

API DOCUMENTATION FOR REAL ESTATE

Table of contents

USER	2
/api/user/	2
/api/user/login/	7
WITH Username and Password	7
WITH Token	9
/api/user/logout/	11
/api/user/forgot/	12
/api/user/reset/	14
/api/user/password/	15
/api/user/checkingaccount/	16
/api/user/agency/	18
PROJECT	20
/api/location/	20
/api/province/<int:id>	22
/api/province/<int:province_id>/district/<int:district_id>	24
/api/s/province/	26
/api/s/district/<int:province_id>	27
/api/s/ward/<int:district_id>	29
/api/s/street/<int:district_id>	30
/api/s/project/<int:district_id>	32
/api/estatetype/	33
/api/estatestatus/	34
/api/transaction/	35
/api/project/	37
/api/estate/?page=<int>	38
/api/estate/<int:id>	41
/api/post/?page=<int>	44
/api/sorttype/	51
/api/filtermaxprice/	52
/api/filterminprice/	54
/api/filterarea/	56
/api/filternumberofroom/	58
/api/filterposttime/	60
/api/search/?page=<int>	61

/api/favorite/?page=<int>

65

/api/favoriteid/

71

/api/news/?page=<int>

72

1. USER

a. /api/user/

GET

Description: Return all users

Permission: Admin

Parameter

Field	Type	Description

Success 200

Field	Type	Description
id	int	The user ID
name	string	Real name
username	string	The username
email	string	Email address
gender	string	Gender
birthday	string	Birthday
address	string	Address
avatar	string	Avatar url
phoneNumber	string	Phone number
identifyNumber	string	Identify number
isAgency	boolean	

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200329193132
// http://127.0.0.1:8000/api/user/

[
  {
    "id": 11,
    "name": "ADMIN",
    "username": "admin",
    "email": "admin@gmail.com",
    "gender": "Nam",
    "birthday": "1998-05-16",
    "address": "Quận 7, Tp.HCM",
    "avatar": "http://127.0.0.1:8000/media/user/admin/2DI27B4_oBp0J7S.jpg",
    "phoneNumber": "0123456789",
    "identifyNumber": "123456789",
    "isAgency": False,
  },
  {
    "id": 12,
    "name": "ADMIN",
    "username": "asdfsdf",
    "email": "anhvanbt7@gmail.com",
    "gender": "Nam",
    "birthday": "1998-05-16",
    "address": "Quận 7, Tp.HCM",
    "avatar": "http://127.0.0.1:8000/media/user/asdfsdf/2DI27B4.jpg",
    "phoneNumber": "0123456789",
    "identifyNumber": "123456789",
    "isAgency": False,
  },
]
```

Response (example): Failed

POST

Description: Create a new user

Permission: Anyone

Parameter

(*) required

Field	Type	Description
name (*)	string	Real name
username (*)	string	User name
password (*)	string	password
gender (*)	string	Gender
email (*)	string	Email address
address	string	Address
phoneNumber	string	Phone number
identifyNumber	string	Identify number
birthday	date	Birthday
avatar	file	Upload file

Postman request example:

Params Authorization ● Headers (11) **Body ●** Pre-request Script Tests Settings

● none ● **form-data** ● x-www-form-urlencoded ● raw ● binary ● GraphQL

	KEY	VALUE
<input checked="" type="checkbox"/>	name	ADMIN
<input checked="" type="checkbox"/>	username	123456
<input checked="" type="checkbox"/>	email	andsfsdfdsfanbt7@gmail.com
<input checked="" type="checkbox"/>	password	123456
<input checked="" type="checkbox"/>	address	Quận 7, Tp.HCM
<input checked="" type="checkbox"/>	phoneNumber	0123456789
<input checked="" type="checkbox"/>	identifyNumber	123456789
<input checked="" type="checkbox"/>	avatar	2.png X
<input checked="" type="checkbox"/>	gender	Nam
<input checked="" type="checkbox"/>	birthday	16/05/1998

Success 200

Field	Type	Description
error_code	string	If success, return 1
error_message	string	Something

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0 If existed, return 2 If something fail, return 3
error_message	string	Something

Response (example): Success

```
{
  "error_code": "1",
```

```
{
  "error_message": "Success."
}
```

Response (example): Failed

```
{
  "error_code": "2",
  "error_message": "Username existed",
}
```

PUT

Description: Motify a exist user

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Field	Type	Description
email	string	Email
address	string	Address
phoneNumber	string	Phone number
identifyNumber	string	Identify number
birthday	date	Birthday
avatar	file	Upload file

Success 200

Field	Type	Description
error_code	string	If success, return 1
error_message	string	Something

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0 If existed, return 2 If something fail, return 3
error_message	string	Something

Response (example): Success

