EduCoin

A Cryptocurrency by Top Three Team

What is EduCoin?

- A crypto designed for educational use
- Can be adopted by colleges around the world
- Value of coins and total amount can be set by one superuser

Requirements

- Functional Requirments
  - Must be able to log-in to their EduCoin account in order to check balance, send coins, withdraw coins, deposit coins, buy new coins, and sell new coins.
  - Have a public, distributed ledger aka a blockchain in order to provide a record of all transactions.
  - The admin user must be able to set the price of the coin.
  - Use Wordpress to create the front-end of the site
  - User profiles/ability to see transaction history

Blockchain - Solutions

- Granting specific access to the designated currency management account by checking for Username. Only the person with the authorized username (Professor Damopoulos) has access to adjust the currency.

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Web-Frontend - Issues

- Wordpress
- Getting accounts and the blockchain linked
- Utilizing Plugins
- GitLab issues with sql.

Web-Frontend - Solutions

- Use a virtual machine so that everyone has a uniform way to edit the website
- Change apache permissions
- Use Ultimate Member pl

App - FrontEnd

- Issues
  - Navigating between app pages.
  - Fetching data from the backend.
- Solutions
  - Using layered Tab and Stack Navigations
  - Fetching an array of users through json files.

Web and App Backend Issues

- Integration with WordPress and the App to blockchain
- Constantly downloading new Versions of a VM
- Authentication/ Encryption issues
- Creating server in order to run personal plugins for Wordpress
- Jury-rigged pseudo-github

Backend Solutions

- Created an image for the vm so frontend can develop the website
- Developing plugin to access the MySql in order to use the blockchain
- Created a script to query to MySql server for app
- Created functional inputs for the front end to easily connect to the database

Lessons We Learned

- Individual subteams need to be in constant communication
- Communication needs to start right away
- Research and design will take longer than you think
- Start coding as soon as you are ready, not before or after
- Completing small portions consistently is better than one big push
- Break up your big project into smaller manageable projects
- Make sure your entire team is always on the same page