CarFlip🚗

Empowering car buyers and sellers through the Ethereum Blockchain💪

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Submitted as the final project for the Chainshot Ehereum Development Bootcamp

Problem Statement

My first big purchase as an adult was the beauty you see below:
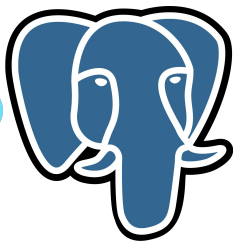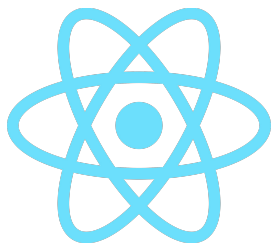
Problem Statement

The problem with a saturated second-hand market:

-   Car Sellers often need to scour through thousands of fraudulent car buy requests, leading them to outsource this process through intermediaries that charge very high commission fees.
-   Car Buyers often need to rely on such intermediaries to find a reliable car and seller. However, such intermediaries often play in cahoots with the car buyer as they are paying them, leaving the car buyer blind-sighted from the intrinsic details of the car transfer process.
-   If you try to do the process in a p2p fashion with platforms like Facebook Marketplace, there is a high risk of scams!

Solution

I made a Dapp so that car buyers and sellers can rely on anonymous escrow agents to ensure that the process is legitimate. Escrow Agents gain recognition through an in-app review system, and the app (through smart contracts) guarantees that a certified car shop has inspected the car before the money transfer occurs.

- Escrow Agents can gain passive income by approving transactions in the app while simultaneously gaining recognition in the system.
- Car Sellers can outsource some of the work to the blockchain and pay less in commission fees.
- Car buyers can make sure that they are buying an inspected car without feeling that the escrow agents are working in cahoots with the sellers.

Tech Stack

- React
- Smart Contract Development and testing facilitated by Hardhat
- Node.js (Express)
- PostgresSql

Demo

Future Work

- Use Aave's capabilities to establish interest-earning long-term agreements between buyers and sellers
- Test app on different testnet and one day, in mainnet :)
- Create an end-to-end market place where sellers can do car sell ad without knowing who their buyer is
- Allow for more smart-contract flexibility (escrow can be set as optional from the UI).

Thank You

Any questions? 😊