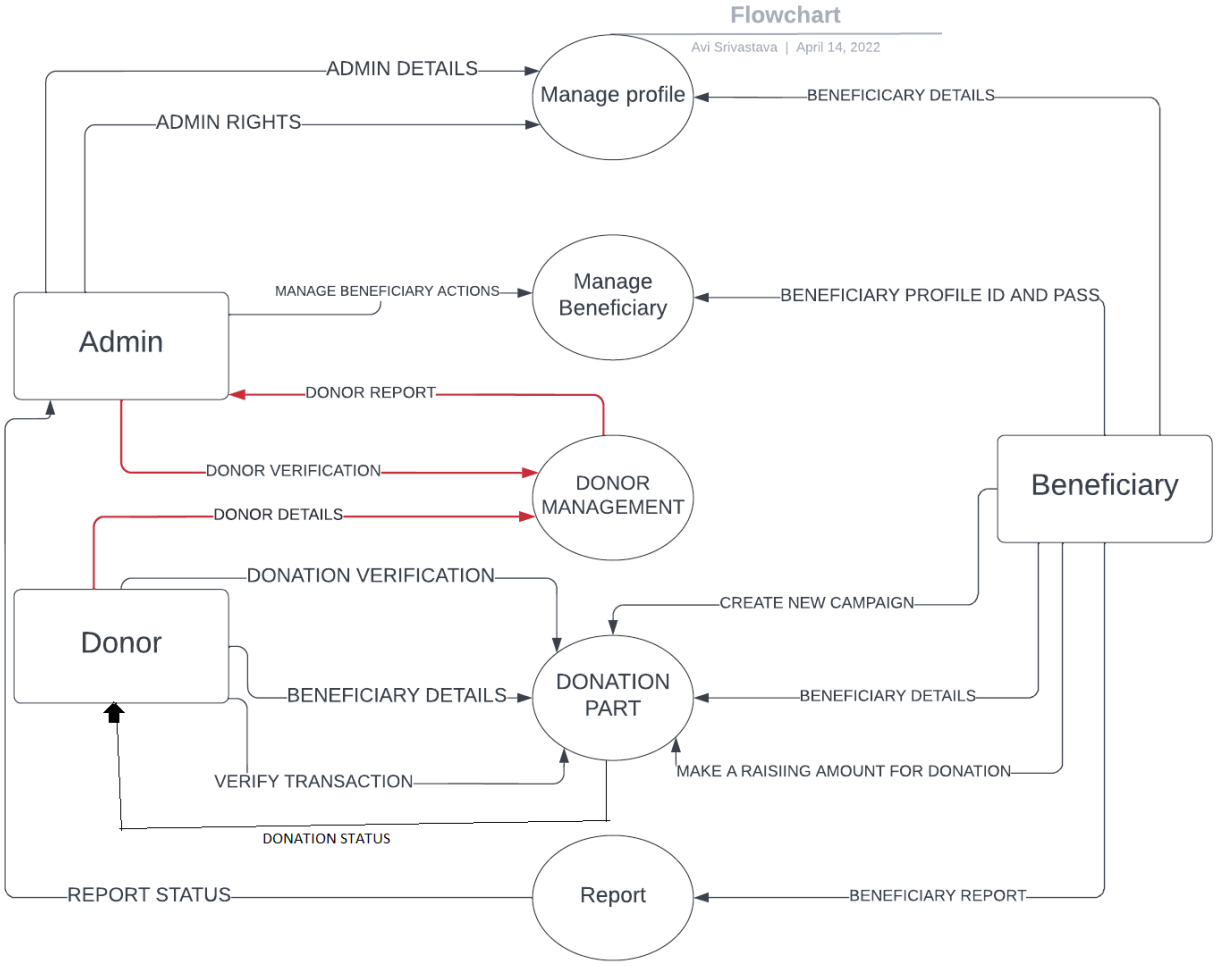
Donors learn about charity projects on the platform, then donate to beneficiaries or the charity organizations.

Beneficiaries upload their information to the platform for help, they can get and spend tokens in cooperative stores. The transactions occurring in the stores will be uploaded to the charity platform.

