

{{House Price Prediction}}

Project Details

You can select localities from a given list and enter other parameters such as area, number of rooms etc and get a ML generated approximate price of the house in said locality with mentioned features.

Team Members:

Student ID	Student Name

MongoDB Database Information

Database Name: housing_db

Collection Name	Collection Details and #of Documents available	Team Member(s) worked on it
localityDescription	Specifies the neighbourhood and vicinity of the house. No.of documents : 1460	
housingConditions	Specifies the current condition of the house. No.of documents : 1460	
exteriorFeatures	Specifies the exterior features that are available and their conditions. No.of documents : 1460	
interiorFeatures	Specifies the interior features that are available and their conditions No.of documents : 1460	

Database backup file: Attach your database backup file here so that it can be restored and used.

Python Methods to GET/Insert/Delete/Update Information

Method Name, Details, Screen Shot, Author

Author: Name of the team member who worked on it

Method: localityDescription_detail

Details: This Method takes house Id and shows the details of a locality of that house and performs read, create, delete and update operations on it.

Screenshot of code:

```
@api_view(["GET", "PUT", "DELETE"])
def localityDescription_detail(request, pk):
    try:
        localitydescription = localityDescription.objects.get(pk=pk)
    except localityDescription.DoesNotExist:
        return JsonResponse(
            {"message": "The localitydescription does not exist"},
            status=status.HTTP_404_NOT_FOUND,
        )

    if request.method == "GET":
        localitydescription_serializer = localityDescriptionSerializer(
            localitydescription
        )
        return JsonResponse(localitydescription_serializer.data)

    elif request.method == "PUT":
        localitydescription_data = JSONParser().parse(request)
        localitydescription_serializer = localityDescriptionSerializer(
            localitydescription, data=localitydescription_data
        )
        if localitydescription_serializer.is_valid():
            localitydescription_serializer.save()
            return JsonResponse(localitydescription_serializer.data)
        return JsonResponse(
            localitydescription_serializer.errors, status=status.HTTP_400_BAD_REQUEST
        )

    elif request.method == "DELETE":
        localitydescription.delete()
        return JsonResponse(
            {"message": "localityDescription was deleted successfully!"},
            status=status.HTTP_204_NO_CONTENT,
        )
```

Screenshot of output window:

Overview

GET http://127.0.0.1:8080/...

DEL http://127.0.0.1:8080/...

DEL http://127.0.0.1:8080/...

GET http://127.0.0.1:8080/...

New Collection

+

...

No Environment

▼

http://127.0.0.1:8080/api/localitydescription/1

Save

▼

GET

▼

http://127.0.0.1:8080/api/localitydescription/1

Send

▼

Params

Authorization

Headers (6)

Body

Pre-request Script

Tests

Settings

Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description		

Body

Cookies

Headers (7)

Test Results

Status: 200 OK Time: 25 ms Size: 489 B Save Response

▼

Pretty

Raw

Preview

Visualize

JSON

▼

```
1  {
2    "Id": 1,
3    "MSSubClass": 60,
4    "MSZoning": "RL",
5    "LotFrontage": 65,
6    "LotArea": 8450,
7    "Street": "Pave",
8    "Alley": "NA",
9    "LotShape": "Reg",
10   "LandContour": "Lvl1",
11   "Utilities": "AllPub",
12   "LotConfig": "Inside",
13   "LandSlope": "Gtl",
14   "Neighborhood": "CollgCr"
15 }
```

Overview

POST http://127.0.0.1:8080/...

DEL http://127.0.0.1:8080/...

DEL http://127.0.0.1:8080/...

GET http://127.0.0.1:8080/...

New Collection

+

...

