
THE
GIVING
TREE

Meet the Team

We tended The Giving Tree with our expertise to grow it into a self sustaining website that requires minimal to no human interaction to run.

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Development Framework

By implementing a solid framework of development, it is ensured that an encompasssing solution was crafted for the problem space identified: to increase donations made to Australian charities by promoting transparency via the use of blockchain technology.

Teamwork

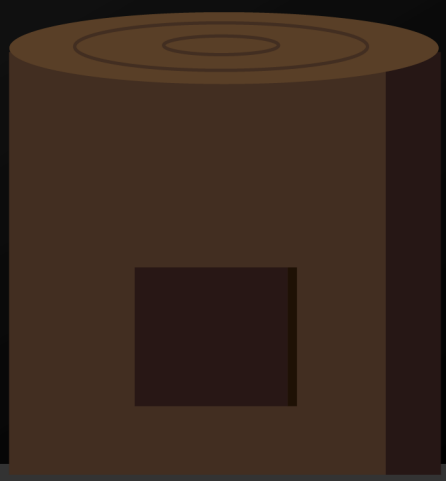
Nurturing The Giving Tree is a multidisciplinary team that ensured all decisions were supported with software engineering processes, user-centered design and ethical thinking.

A significant issue facing potential charity donators is a lack of trust in the outcome of their donation. Will their funds be used to address the purposes of the charity or simply line the pockets of unethical charity operators?

Despite this, most people still want to donate, but researching individual charities takes time. Relevant information is spread across a variety of sources, including a multitude of charity websites, newsletters and portals.

Relying on blockchain technology for ensuring public charity financial information has been proposed in the past. However, cryptocurrency is highly volatile, and many charities lack the infrastructure to support its permanent integration. Therefore, requiring charities to operate entirely through cryptocurrency was deemed unviable.

Rather, our proposal leverages existing regulation for charity financial data. This allows for the use of blockchain to promote wider audiences to consistently donate towards deserving charities.



