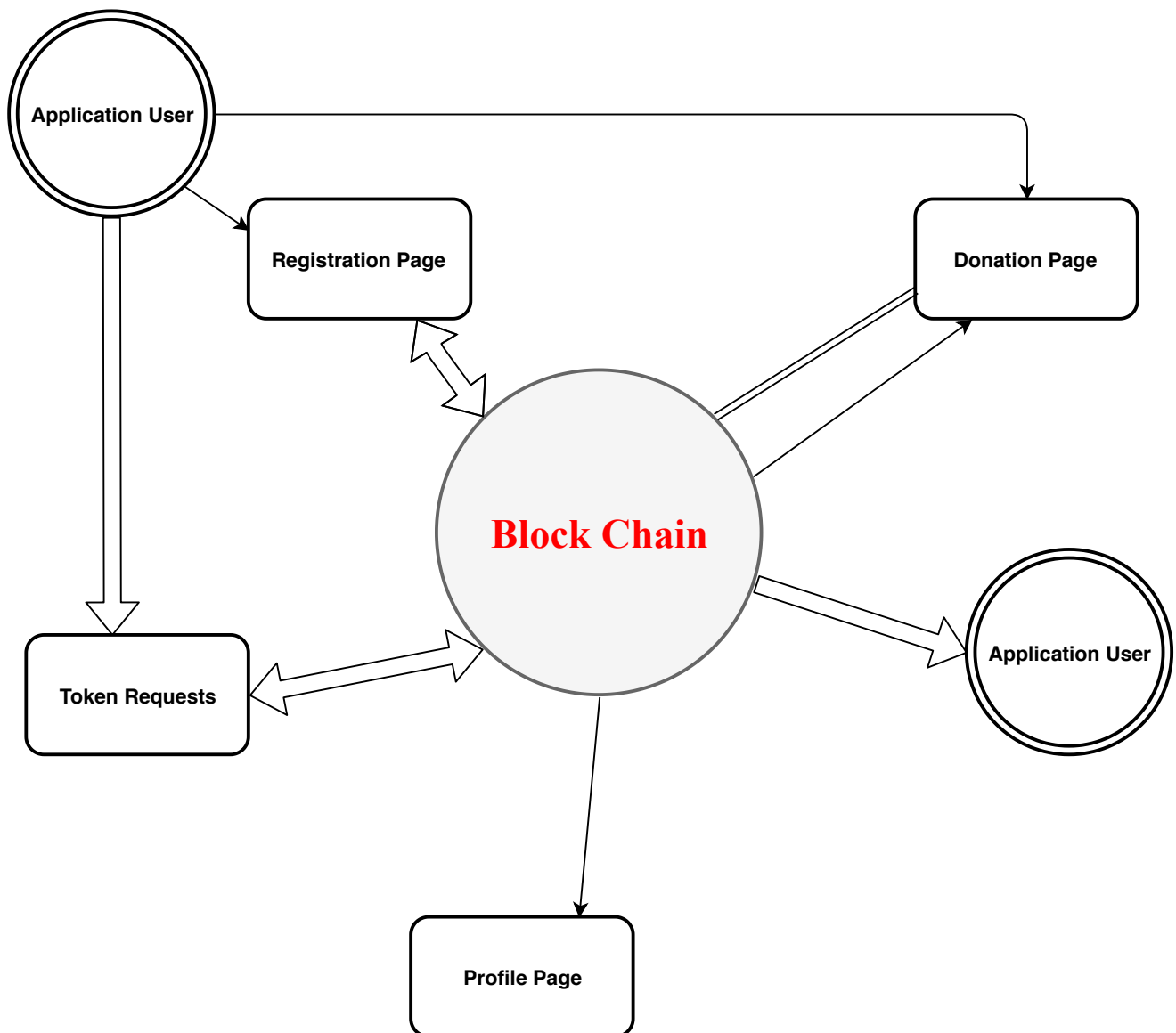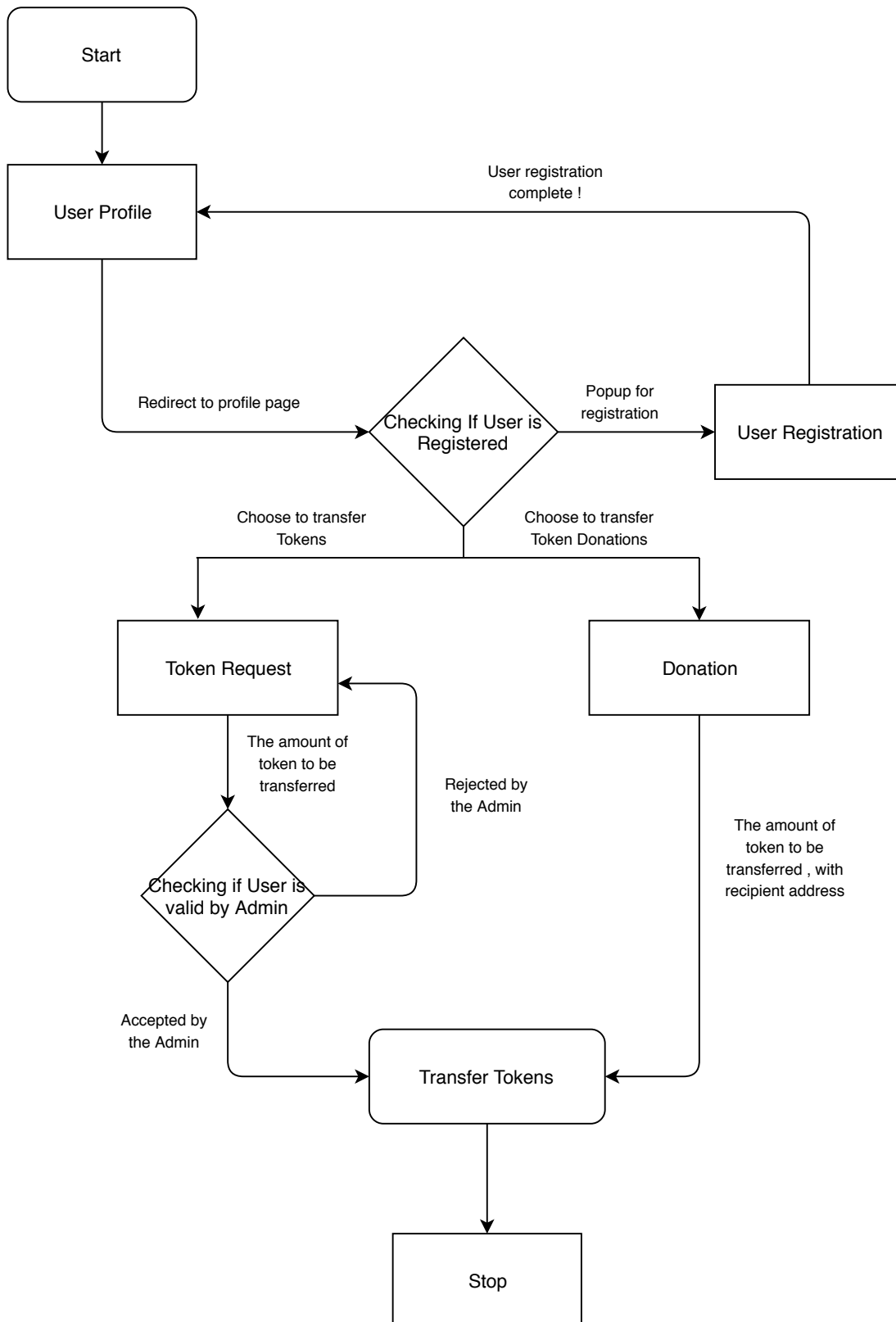# Level 0
Flowchart