No Environment

▼

http://127.0.0.1:8080/api/localitydescription

Save

▼

POST

▼

http://127.0.0.1:8080/api/localitydescription

Send

▼

Params

Authorization

Headers (8)

Body

Pre-request Script

Tests

Settings

Cookies

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

Text

▼

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

```
{
  "Id": 1461,
  "MSSubClass": 30,
  "MSZoning": "RL",
  "LotFrontage": 50,
  "LotArea": 6200,
  "Street": "Pave",
  "Alley": "NA",
  "LotShape": "Reg",
  "LandContour": "Bnk",
  "Utilities": "AllPub",
  "LotConfig": "Inside",
  "LandSlope": "Gtl",
  "Neighborhood": "CollgCr"
}
```

Body

Cookies

Headers (7)

Test Results

Status: 201 Created Time: 16 ms Size: 498 B Save Response

▼

Pretty

Raw

Preview

Visualize

JSON

▼

```
1  {
2    "Id": 1461,
3    "MSSubClass": 30,
4    "MSZoning": "RL",
5    "LotFrontage": 50,
6    "LotArea": 6200,
7    "Street": "Pave",
8    "Alley": "NA",
9    "LotShape": "Reg",
10   "LandContour": "Bnk",
11   "Utilities": "AllPub",
12   "LotConfig": "Inside",
13   "LandSlope": "Gtl",
14   "Neighborhood": "CollgCr"
15 }
```

Overview PUT http://127.0.0.1:8080/api/localitydescription/1461 DEL http://127.0.0.1:8080/api/localitydescription/1461 DEL http://127.0.0.1:8080/api/localitydescription/1461 GET http://127.0.0.1:8080/api/localitydescription/1461 New Collection + ... No Environment

http://127.0.0.1:8080/api/localitydescription/1461 Save

PUT http://127.0.0.1:8080/api/localitydescription/1461 Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL Text

```
1 {
2   "Id": 1461,
3   "MSSubClass": 80,
4   "MSZoning": "RL",
5   "LotFrontage": 50,
6   "LotArea": 5000,
7   "Street": "Pave",
8   "Alley": "NA",
9   "LotShape": "Reg",
10  "LandContour": "Bnk",
11  "Utilities": "AllPub",
12  "LotConfig": "Inside",
13  "LandSlope": "Gtl",
14  "Neighborhood": "veenger"
15}
```

Body Cookies Headers (7) Test Results Status: 200 OK Time: 16 ms Size: 492 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "Id": 1461,
3   "MSSubClass": 80,
4   "MSZoning": "RL",
5   "LotFrontage": 50,
6   "LotArea": 5000,
7   "Street": "Pave",
8   "Alley": "NA",
9   "LotShape": "Reg",
10  "LandContour": "Bnk",
11  "Utilities": "AllPub",
12  "LotConfig": "Inside",
13  "LandSlope": "Gtl",
14  "Neighborhood": "veenger"
15}
```

Overview DEL http://127.0.0.1:8080/api/localitydescription/1461 DEL http://127.0.0.1:8080/api/localitydescription/1461 DEL http://127.0.0.1:8080/api/localitydescription/1461 GET http://127.0.0.1:8080/api/localitydescription/1461 New Collection + ... No Environment

http://127.0.0.1:8080/api/localitydescription/1461 Save

DELETE http://127.0.0.1:8080/api/localitydescription/1461 Send

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body Cookies Headers (7) Test Results Status: 204 No Content Time: 14 ms Size: 306 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "message": "localityDescription was deleted successfully!"
3}
```

Author: Name of the team member who worked on it

Method: housingConditions_detail

Details: This Method takes house Id and shows the details of a condition of that house and performs read, create, delete and update operations on it.

Screenshot of code:

```
@api_view(["GET", "PUT", "DELETE"])
def housingConditions_detail(request, pk):
    try:
        housingconditions = housingConditions.objects.get(pk=pk)
    except housingConditions.DoesNotExist:
        return JsonResponse(
            {"message": "The housingconditions does not exist"},
            status=status.HTTP_404_NOT_FOUND,
        )

    if request.method == "GET":
        housingconditions_serializer = housingConditionsSerializer(housingconditions)
        return JsonResponse(housingconditions_serializer.data)

    elif request.method == "PUT":
        housingconditions_data = JSONParser().parse(request)
        housingconditions_serializer = housingConditionsSerializer(
            housingconditions, data=housingconditions_data
        )
        if housingconditions_serializer.is_valid():
            housingconditions_serializer.save()
            return JsonResponse(housingconditions_serializer.data)
        return JsonResponse(
            housingconditions_serializer.errors, status=status.HTTP_400_BAD_REQUEST
        )

    elif request.method == "DELETE":
        housingconditions.delete()
        return JsonResponse(
            {"message": "housingConditions was deleted successfully!"},
            status=status.HTTP_204_NO_CONTENT,
        )
```