This is how the seedling of

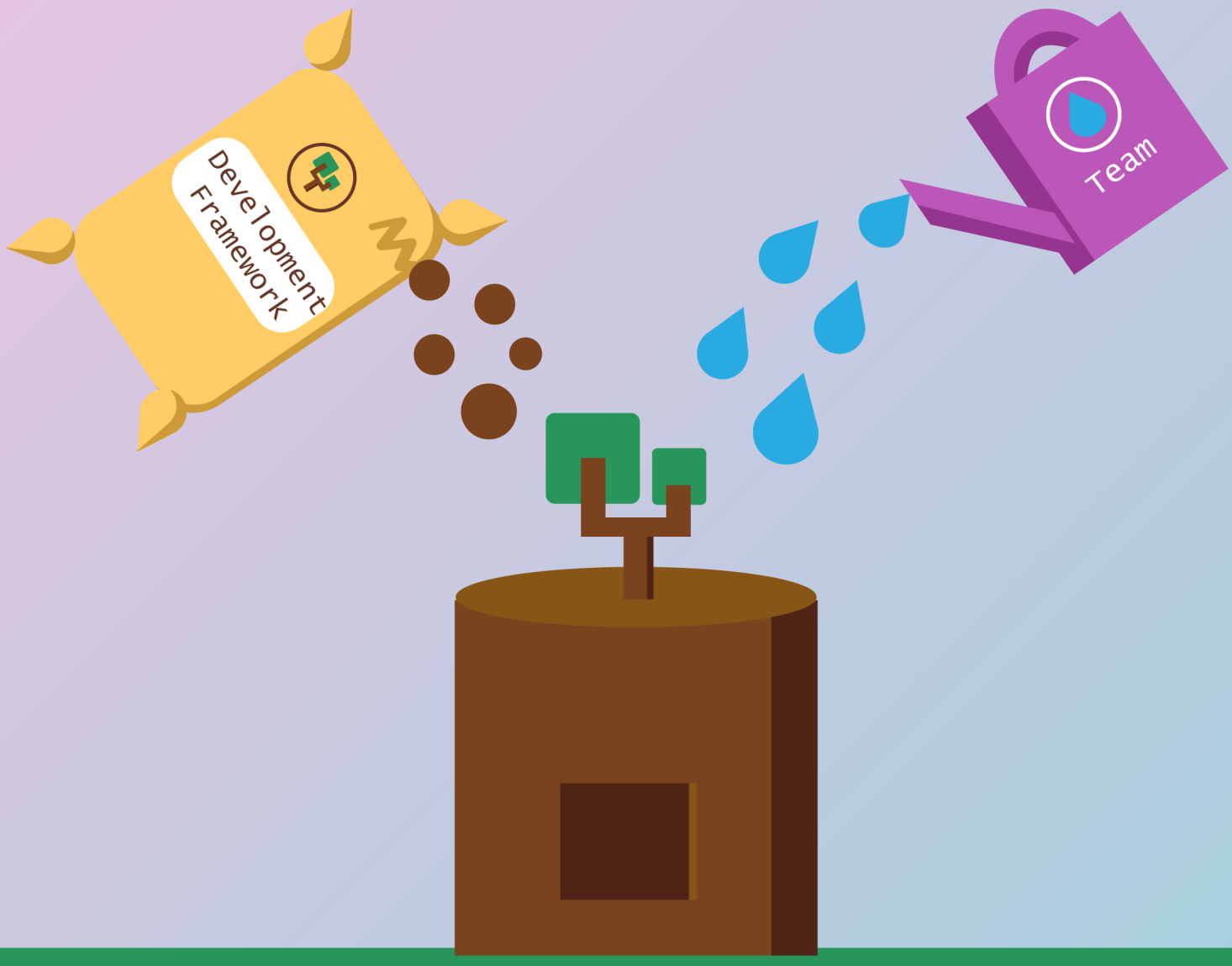
THE GIVING TREE

was planted.

The Giving Tree is a single-elimination knockout tournament held between a selection of community-nominated charities. It takes the form of a web application backed by an Ethereum smart contract. This kind of interface provides an accessible way to compare the financial data of contending charities in the eyes of a potential donator.

Donators decide who they trust more in a 1v1 match-up, and vote for their chosen charity by making a donation. The charity with the most donations advances to the next round.

Each donation contributes to the tournaments prize pool, which is then awarded to the final victor.

