EDU COIN
To gamify learning

TRANSFINITTE

TEAM :
- MUKESH RAM
- DHANUSH VARDHAN M
- THARUN T
- MADHUMITHA DORAISAMY
- NARESH B
- AKASH MUTHAR

TRANSFINITTE'22 – PRESENTATION

EXECUTIVE SUMMARY

Problem Statement: Perform whitelisted ICO of 15 addresses using a Merkle Tree. Only a whitelisted wallet should be able to do the transaction on the smart contract.

TECHNICAL IMPLEMENTAION: Smart contracts, merkel tree, whitelisting, web deploying.

REAL LIFE PROBLEM: Educational sector has long been plagued by mundane rigor classroom work. Making the classroom experience livelier, especially for primary school Children, would go a long way in improving student's engagement throughout the school life.

OUR VISION: Edu Coin aims to gamify the learning process by utilizing crypto currency to reward achievements and good behaviour.

PRODUCT MOCKUP
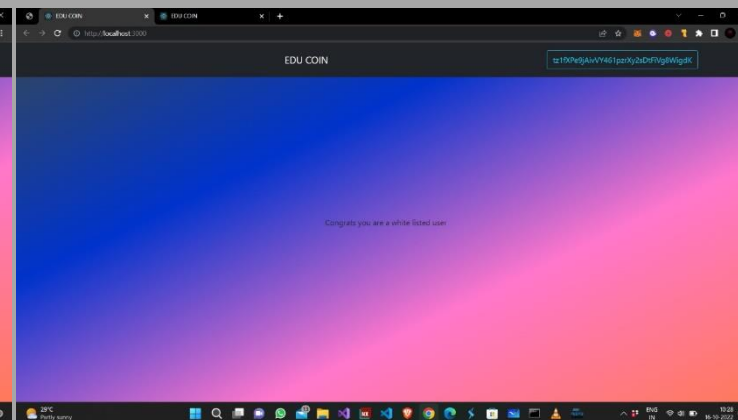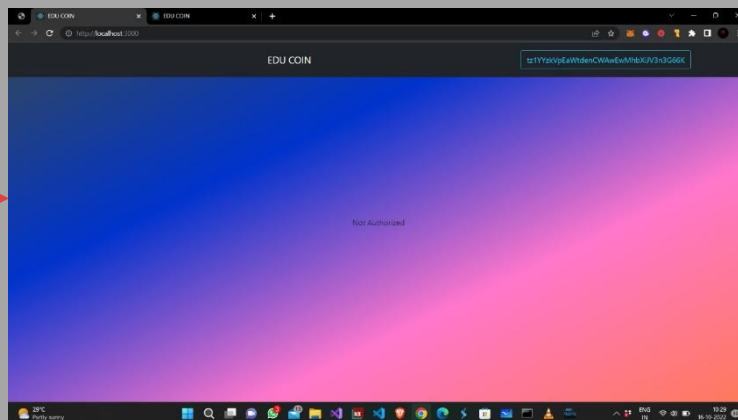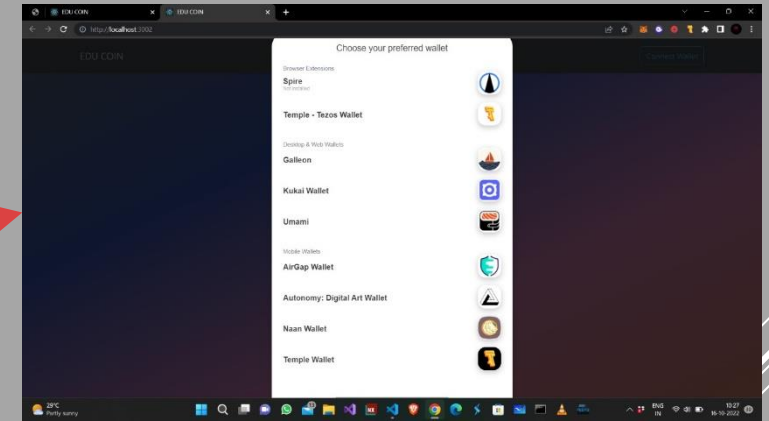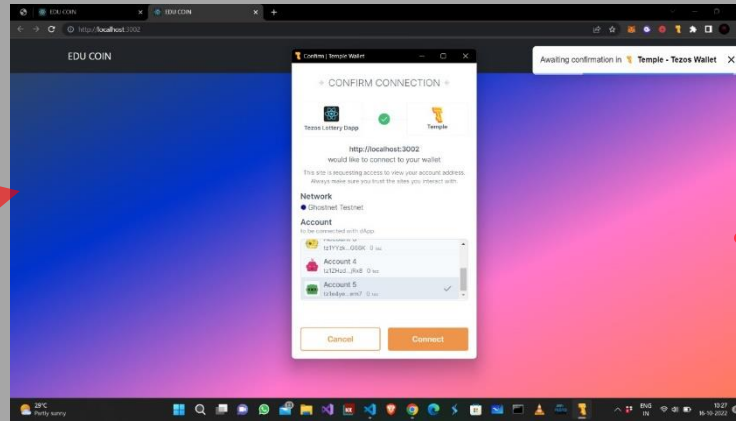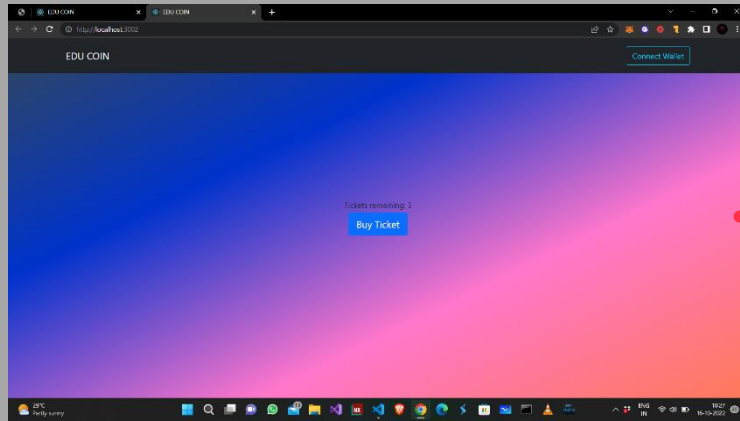
PRODUCT TECHNICAL FEATURES