Screenshot of output window:

Overview

DEL http://127.0.0.1:8080/...

GET http://127.0.0.1:8080/...

DEL http://127.0.0.1:8080/...

GET http://127.0.0.1:8080/...

New Collection

+ ...

No Environment

http://127.0.0.1:8080/api/housingconditions/2

Save

Send

Params

Authorization

Headers (8)

Body

Pre-request Script

Tests

Settings

Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description		

Body

Cookies

Headers (7)

Test Results

Status: 200 OK Time: 9 ms Size: 416 B Save Response

PrettyRawPreviewVisualizeJSON

```
1 {
2   "Id": 2,
3   "Condition1": "Feedz",
4   "Condition2": "Nozm",
5   "BldgType": "IFam",
6   "HouseStyle": "1Story",
7   "OverallQual": 6,
8   "OverallCond": 8,
9   "YearBuilt": 1976,
10  "YearRemodAdd": 1976
11 }
```

Overview

DEL http://127.0.0.1:8080/...

POST http://127.0.0.1:8080/...

DEL http://127.0.0.1:8080/...

GET http://127.0.0.1:8080/...

New Collection

+ ...

No Environment

http://127.0.0.1:8080/api/housingconditions

Save

Send

Params

Authorization

Headers (8)

Body

Pre-request Script

Tests

Settings

Cookies

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

Text

```
1 {
2   "Id": 1461,
3   "Condition1": "Feedz",
4   "Condition2": "Nozm",
5   "BldgType": "IFam",
6   "HouseStyle": "1Story",
7   "OverallQual": 3,
8   "OverallCond": 4,
9   "YearBuilt": 2000,
10  "YearRemodAdd": 2000
11 }
```

Body

Cookies

Headers (7)

Test Results

Status: 201 Created Time: 14 ms Size: 425 B Save Response

PrettyRawPreviewVisualizeJSON

```
1 {
2   "Id": 1461,
3   "Condition1": "Feedz",
4   "Condition2": "Nozm",
5   "BldgType": "IFam",
6   "HouseStyle": "1Story",
7   "OverallQual": 3,
8   "OverallCond": 4,
9   "YearBuilt": 2000,
10  "YearRemodAdd": 2000
11 }
```

Overview

DEL http://127.0.0.1:8080/... PUT http://127.0.0.1:8080/... DEL http://127.0.0.1:8080/... GET http://127.0.0.1:8080/... New Collection

No Environment

http://127.0.0.1:8080/api/housingconditions/1461

PUT http://127.0.0.1:8080/api/housingconditions/1461

Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL Text

```
1 {
2   "Id": 1461,
3   "Condition1": "Feedr",
4   "Condition2": "Noxm",
5   "BldgType": "IFam",
6   "HouseStyle": "2Story",
7   "OverallQual": 9,
8   "OverallCond": 9,
9   "YearBuilt": 2004,
10  "YearRemodAdd": 2012
11 }
```

Body Cookies Headers (7) Test Results

Status: 200 OK Time: 16 ms Size: 419 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "Id": 1461,
3   "Condition1": "Feedr",
4   "Condition2": "Noxm",
5   "BldgType": "IFam",
6   "HouseStyle": "2Story",
7   "OverallQual": 9,
8   "OverallCond": 9,
9   "YearBuilt": 2004,
10  "YearRemodAdd": 2012
11 }
```

Overview

DEL http://127.0.0.1:8080/... DEL http://127.0.0.1:8080/... DEL http://127.0.0.1:8080/... GET http://127.0.0.1:8080/... New Collection

No Environment

http://127.0.0.1:8080/api/housingconditions/1461

DELETE http://127.0.0.1:8080/api/housingconditions/1461

Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Query Params

Body Cookies Headers (7) Test Results

Status: 204 No Content Time: 10 ms Size: 306 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "message": "housingConditions was deleted successfully!"
3 }
```