```
{
  "error_code": "1",
  "error_message": "Success."
}
```

Response (example): Failed

b. `/api/user/login/`
WITH Username and Password
POST

Description: Login

Permission: Anyone

Parameter

(*) required

Field	Type	Description
username (*)	string	User name
password (*)	string	password

Postman request example:

Params Authorization Headers (10) **Body** Pre-request Script Tests Settings

☐ none
 ☒ form-data
 ☐ x-www-form-urlencoded
 ☐ raw
 ☐ binary
 ☐ GraphQL

	KEY	VALUE
<input checked="" type="checkbox"/>	username	admin
<input checked="" type="checkbox"/>	password	123456

Success 200

Field	Type	Description
name	string	Real name
username	string	Username
gender	string	Gender
birthday	string	Birthday
address	string	Address
avatar	string	Avatar url
phoneNumber	string	Phone Number
email	string	Email Address
identifyNumber	string	Identify number
isAgency	boolean	
token	string	Token

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success


```
{
  "name": "ADMIN",
  "username": "admin",
  "gender": "Nam",
  "birthday": "1998-05-16",
  "address": "Quận 7, Tp.HCM",
  "avatar": "http://127.0.0.1:8000/media/user/admin/2DI27B4_oBp0J7S.jpg",
  "phoneNumber": "0123456789",
  "email": "admin@gmail.com",
  "isAgency": True,
  "identifyNumber": "123456789",
  "token":
  "eyJ0eXAiOiZV90aW1lIjoieMjAyMC0wMy0zMjFQwNDowOTofRd_Esxic4t25KLGaRM
  UE"
}
```

Response (example): Failed

```
{
  "error_code": "0",
  "error_message": "Something fail",
}
```

WITH Token

POST

Description: Login

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Field	Type	Description

Success 200

Field	Type	Description
name	string	Real name
username	string	Username
gender	string	Gender
birthday	string	Birthday
address	string	Address
avatar	string	Avatar url
phoneNumber	string	Phone Number
email	string	Email Address
isAgency	boolean	
identifyNumber	string	Identify number

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success

```
{
  "name": "ADMIN",
  "username": "admin",
  "gender": "Nam",
  "birthday": "1998-05-16",
  "address": "Quận 7, Tp.HCM",
  "avatar": "http://127.0.0.1:8000/media/user/admin/2DI27B4_oBp0J7S.jpg",
  "phoneNumber": "0123456789",
  "email": "admin@gmail.com",
  "isAgency": True,
  "identifyNumber": "123456789"
}
```

Response (example): Failed

```
{
  "error_code": "0",
  "error_message": "Something fail",
}
```

c. `/api/user/logout/`

POST

Description: Logout

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Field	Type	Description

Postman request example:

POST

http://127.0.0.1:8000/api/user/logout/

Send

Save

Params

Authorization

Headers (10)

Body

Pre-request Script

Tests

Settings

Cookies

Code

TYPE

Bearer Token

The authorization header will be automatically generated when you send the request. [Learn more about authorization](#)

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. [Learn more about variables](#)

Token

eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJ0eXBlljoidXNlcisiMkljoiYWRtaW4iLCJlbWFpbCI6ImFkbWluQGdtYWlsLmNvbSIsImNyZWZvZV90aW1lIjoiaWJyMC0wMy0yOQwOT01ODozMi4yNDgxMTArMDA6MDAifQ.hQ6SKCXirArKY3egCpjlQG2009haCPAlzRgeanjjeHy

Response

Success 200

Field	Type	Description
-------	------	-------------

error_code	string	If success, return 1
error_message	string	Something

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success

<pre>{ "error_code": "1", "error_message": "Success." }</pre>

Response (example): Failed

<pre>{ "error_code": "0", "error_message": "Something fail", }</pre>
--

d. [/api/user/forgot/](#)

POST

Description: Call this api when forgot your password, we will send an email which contained a PIN to your email address

Permission: Anyone

Parameter

(*) required

Field	Type	Description
email (*)	string	The email which registered

Postman request example:

POST http://127.0.0.1:8000/api/user/forgot/

Params Authorization Headers (10) **Body** Pre-request Script Tests Settings

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

	KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/>	email	anhvanbt7@gmail.com	
	Key	Value	Description

Success 200

Check your mail, the email will be sent

Field	Type	Description
error_code	string	If success, return 1
error_message	string	Something

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success

```
{
  "error_code": "1",
  "error_message": "Success."
}
```

Response (example): Failed

