Device Classification API Documentation

This API allows users to interact with a device classification system. It provides endpoints for retrieving devices, adding new devices, retrieving device information by ID, and predicting prices based on device attributes.

We can use it by run the SpringBoot project.

Base URL

The base URL for all endpoints is:

```
http://localhost:8080/api/
```

Endpoints

1. Retrieve Devices

Endpoint: `POST /devices/`

Description: Retrieves a list of devices.

Request Body: None

Response: List of devices with their attributes.

2. Add Device

Endpoint: `POST /devices`

Description: Adds a new device to the system.

Request Body:

 - `id`: Device ID (string)

 - `battery_power`: Battery power (integer)

 - `blue`: Bluetooth capability (integer)

- `clock_speed`: Clock speed (float)

- `dual_sim`: Dual SIM capability (integer)

- `fc`: Front camera megapixels (integer)

- `four_g`: 4G capability (integer)

- `int_memory`: Internal memory (integer)

- `m_dep`: Mobile depth (float)

- `mobile_wt`: Mobile weight (integer)

- `n_cores`: Number of cores (integer)

- `pc`: Primary camera megapixels (integer)

- `px_height`: Pixel height (integer)

- `px_width`: Pixel width (integer)

- `ram`: RAM (integer)

- `sc_h`: Screen height (integer)

- `sc_w`: Screen width (integer)

- `talk_time`: Talk time (integer)

- `three_g`: 3G capability (integer)

- `touch_screen`: Touch screen capability (integer)

- `wifi`: WiFi capability (integer)

Response: Status of the operation.

3. Device ID

Endpoint: `GET /devices/{id}`

Description: Retrieves device information by ID.

Request Parameter:

  - `id`: Device ID (integer)

Response: Device information for the specified ID.

4. Predict Price

Endpoint: `POST /predict/{id}`

Description: Predicts the price of a device based on its attributes.

Request Parameter:

  - `id`: Device ID (integer)

Response: Predicted price of the device.

Note: before use this endpoint you must execute the FastAPI method from ModelAPI.py that run the external endpoint http://127.0.0.1:8000/predict/{deviceId}.