Author: Name of the team member who worked on it

Method: exteriorFeatures_detail

Details: This Method takes house Id and shows the details about the exterior features of that house and performs read, create, delete and update operations on it.

Screenshot of code:

```
@api_view(["GET", "POST", "DELETE"])
def exteriorFeatures_list(request):
    if request.method == "GET":
        application_data = exteriorFeatures.objects.all()

        title = request.GET.get("title", None)
        if title is not None:
            application_data = application_data.filter(title__icontains=title)

        serializer = exteriorFeaturesSerializer(application_data, many=True)
        return JsonResponse(serializer.data, safe=False)
        # 'safe=False' for objects serialization

    elif request.method == "POST":
        exteriorfeatures_data = JSONParser().parse(request)
        exteriorfeatures_serializer = exteriorFeaturesSerializer(
            data=exteriorfeatures_data
        )
        if exteriorfeatures_serializer.is_valid():
            exteriorfeatures_serializer.save()
            return JsonResponse(
                exteriorfeatures_serializer.data, status=status.HTTP_201_CREATED
            )
        return JsonResponse(
            exteriorfeatures_serializer.errors, status=status.HTTP_400_BAD_REQUEST
        )

    elif request.method == "DELETE":
        count = exteriorFeatures.objects.all().delete()
        return JsonResponse(
            {
                "message": "{} exteriorFeatures were deleted successfully!".format(
                    count[0]
                )
            },
            status=status.HTTP_204_NO_CONTENT,
        )
```


Screenshot of output window:

Overview

DEL http://127.0.0.1:80...

DEL http://127.0.0.1:80...

GET http://127.0.0.1:80...

GET http://127.0.0.1:80...

New Collection

+

...

No Environment

▼

http://127.0.0.1:8080/api/exteriorfeatures/49

Save

✎

📄

GET http://127.0.0.1:8080/api/exteriorfeatures/49

Send

ParamsAuthorizationHeaders (6)BodyPre-request ScriptTestsSettingsCookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
-----	-------	-------------	-----	-----------

BodyCookiesHeaders (7)Test Results

Status: 200 OKTime: 14 msSize: 871 BSave Response

PrettyRawPreviewVisualizeJSON

```
1  {
2    "Id": 49,
3    "RoofStyle": "Gable",
4    "RoofMatl": "CompShg",
5    "Exterior1st": "MetalSd",
6    "Exterior2nd": "MetalSd",
7    "MasVnrType": "None",
8    "MasVnrArea": 0,
9    "ExterQual": "TA",
10   "ExterCond": "TA",
11   "Foundation": "BrkT11",
12   "BsmtQual": "TA",
13   "BsmtCond": "TA",
14   "BsmtExposure": "No",
15   "BsmtFinType1": "Unf",
16   "BsmtFinSF1": 0,
17   "BsmtFinType2": "Unf",
18   "BsmtFinSF2": 0,
19   "BsmtUnfSF": 736,
20   "TotalBsmtSF": 736,
21   "GarageType": "NA",
22   "GarageYrBlt": 0,
23   "GarageFinish": "NA",
24   "GarageCars": 0,
25   "GarageArea": 0,
26   "GarageQual": "NA",
27   "GarageCond": "NA",
28   "PavedDrive": "N",
29   "WoodDeckSF": 0,
30   "OpenPorchSF": 0,
31   "EnclosedPorch": 102
}
```

Overview

DEL http://127.0.0.1:80...

DEL http://127.0.0.1:80...

POST http://127.0.0.1:80...

GET http://127.0.0.1:80...

