

Car Survey PH API Documentation

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1 Overview

CarSurvey PH provides users with insights about the fair market value (FMV) and depreciation evaluation of second-hand motorcycles and trucks in the Philippines. The API allows authenticated users to retrieve estimated vehicle pricing evaluations.

2 Base URL

`http://3.26.1.211:8000/`

3 Authentication

The API uses key-based authentication to verify users and enable requests.

3.1 Creating a New User and Retrieving an API Token

To create a new user and obtain an API token, follow these steps:

Open terminal to location `..\CS191-Car-Survey-PH\api`

```
cd ..\CS191-Car-Survey-PH\api
```

Access the Django shell

```
python manage.py shell
```

Create a new user

```
1 from django.contrib.auth.models import User
2 user = User.objects.create_user(username='user', email='
    user@example.com', password='password')
3 user.save()
```

Generate an API token for the user

```
1 from rest_framework.authtoken.models import Token
2 token, created = Token.objects.get_or_create(user=user)
3 print(token.key)
```

Copy the generated token and use it for authentication in API requests.

3.2 Using the API Key

Include the API key in the Authorization header of each request:

```
1 Authorization: Token 'YourAPIKey'
```

4 Endpoints

4.1 Fair Market Value (FMV) of a Vehicle

Endpoint: GET /fmv/

Description: Retrieves the fair market value of the inputted motorcycle or truck based on its maker, model, and year.

Sample Request Format:

```
{
  "vehicle": "motors",
  "maker": "Honda",
  "model": "Click 125i",
  "year": 2022
}
```

Sample Response Format:

```
{
  "value_price": 78284.6,
  "highest_value": 117220.99,
  "lowest_value": 78284.6
}
```

Sample Javascript Request:

```
1 {
2   const urlInput = "api/fmv";
3   const maker = "Honda";
4   const model = "Click 150i";
5   const year = "2019";
6   const vehicleInput = "motorcycle";
7
8   const apiUrl = "http://3.26.1.211:8000/" + urlInput + "?
      maker=" + maker + "&model=" + model + "&year=" + year
      + "&vehicle=" + vehicleInput;
9
10  fetch(apiUrl, {
11    method: "GET",
```

```

12     headers: {
13         "Authorization": "Token 'YourAPIKey'",
14         "Content-Type": "application/json"
15     }
16 })
17 }

```

4.2 Depreciation Value of a Vehicle

Endpoint: GET /depreciation/

Description: Calculates the depreciation value of the inputted vehicle based on its maker, model, and year.

Sample Request Format:

```

{
  "vehicle_type": "trucks",
  "maker": "Mitsubishi",
  "model": "L300",
  "year": 2023
}

```

Sample Response Format:

```

{
  "depreciation_value": 137312.28,
  "values": [528594.37, 391282.09, 310959.56, 253969.82,
    209765.14, 173647.29, 143110.08, 116657.54, 93324.75,
    72452.86, 53571.94]
}

```

Depreciation value refers to the amount a vehicle's value loses after each year. The 'values' array displays the market value of the vehicle for this year, along with its projected value for the next 10 years.

5 Error Handling

5.1 Authentication Errors

Example Response:

```

{
  "detail": "Authentication credentials were not provided."
}

```