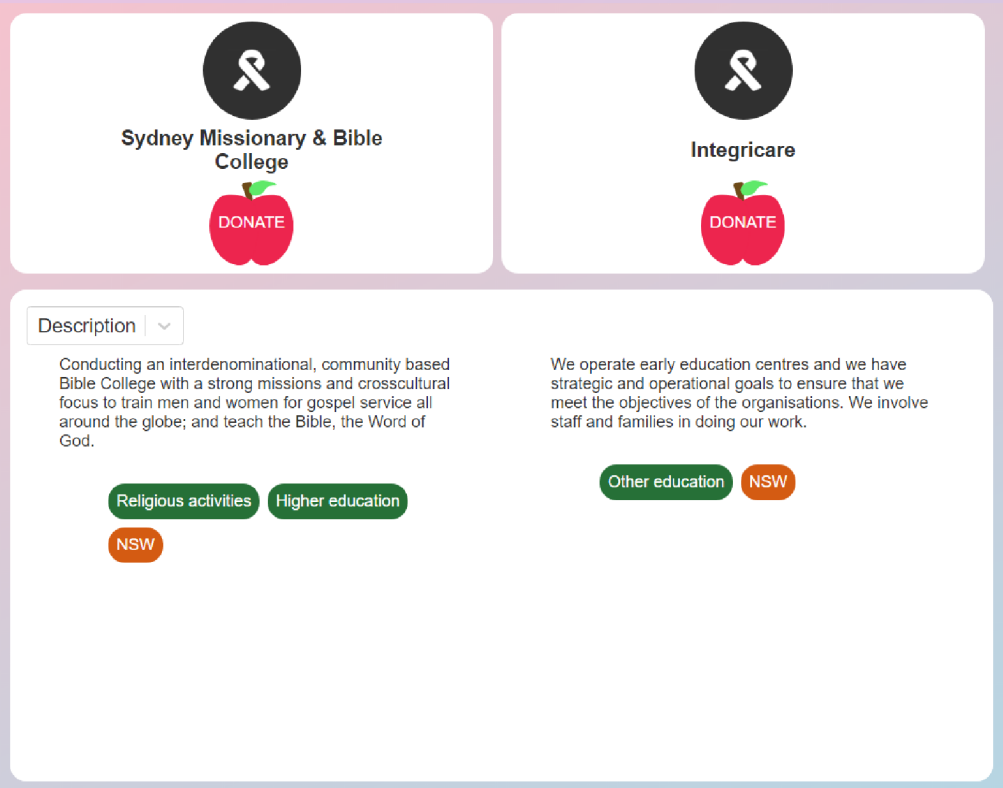


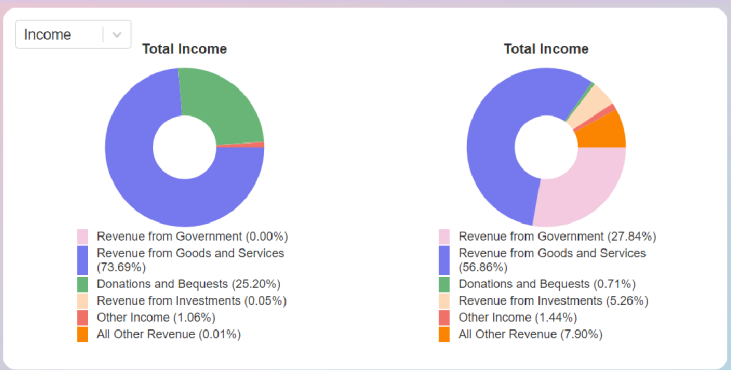
How to Win

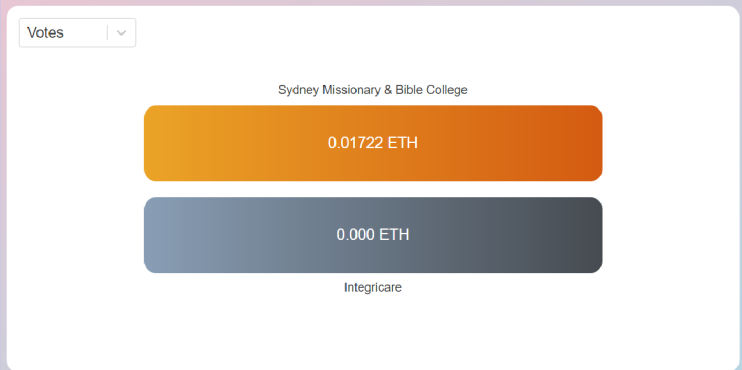
For each 1v1 match, The Giving Tree provides an informative overview of the contending charities. This allows for a clear comparison of each charities' descriptions, focuses, locations, reported income and reported expenses.

Each round pairs two charities to form a match. The public can vote for their preferred charity by donating to the tournaments prize pool.

These rounds operate for one week, after which the winners of each match progress to the next phase until ultimately one charity prevails.