New Collection

+

...

No Environment

▼

http://127.0.0.1:8080/api/exteriorfeatures

Save

✎

📄

POST http://127.0.0.1:8080/api/exteriorfeatures

Send

ParamsAuthorizationHeaders (8)BodyPre-request ScriptTestsSettingsCookies

noneform-datax-www-form-urlencodedrawbinaryGraphQLText

PrettyRawPreviewVisualizeJSON

```
1  {
2    "Id": 1461,
3    "RoofStyle": "Hip",
4    "RoofMatl": "WdShng",
5    "Exterior1st": "MetalSd",
6    "Exterior2nd": "MetalSd",
7    "MasVnrType": "None",
8    "MasVnrArea": 0,
9    "ExterQual": "TA",
10   "ExterCond": "TA",
11   "Foundation": "BrkT11",
12   "BsmtQual": "TA",
13   "BsmtCond": "TA",
14   "BsmtExposure": "No",
15   "BsmtFinType1": "Unf",
16   "BsmtFinSF1": 0,
17   "BsmtFinType2": "Unf"
}
```

Overview

DEL http://127.0.0.1:8080/api/exteriorfeatures/1461

PUT http://127.0.0.1:8080/api/exteriorfeatures/1461

GET http://127.0.0.1:8080/api/exteriorfeatures/1461

New Collection

No Environment

http://127.0.0.1:8080/api/exteriorfeatures/1461

PUT http://127.0.0.1:8080/api/exteriorfeatures/1461

Send

Params

Authorization

Headers (8)

Body

Pre-request Script

Tests

Settings

Cookies

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

Text

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

Body

Cookies

Headers (7)

Test Results

Status: 200 OK

Time: 23 ms

Size: 872 B

Save Response

Pretty

Raw

Preview

Visualize

JSON

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

Overview

DEL http://127.0.0.1:8080/api/exteriorfeatures/1461

DELETE http://127.0.0.1:8080/api/exteriorfeatures/1461

GET http://127.0.0.1:8080/api/exteriorfeatures/1461

New Collection

No Environment

http://127.0.0.1:8080/api/exteriorfeatures/1461

DELETE http://127.0.0.1:8080/api/exteriorfeatures/1461

Send

Params

Authorization

Headers (8)

Body

Pre-request Script

Tests

Settings

Cookies

Query Params

KEY

VALUE

DESCRIPTION

Key

Value

Description

Body

Cookies

Headers (7)

Test Results

Status: 204 No Content

Time: 17 ms

Size: 305 B

Save Response

Pretty

Raw

Preview

Visualize

JSON

1

2

3

Author: Name of the team member who worked on it
Method: interiorFeatures_detail

Details: This Method takes house Id and shows the details about the interior features of that house and performs read, create, delete and update operations on it.

Screenshot of code:

```
@api_view(["GET", "PUT", "DELETE"])
def interiorFeatures_detail(request, pk):
    try:
        interiorfeatures = interiorFeatures.objects.get(pk=pk)
    except interiorFeatures.DoesNotExist:
        return JsonResponse(
            {"message": "The interiorfeatures does not exist"},
            status=status.HTTP_404_NOT_FOUND,
        )

    if request.method == "GET":
        interiorfeatures_serializer = interiorFeaturesSerializer(interiorfeatures)
        return JsonResponse(interiorfeatures_serializer.data)

    elif request.method == "PUT":
        interiorfeatures_data = JSONParser().parse(request)
        interiorfeatures_serializer = interiorFeaturesSerializer(
            interiorfeatures, data=interiorfeatures_data
        )
        if interiorfeatures_serializer.is_valid():
            interiorfeatures_serializer.save()
            return JsonResponse(interiorfeatures_serializer.data)
        return JsonResponse(
            interiorfeatures_serializer.errors, status=status.HTTP_400_BAD_REQUEST
        )

    elif request.method == "DELETE":
        interiorfeatures.delete()
        return JsonResponse(
            {"message": "interiorFeatures was deleted successfully!"},
            status=status.HTTP_204_NO_CONTENT,
        )
```

Screenshot of output window:

Overview

DEL http://127.0.0.1:80...