The admin can verify, remove any campaign and the admin is overall the head of the system who can access each and every transaction.

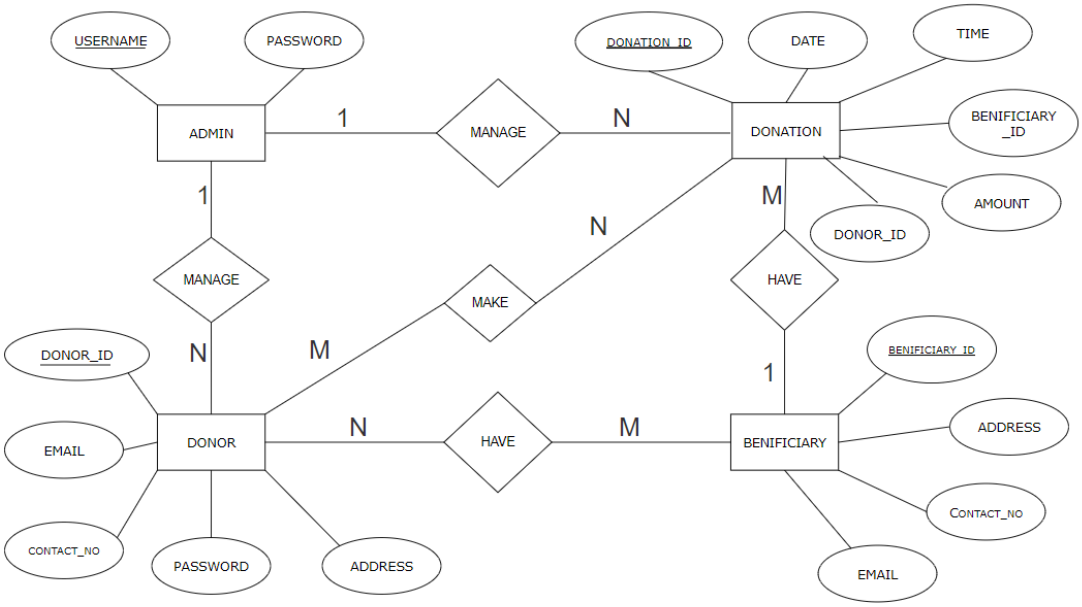
DFD (Data Flow Diagrams)

Context Level DFD



1 Level DFD

ERD (Entity Relationship Diagram) for “FundBlock”



Proposed Technology/Platform

Frontend - HTML, LESS (or SASS)/CSS, JavaScript, ReactJS
Backend - Solidity, Node JS, web3, ganache-cli, metamask

Minimum Hardware/Software Requirements

Software - VS Code, Ganache, Truffle, Ethereum Blockchain.
Hardware -

i. RAM: 512MB
ii. Disk: 1GB
iii. System Desktop Laptop Some ARM chipsets >1 GHz.
iv. Operating system Windows 7/8.x/10. Mac OS X. Some BSDs.

Future Scope

i. Make the UI/UX even better.

ii. Make an Android app for this idea.

Module Description

Modules of the Project:

I. Donor Module
II. Beneficiary Module
III. Admin Module

Donor's Module: When the donor logs in from the index module, the user is directed to the donor.js. This module is also the first page a user opens if he has already logged in instead of the index page. Here users can find available fundraisers and can donate an appropriate amount of money. The user can search for a cause as well.

Options:

i. Select a campaign to fund
ii. Go through with its details to verify
iii. Can donate with his/her metamask account through ether

Beneficiary Module: This module includes the facility so that the fund raiser/beneficiary can add a campaign in which there is a form contains the info like name of campaign, retiring date/time target amount, campaign photo, and then it goes for the verification to the admin. After that it is available for the donors to donate.

Options:

i. Add a new campaign
ii. Delete a campaign

Admin Module: This module is only accessible for the project developers having admin rights. The admin can add a new fundraiser, Update the fundraisers entered by the users or delete any entry. The admin approves the entry is forwarded to the blockchain database. Once the entry is approved by the

admin only then it is shown on the Donor/Beneficiary module. Admin has a provision to update categories as well.

Options:

i. Can verify and delete a campaign if got conflicted
ii. Manage all blockchain transaction

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