Defects classification API

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Github:

https://github.com/YiranXu/ap_hw_yr

Install requirements

```
pip install -r requirements.txt
```

How to test the API:

using curl or an API test software (eg. Postman)

- /predict route (change the location acoordingly)

```
curl --location --request POST 'http://127.0.0.1:8000/predict' \
--form 'image=@"/Users/yiranxu/Documents/Documents - Yiran’s MacBook
Air/Coding/apple_interview/dataset/OK/05.jpg"'
```

- /history route

```
curl --location --request GET 'http://127.0.0.1:8000/history' \
--form 'image=@"/Users/yiranxu/Documents/Documents - Yiran’s MacBook
Air/Coding/apple_interview/dataset/OK/05.jpg"'
```

- /metadata route

```
curl --location --request GET 'http://127.0.0.1:8000/metadata' \
--form 'image=@"/Users/yiranxu/Documents/Documents - Yiran’s MacBook
Air/Coding/apple_interview/dataset/OK/05.jpg"'
```

- /train route

```
curl --location --request POST 'http://127.0.0.1:8000/train' \
--header 'Content-Type: text/plain' \
--data-raw ''\''dataset'\'''
```

API specification:

Function	get_image_prediction_api(image)
HTTP method	POST
parameters	upload an image through request call using curl or an API test software
Return	json (two keys: 'filename', 'model_prediction_class' with their corresponding values

Function	get_prediction_history()
HTTP method	GET
parameters	None
Return	json (two keys: 'filename', 'model_prediction_class' with their corresponding values

Function	get_metadata()
HTTP method	GET
parameters	None
Return	json (one key: 'model metadata' with its corresponding value

Function	retrain()
HTTP method	POST
parameters	string
Return	json (status 'success' or'fail')