DEL http://127.0.0.1:80...

DEL http://127.0.0.1:80...

GET http://127.0.0.1:80...

New Collection

+

...

No Environment

▼

http://127.0.0.1:8080/api/interiorfeatures/66

Save

▼

GET

▼

http://127.0.0.1:8080/api/interiorfeatures/66

Send

▼

Params

Authorization

Headers (8)

Body

●

Pre-request Script

Tests

Settings

Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
-----	-------	-------------	-----	-----------

Body

▼

Cookies

Headers (7)

Test Results

Status: 200 OKTime: 21 msSize: 787 BSave Response

▼

Pretty

Raw

Preview

Visualize

JSON

▼

```
1
2  {
3    "Id": 66,
4    "Heating": "GasA",
5    "HeatingQC": "Ex",
6    "CentralAir": "Y",
7    "Electrical": "SBrkr",
8    "FstFltSF": 1143,
9    "SecFltSF": 1330,
10   "LowQualFinSF": 0,
11   "GrLivArea": 2473,
12   "BsmtFullBath": 0,
13   "BsmtHalfBath": 0,
14   "FullBath": 2,
15   "HalfBath": 1,
16   "BedroomAbvGr": 4,
17   "KitchenAbvGr": 1,
18   "KitchenQual": "Gd",
19   "TotRmsAbvGnd": 9,
20   "Functional": "Typ",
21   "Fireplaces": 1,
22   "FireplaceQu": "Gd",
23   "PoolArea": 0,
24   "PoolQC": "NA",
25   "Fence": "NA",
26   "MiscFeature": "NA",
27   "MiscVal": 0,
28   "MoSold": 10,
29   "YrSold": 2007,
30   "SaleType": "WD",
31   "SaleCondition": "Normal",
32   "SalePrice": 317000
33 }
```

Overview

DEL http://127.0.0.1:80...

DEL http://127.0.0.1:80...

DEL http://127.0.0.1:80...

POST http://127.0.0.1:80...

New Collection

+

...

No Environment

▼

http://127.0.0.1:8080/api/interiorfeatures

Save

▼

POST

▼

http://127.0.0.1:8080/api/interiorfeatures

Send

▼

Params

Authorization

Headers (8)

Body

●

Pre-request Script

Tests

Settings

Cookies

none

form-data

x-www-form-urlencoded

raw

●

binary

GraphQL

Text

▼

Body

▼

Cookies

Headers (7)

Test Results

Status: 201 CreatedTime: 17 msSize: 794 BSave Response

▼

Pretty

Raw

Preview

Visualize

JSON

▼

```
1
2  {
3    "Id": 1461,
4    "Heating": "GasB",
5    "HeatingQC": "Ex",
6    "CentralAir": "N",
7    "Electrical": "Abcde",
8    "FstFltSF": 780,
9    "SecFltSF": 1330,
10   "LowQualFinSF": 0,
11   "GrLivArea": 2473,
12   "BsmtFullBath": 0,
13   "BsmtHalfBath": 0,
14   "FullBath": 2,
15   "HalfBath": 1,
16   "BedroomAbvGr": 4,
17   "KitchenAbvGr": 1,
18   "KitchenQual": "Gd",
19   "TotRmsAbvGnd": 9,
20   "Functional": "Typ",
21   "Fireplaces": 1,
22   "FireplaceQu": "Gd",
23   "PoolArea": 0,
24   "PoolQC": "NA",
25   "Fence": "NA",
26   "MiscFeature": "NA",
27   "MiscVal": 0,
28   "MoSold": 10,
29   "YrSold": 2007,
30   "SaleType": "WD",
31   "SaleCondition": "Normal",
32   "SalePrice": 317000
33 }
```

Overview

DEL http://127.0.0.1:8080/api/interiorfeatures/1461

DEL http://127.0.0.1:8080/api/interiorfeatures/1461

DEL http://127.0.0.1:8080/api/interiorfeatures/1461

PUT http://127.0.0.1:8080/api/interiorfeatures/1461

New Collection

+

...

