

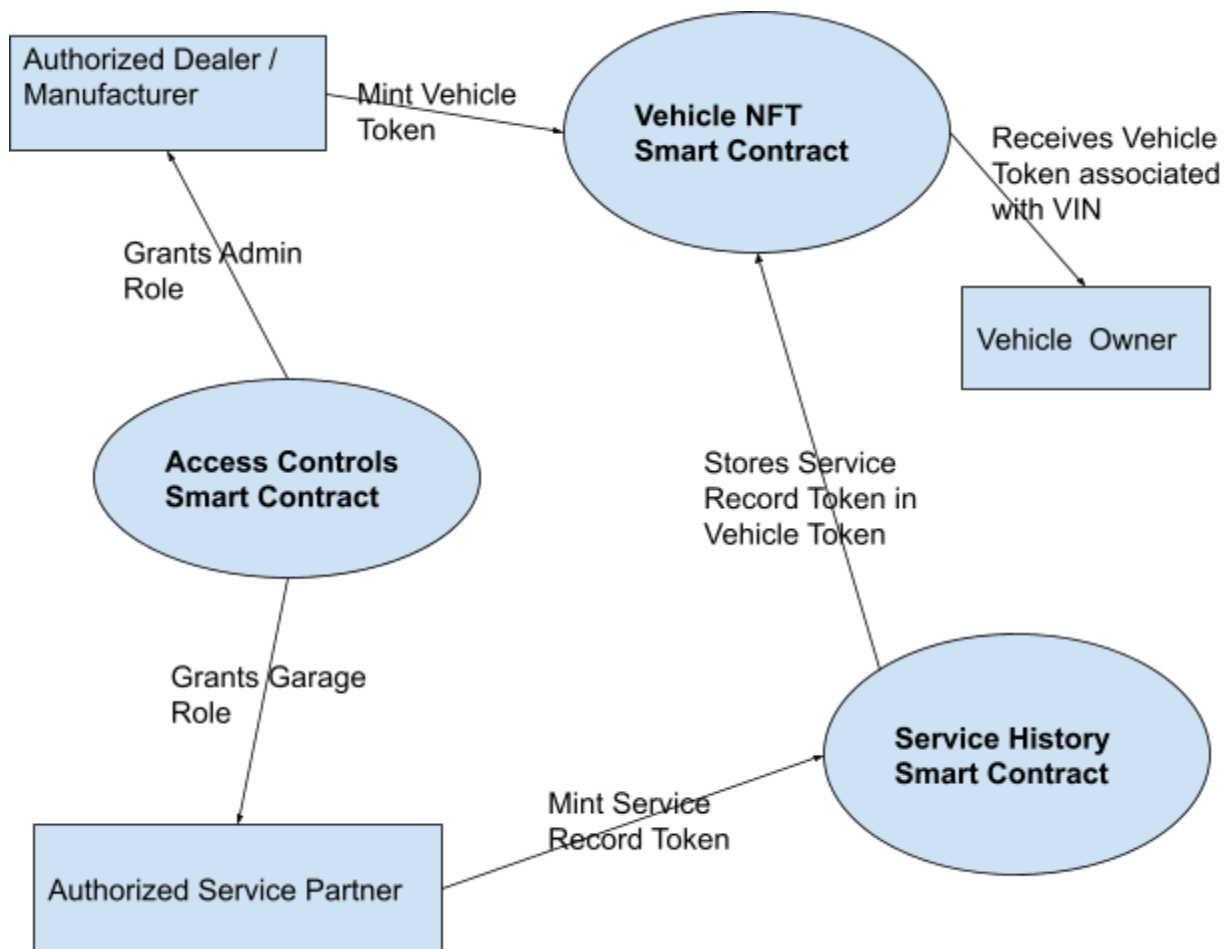
LuckyDay Vehicle History Report On Blockchain

Introduction

LuckyDay Vehicle History Report is a part of the LuckyDay web app , for storing vehicle history records on the blockchain. Right now the vehicle history records are distributed among dealers, insurance companies, collision centers, and DMVs etc. The main purpose of the LuckyDay Vehicle History report is to bring all scattered records to one place and give a role based access to different parties to add the different history records in the LuckyDay blockchain. For example: the records for emission tests , repair works, Oil changes etc. can be added to the blockchain by different parties and can not be altered later. The successive buyer will have unaltered and complete history of the vehicle before buying it.

Workflow of adding Vehicle History Records

The Manufacturer or Authorized Dealer can mint the Vehicle Token through the Vehicle Smart Contract, the new minted Vehicle Token will be associated with basic information of vehicle VIN and URI. The Vehicle Smart Contract has the ability to embed new Service History records NFTs in the Vehicle NFT Token later. So, the search will be easier to get all service records associated with a given vehicle's NFT token.



