
CarFlip

Empowering car buyers and sellers through the Ethereum
Blockchain 💪

By Junior Garcia

Submitted as the final project for the Chainshot Ethereum
Development Bootcamp

Problem Statement

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



Problem Statement

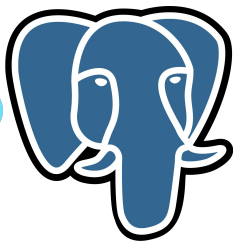
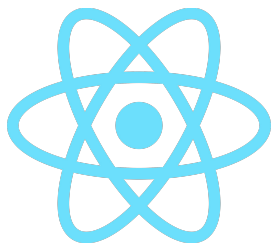
The problem with a saturated second-hand market:

- 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.
-



Express




Hardhat



Tech Stack

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

Demo

CarFlip  Contracts Escrow Agents

User: 0x3c44cdddb6a900fa2b585dd299e03d12fa4293bc

New Car Transfer Contract

CAR'S VEHICLE IDENTIFICATION NUMBER

ESCROW AGENT ADDRESS

CAR BUYER ADDRESS

ESCROW AGENT COMMISSION

CAR SELLING PRICE (IN ETH)

DEPLOY

Car VIN kjascnknaslkasc

Escrow Agent 0x70997970C51812dc3A010C7d01b50e0d17dc79C8

Car Seller 0xf139Fd6e51aad88F6F4ce6aB8827279cffFb92266

Car Buyer 0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC

Car Price 20 ETH

Commision 3 %

Is Car Inspected ✓? Yes 😊

Car Shop Inspection Document /Users/juniorgarcia/Documents/repos/hardhat-boilerplate-test/api/files/CREST 1.html

This contract has been approved!

CarFlip  Contracts Escrow Agents

User: 0x3c44cdddb6a900fa2b585dd299e03d12fa4293bc

Escrow Agents

Below is a list of our top performing escrow agents.

0x70997970C51812dc3A010C7d01b50e0d17dc79C8

Commissions Earned: 0.6 ETH

Contracts Escrowed: 1

Reviews Received: 2

Average Review: 4.5

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? 😊