No Environment

http://127.0.0.1:8080/api/interiorfeatures/1461

Save

PUT

http://127.0.0.1:8080/api/interiorfeatures/1461

Send

Params

Authorization

Headers (8)

Body

Pre-request Script

Tests

Settings

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

Text

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

...

"Id": 1461,

...

"Heating": "Gasc",

...

"HeatingQC": "db",

...

"CentralAir": "Y",

...

"Electrical": "defg",

...

"FatFltSF": 780,

...

"SecFltSF": 1700,

...

"LowQualFinSF": 0,

...

"GrLivArea": 2473,

...

"BsmtFullBath": 0,

...

"BsmtHalfBath": 0,

...

"FullBath": 2,

...

"HalfBath": 1,

...

"BedroomAbvGr": 2,

...

"KitchenAbvGr": 1,

...

"KitchenQual": "Gd",

...

"TotRmsAbvGrd": 9,

...

Body

Cookies

Headers (7)

Test Results

Status: 200 OK

Time: 25 ms

Size: 787 B

Save Response

Pretty

Raw

Preview

Visualize

JSON

1

2

3

4

5

6

7

8

9

10

11

12

13

14

...

"Id": 1461,

...

"Heating": "Gasc",

...

"HeatingQC": "db",

...

"CentralAir": "Y",

...

"Electrical": "defg",

...

"FatFltSF": 780,

...

"SecFltSF": 1700,

...

"LowQualFinSF": 0,

...

"GrLivArea": 2473,

...

"BsmtFullBath": 0,

...

"BsmtHalfBath": 0,

...

"FullBath": 2,

...

"HalfBath": 1,

...

"BedroomAbvGr": 2,

...

"KitchenAbvGr": 1,

...

"KitchenQual": "Gd",

...

"TotRmsAbvGrd": 9,

...

Overview

DEL http://127.0.0.1:8080/api/interiorfeatures/1461

DEL http://127.0.0.1:8080/api/interiorfeatures/1461

DEL http://127.0.0.1:8080/api/interiorfeatures/1461

DEL http://127.0.0.1:8080/api/interiorfeatures/1461

New Collection

+

...

No Environment

http://127.0.0.1:8080/api/interiorfeatures/1461

Save

DELETE

http://127.0.0.1:8080/api/interiorfeatures/1461

Send

Params

Authorization

Headers (8)

Body

Pre-request Script

Tests

Settings

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body

Cookies

Headers (7)

Test Results

Status: 204 No Content

Time: 14 ms

Size: 305 B

Save Response

Pretty

Raw

Preview

Visualize

JSON

1

2

3

...

"message": "interiorFeatures was deleted successfully!"

...

User Interface:

UI1:

- Student Name:
- Details:
- Screen Shot of Output:
- Screenshot of the Code:

UI2:

- Student Name:
- Details:
- Screen Shot of Output:
- Screenshot of the Code:

UI3:

- Student Name:
- Details:
- Screen Shot of Output:
- Screenshot of the Code:

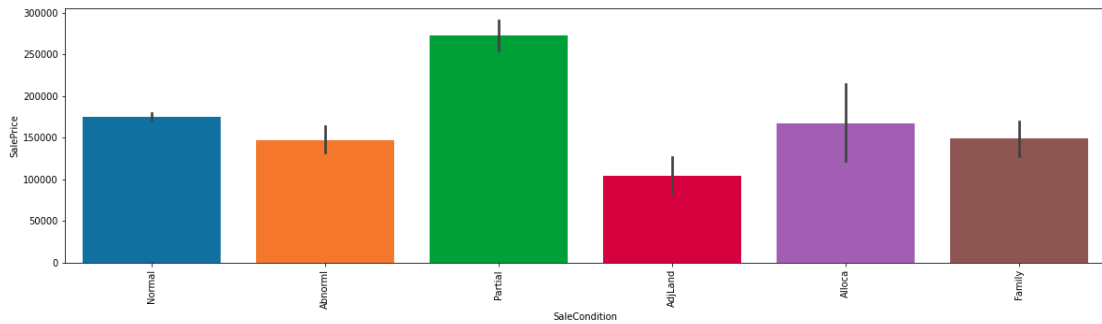
..