How to Look for Vehicle History Records

Go to the LuckyDay web app, and select Vehicle History Report page, go to **Vehicle History Search Section** in the page , select the Vehicle NFT Token ID from the drop down list and all the service history records added so far in this Vehicle NFT token are displayed.

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localhost:8501/Vehicle_History_Report

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app

Vehicle Moto Sale

Lucky Day Auction NFT

Vehicle History Report

Vehicle History Search

Select Vehicle token ID

2

Selected Vehicle Token ID : 2

VIN Number of Selected Vehicle Token ID : 5YJSA1AC8DFP10730

URI of Selected Vehicle Token ID : 2015 Tesla S

Owner of Selected Vehicle Token ID : 0x87cDb9F24019C8f4d1D5dCcBe804617Ffe1F56F3

Emission Test History

	Mileage	Date	Garage Address	Emission Test	Advisories
0	30000	2023-03-03T23:48:17	0x4de50C3ebec5a00Bd3d212527c7069fED61Ed283	<input checked="" type="checkbox"/>	

Vehicle Service History

	Mileage	Date	Garage Address	Description
0	30000	2023-03-03T23:48:41	0x4de50C3ebec5a00Bd3d212527c7069fED61Ed283	Vehicle body r
1	30000	2023-03-04T00:06:54	0x3C2dD9F4860C71eD3Eab02B3379f57CB824DEaaf	Vehicle Body i

How to Mint Vehicle NFT Token

Go to the LuckyDay web app, and select Vehicle History Report page, go to **Vehicle NFT Mint Section** in the page , enter 'Vehicle VIN' , 'Vehicle URI', 'Select Admin Role Account to Mint Vehicle Token' and 'Select New Vehicle Owner Address', then click on 'Mint Vehicle token' button. New vehicle token Id will be minted for the given information. In this example , Vehicle **Token ID 9** minted for the given information.

← → ↻ localhost:8501/Vehicle_History_Report

app

Vehicle Moto Sale

Lucky Day Auction NFT

Vehicle History Report

Vehicle NFT Mint Section

Vehicle VIN

5YJSA1H20FFP78357

Vehicle URI

2015 Tesla S

Select Admin Role Account to Mint Vehicle Token

0x9BfAe49cf5ADBa070c23fF6dED65741817a8D325

Select New Vehicle Owner Address

0xd56e60C1E9B5a69Ccf498a8a9Fd8973211d298C

Mint Vehicle token

TRANSACTION HASH `b'-F\x09\x10\x07\xaa\x1e'N\x0c\x1c\x0f\x06C\xac\x02\x06#\xb70PU\xa8\xe1'\x93\x86\x84\xcc\x03\x9c'`

Successfully Minted Vehicle Token

Vehicle Token ID = `9`

Vehicle VIN = 5YJSA1H20FFP78357

Vehicle Token uri = 2015 Tesla S

Vehicle Owner Account Address = 0xd56e60C1E9B5a69Ccf498a8a9Fd8973211d298C

How to Mint Emission Test NFT Token

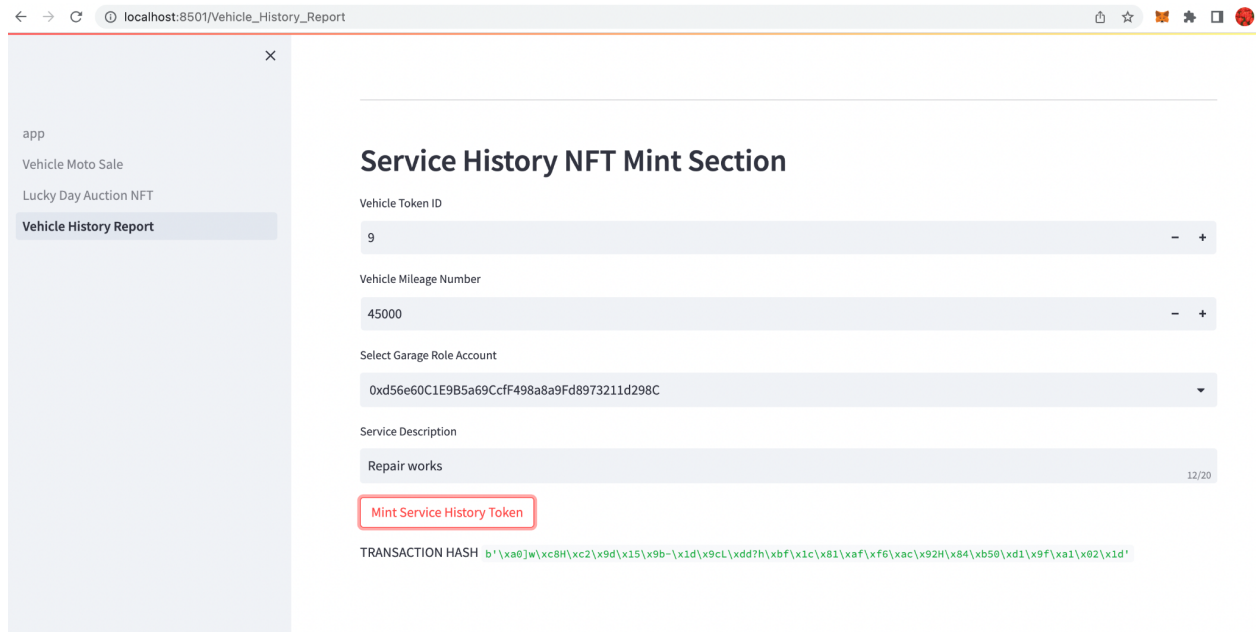
Go to the LuckyDay web app, and select Vehicle History Report page, go to **Emission Test NFT Mint Section** on the page , enter 'Vehicle Token ID', 'Vehicle Mileage Number', 'Select Garage Role Account' and 'What's vehicle emission test result'. In this example : emission test pass record is minted for Vehicle **Token ID 9**