We use the Tezos Blockchain to examine the efficiency and cost of our Model. We use the Smartpy to create a contract and publish it to Ghost public test network.

In our model each transaction on Tezos has a cost for the user. The user must include a gas fee when submitting transactions. Users can can send coins with a minimal fee filter.

RPC JSON View   ×

```
{
  "kind":"origination",
  "source":"tz1U5wp9QG1W7eZpJHLTNcbsPFFLZ2Gdig6n",
  "fee":"6303",
  "counter":"12260920",
  "gas_limit":"4901",
  "storage_limit":"6163",
  "balance":"0",
  "script":{
    "code":[
      {
        "prim":"parameter",
        "args":[
          {...} // 2 items
        ]
      },
      {
        "prim":"storage",
        "args":[
          {...} // 2 items
        ]
      },
      {
        "prim":"code",
        "args":[
          [...] // 17 items
        ]
      }
    ],
    "storage":{
      "prim":"Pair",
```

The contract is deployed at Counter block at 12260920, get the Baker fee 0.006303 ꜩ, Allocation fee =0.06425 ꜩ, Storage fee =1.4765 ꜩ.

TECHNICAL SOLUTION

Create EduCoin token under admin address.

Program and deploy smart contract.

Transfer tokens from admin to smart contract address.

Features are:
- Merkle tree for 15 accounts
- Merkle tree verification contract caller
- Function to send tokens to verified accounts.
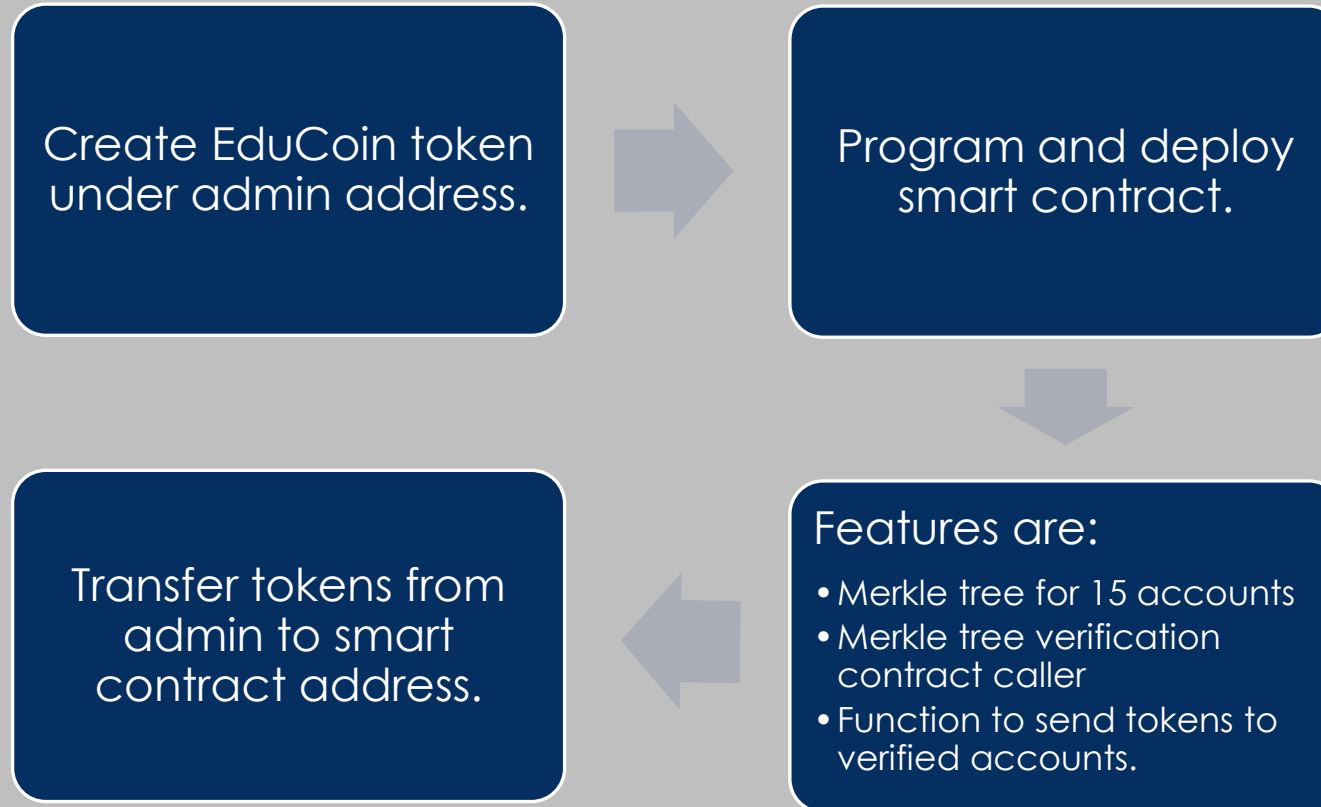
THE REAL WORLD APPLICATION

1. Indian Educational system has long been affected by mundane, strict lectures.
2. There is dire need of fun elements that increase student's interest.
3. Also, there is a general lack of fostering confidence and competitive attitude among school children.
4. In most cases there is no documentation of awards and through years, students lose their certifications one way or another.
5. Little rewards for daily activities would go a long way in motivating children to engage in them more.

OUR PRODUCT

1. We created a crypto-currency focused on primary schools.
2. Edu Coin aims to gamify the learning process by utilizing crypto currency to reward achievements and good behaviour.
3. Students are awarded these coins for any minor or major achievement from good classroom engagement to extracurricular merit.
4. This currency can be used for
   1. Documenting and systemizing rewards at schools.
   2. House based annual reward or any competition scores can be made errorless.
   3. Motivating students to act better by rewarding favourable behaviour such as good classroom engagement, extracurricular merit and daily homework.

THANK YOU!
HAPPY FOR ANY CLARIFICATIONS