Given below is the basic structure
of the working of the
CharityChain Dapp

Level 1 Flow Chart

This is the Level 1 Flowchart of Charity Chain Dapp, Explaining a few more functionalities in the

Start

User Profile

User registration complete !

Checking If User is Registered

Redirect to profile page

Popup for registration

User Registration

Choose to transfer Tokens

Choose to transfer Token Donations

Token Request

Donation

The amount of token to be transferred

Rejected by the Admin

The amount of token to be transferred , with recipient address

Checking if User is valid by Admin

Accepted by the Admin

Transfer Tokens

Stop

Level 2 Flow Chart

This is the flow chart diagram of Functions inside the Solidity Smart Contracts.

Owner.sol

New Owner

→ New owner address

Transfer Ownership

→ Assigning New owner to current owner

Current Owner

→ Getting owner address

Return Current Owner

TokenFunc.sol

To Address → | Token amount →

Transfer

From Address → | Token amount →

To Address →

Transfer From

Checking if Address != address[0]
— No → Tranaction Falied
— Yes ↓

Checking if sender balance is less than transfer amount
— No
— Yes ↓

Balance(sender) = Balance(sender) - Transfer amount

Balance(receiver) = Balance(receiver) + Transfer amount

Checking if to Address != address[0]
— No → Tranaction Falied
— Yes ↓

Checking if from address balance is less than transfer amount
— No
— Yes ↓

Balance(from) = Balance(from) - Transfer amount

Balance(to) = Balance(to) + Transfer amount

Address of User ↓

Balance of User → Balance

Total Supply → Total Token Balance

CharityFunc.sol

Name | Password | Email | Key ↓

User Details Function

↓

Checking if user already registered
— Yes →
— No ↓

Checking if user limit exceeds
— Yes →
— No ↓

Structure
Name
EmailID
Password
Key

↓ Mapping Structure with Address

userDonations → Reading Details → Read Details Function → User Informations

Token Amount ↓

User Token Request Function

↓ Entering to array

Requested User List

→ Fetching Details

Request Details Function →

Getting Details

Token Reverse

Token Approve

↓

Go to TokenFunc.sol Transfer Function