The screenshot shows a web browser window with the address bar displaying 'localhost:8501/Vehicle_History_Report'. On the left is a sidebar menu with the following items: 'app', 'Vehicle Moto Sale', 'Lucky Day Auction NFT', and 'Vehicle History Report' (which is highlighted). The main content area is titled 'Emission Test NFT Mint Section'. It contains the following fields and options:

- Vehicle Token ID:** A text input field containing the value '9'.
- Vehicle Mileage Number:** A text input field containing the value '30000'.
- Select Garage Role Account:** A dropdown menu showing the selected value '0xd56e60C1E9B5a69CcFF498a8a9Fd8973211d298C'.
- What's vehicle emission test result:** Two radio button options: 'Pass' (which is selected) and 'Fail'.
- Your selected emission test Pass:** A button labeled 'Mint Vehicle Emission Test Token'.
- TRANSACTION HASH:** A green text field containing a long hexadecimal string: `b"\xcd\x18F\x1b'\x04\x9a\x05\x06\x08\xac\x1cU'\xb4'\xf1\x1f\x1c\x03\xca\x1f\x04\x0c\x1e\x0f\xcd\x08\x19"`.

How to Mint Service History NFT Token

Go to the LuckyDay web app, and select Vehicle History Report page, go to **Service History NFT Mint Section** on the page , enter 'Vehicle Token ID', 'Vehicle Mileage Number', 'Select Garage Role Account' and 'Service Description'. In this example : service history token is minted for Vehicle **Token ID 9**



The screenshot shows a web browser window with the address bar displaying 'localhost:8501/Vehicle_History_Report'. On the left is a sidebar menu with the following items: 'app', 'Vehicle Moto Sale', 'Lucky Day Auction NFT', and 'Vehicle History Report' (which is highlighted). The main content area is titled 'Service History NFT Mint Section'. It contains four input fields: 'Vehicle Token ID' with the value '9', 'Vehicle Mileage Number' with the value '45000', 'Select Garage Role Account' with a dropdown menu showing '0xd56e60C1E9B5a69CcF498a8a9Fd8973211d298C', and 'Service Description' with the value 'Repair works'. Below these fields is a red button labeled 'Mint Service History Token'. At the bottom, the 'TRANSACTION HASH' is displayed in green text: 'b'\xa0]w\xc8H\xc2\x9d\x15\x9b-\x1d\x9cL\xdd7h\xbf\x1c\x81\xaf\xf6\xac\x92H\x84\xb50\xd1\x9f\xa1\xe2\x1d' 12/20'.

How to Look for History Records for new Vehicle Token

Refresh LuckyDay web app in browser, and select Vehicle History Report page, go to **Vehicle History Search Section** in the page , select the Vehicle NFT Token ID from the drop down list and all the service history records added so far in this Vehicle NFT token are displayed. In this example: all history records associated with **Token ID 9** are displayed.

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app

Vehicle Moto Sale

Lucky Day Auction NFT

Vehicle History Report

Vehicle History Search

Select Vehicle token ID

9

Selected Vehicle Token ID : 9

VIN Number of Selected Vehicle Token ID : 5YJSA1H20FFP78357

URI of Selected Vehicle Token ID : 2015 Tesla S

Owner of Selected Vehicle Token ID : 0xd56e60C1E9B5a69Ccf498a8a9Fd8973211d298C

Emission Test History

	Mileage	Date	Garage Address	Emission Test	Advisories
0	30000	2023-03-04T23:54:16	0xd56e60C1E9B5a69Ccf498a8a9Fd8973211d298C	<input checked="" type="checkbox"/>	

Vehicle Service History

	Mileage	Date	Garage Address	Description
0	45000	2023-03-05T00:01:09	0xd56e60C1E9B5a69Ccf498a8a9Fd8973211d298C	Repair works