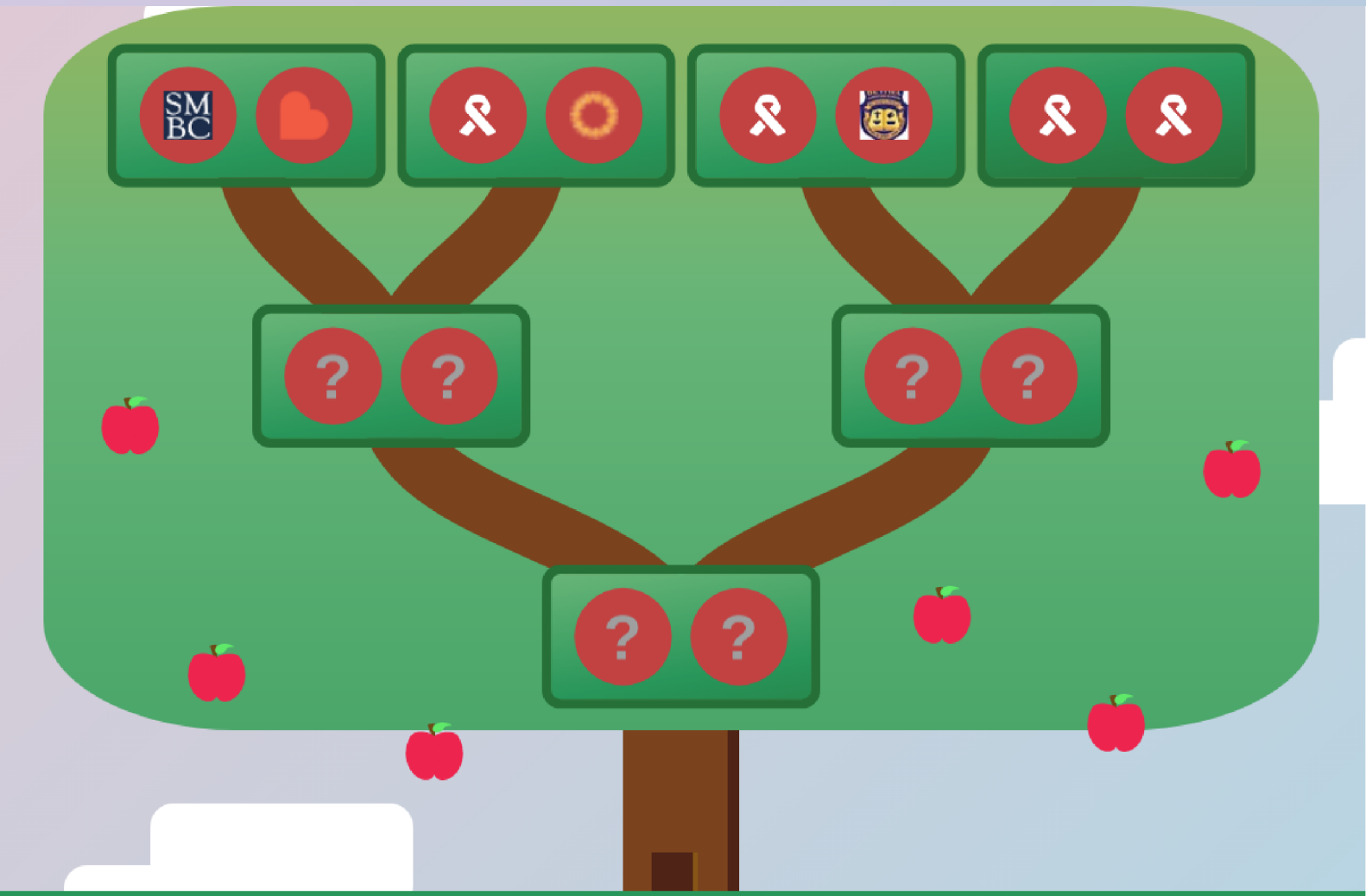
Tournament End

At the end of a tournament, the prize pool is donated to the victor. The Giving Tree has a dual system for paying this out.

Option 1 requires the charity has registered an Ethereum address with the ACNC, in which case the funds are directly donated.

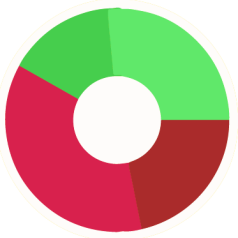
Option 2 occurs when the charity does not have an Ethereum address. In this case, the funds are donated to an Ethereum account controlled by the ACNC, who then converts it to the preferred currency which can then be awarded to to the winning charity.

After this phase, another tournament can begin.



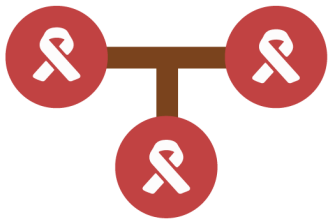
$100.00 AUD 0.1807 ETH

System Architecture



Nomination

Donator makes an informed decision based on financial data.



Tournament Round

The system creates ‘1v1’ matches between the top nominated charities.

Donate Prize Pool

The user is donated the aggregate sum of the donations made by voting.

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runs on a smart contract that goes through 5 set phases. The time spent at each phase is configurable to ensure the best outcome for the current environment.

Voting

Users vote in the form of donations in any active match.

Tournament End

The system runs matches until the final winner is decided.

The Giving Tree

The Giving Tree is a fresh solution to increasing donations made toward charities through blockchain technology.

- Any ACNC registered charity can participate
- Charities choose where the funds are needed most
- Configurable tournament settings
- Multiple options for receiving prize pool
- No unknown delays for receipt of the donation
- Tournament ‘rounds’ promote recurrent donations

Existing Systems

Current systems focus on utilising the blockchain to make donations towards charities, without promoting donations explicitly.

- Charity must maintain cryptocurrency wallets
- Comparison between charities must be done manually
- Financial data limited to charity or project
- Limited to charities chosen by the system
- Limited to projects chosen by the system
- No incentive for continuous donations

ACNC Integration

To access trusted financial reports for participating charities, The Giving Tree leverages the Australian Charities and Not-For-Profits Commission (ACNC). The ACNC is a government regulatory authority responsible for maintaining and promoting public confidence in Australian charities.

The ACNC accomplishes this by collecting and publishing all mandated information for its registered charities, including annual financial data.

A public release of The Giving Tree would require the ACNC to either provide the Ethereum addresses of charities where possible, or act as the financial intermediary when paying each tournament's winner.

Australian Charities and Not-for-profits Commission

What is Blockchain?

The Giving Tree utilises blockchain technology to help address the issues presented around financial transparency and misuse within charities.

Blockchains allow for the permanent storage of transaction history in a publically available ledger. The information in this ledger is immutable and is distributed across many servers.

BitCoin is the most well-known blockchain implementation, and uses this technology solely for digital currency purposes. Ethereum further extends the potential of blockchain technology by offering Turing-complete programming languages.

These allow for deployable software methods called “smart contracts”. As these contracts are written onto a blockchain, they themselves are public and immutable.

Within The Giving Tree, smart contracts are used to operate the foundation of the tournament system, meaning donators can completely trust that the tournament will operate as specified.