..

..

Implementation of Matplotlib:

- Student Name:
- Details: Average price of house on sale by their Sale Condition
- Screenshot of Output:

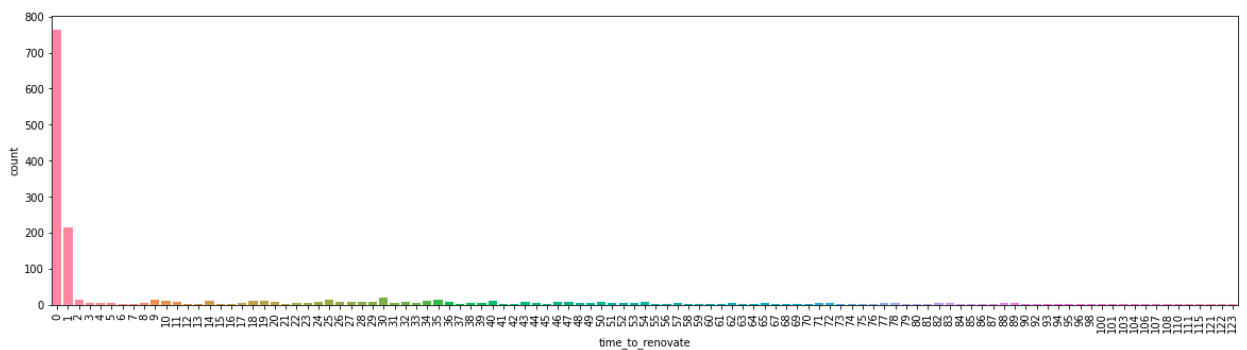


- Screenshot of the Code:

```
results = collection.find(
    {},
    {"_id": 0, "SaleCondition": 1, "SalePrice": 1}
)
results = [result for result in results]
sale_data = pd.DataFrame(results)
```

```
# Plotting
plt.figure(figsize=(20,5))
sns.barplot(x="SaleCondition", y="SalePrice", data=sale_data)
plt.xticks(rotation=90)
plt.show()
```

- Student Name:
- Details: Time taken in renovation (in years) after building a house
- Screenshot of Output:



- Screenshot of the Code:

```
housing_condition["time_to_renovate"] = housing_condition["YearRemodAdd"] - housing_condition["YearBuilt"]

# Plotting
plt.figure(figsize=(20,5))
sns.countplot(x="time_to_renovate", data=housing_condition)
plt.xticks(rotation=90)
plt.show()
```

Implementation of ML:

Write the details of the ML functionalities done by each team member.

Trained a regression model to predict the house price given the input features.

The screenshot displays a REST client interface with a POST request to `http://127.0.0.1:8080/api/pricePrediction`. The request body is a JSON object containing various house features. The response is a JSON object with a predicted price.

Request:

```
1 {
2   "LotArea": 1000,
3   "OverallQual": 7.0,
4   "OverallCond": 8.0,
5   "YearBuilt": 1920.0,
6   "YearRemodAdd": 1925.0,
7   "SaleCondition_Normal": 1.0,
8   "BedroomAbvGr": 4.0,
9   "KitchenAbvGr": 2.0,
10  "TotRmsAbvGrd": 5.0,
11  "GarageArea": 120.0
12 }
```

Response:

```
1 {
2   "predicted_price": 146120.24131602174
3 }
```


Score Distribution

Module	Total Marks	Student 1	Student 2	Student 3	Student 4
NoSQL Database	20				
Python Methods	25				
UI Forms and data display	25				
Charts/Graphs	10				
ML	10				
Documentation	10				
Total	100				