```
{
  "error_code": "0",
  "error_message": "Something fail",
}
```

e. `/api/user/reset/`

POST

Description: Call this api in order to reset your password

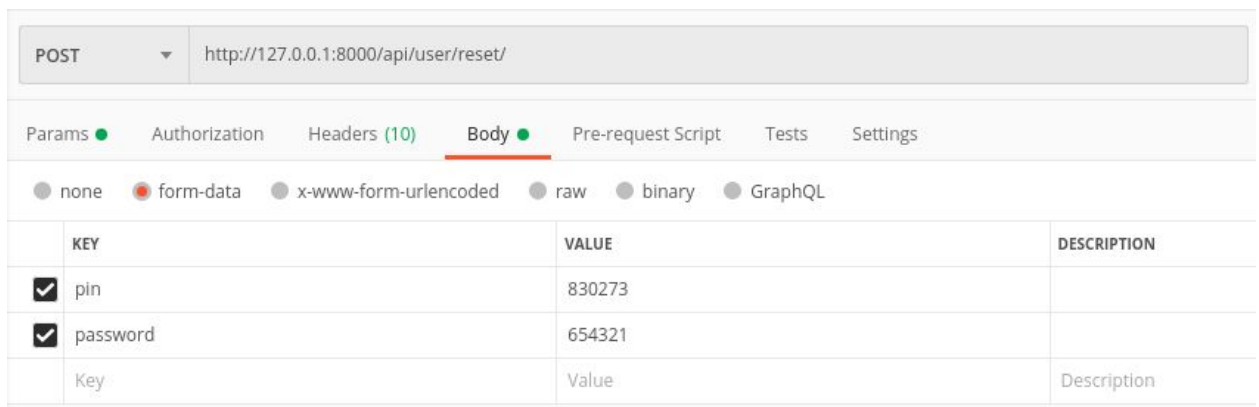
Permission: Anyone

Parameter

(*) required

Field	Type	Description
pin (*)	string	Take this pin code in your email
Password (*)	string	The new password

Postman request example:



The image shows a Postman request configuration for a POST method to the URL `http://127.0.0.1:8000/api/user/reset/`. The 'Body' tab is selected, and the 'form-data' radio button is chosen. Below the tabs, there is a table with two columns: 'KEY' and 'VALUE'. The first row has 'pin' as the key and '830273' as the value. The second row has 'password' as the key and '654321' as the value. Both rows have a checked checkbox in the first column. A third row is partially visible with 'Key' and 'Value' as placeholders. The 'Description' column is empty for the first two rows and contains 'Description' for the third row.

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> pin	830273	
<input checked="" type="checkbox"/> password	654321	
Key	Value	Description

Success 200

Check your mail, the email will be sent

Field	Type	Description
error_code	string	If success, return 1

error_message	string	Something
---------------	--------	-----------

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success

<pre>{ "error_code": "1", "error_message": "Success." }</pre>

Response (example): Failed

<pre>{ "error_code": "0", "error_message": "Something fail", }</pre>
--

f. `/api/user/password/`
PUT

Description: Change password

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Field	Type	Description
oldPassword (*)	string	Old password
newPassword (*)	string	New password

Success 200

Field	Type	Description
error_code	string	If success, return 1
error_message	string	Success

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success

<pre>{ "error_code": "1", "error_message": "Success.", }</pre>
--

Response (example): Failed

<pre>{ "error_code": "0", "error_message": "Something went wrong - Old password is not matched", }</pre>
--

g. [/api/user/checkingaccount/](#)
POST

Description: Check account before upgrade to agency account.

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Field	Type	Description

Success 200

Field	Type	Description
id	int	The user ID
name	string	Real name
username	string	The username
email	string	Email address
gender	string	Gender
birthday	string	Birthday
address	string	Address
avatar	string	Avatar url
phoneNumber	string	Phone number
identifyNumber	string	Identify number
isAgency	boolean	

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success

{

```
"id": 18,  
"name": "admin test agency",  
"username": "admin",  
"email": "aaaa@gmail.com",  
"gender": "abcxyz",  
"birthday": "1900-01-01",  
"address": "tren troi",  
"avatar": "",  
"phoneNumber": "0101011000101",  
"identifyNumber": "11111111111",  
"isAgency": true  
}
```

Response (example): Failed

```
{  
  "error_code": "0",  
  "error_message": "Something went wrong - ",  
}
```

h. [/api/user/agency/](#)

POST

Description: Upgrade to agency account.

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Field	Type	Description
name (*)	string	Real name
email (*)	string	Email address
gender (*)	string	Gender
birthday (*)	string	Birthday
address (*)	string	Address

avatar (*)	string	Avatar url
phoneNumber (*)	string	Phone number
identifyNumber (*)	string	Identify number

Success 200

Field	Type	Description
error_code	string	If success, return 1
error_message	string	Something

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success

<pre>{ "error_code": "1", "error_message": "Success." }</pre>

Response (example): Failed

<pre>{ "error_code": "0", "error_message": "Something went wrong - ", }</pre>

2. PROJECT

a. `/api/location/`

GET

Description: Return all location, include: province, district, ward, street

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
	object[]	
id	int	The province ID
name	string	The province name
code	string	The province code
districts	object[]	All districts
id	int	The district ID
name	string	The district name
wards	object[]	All wards
id	int	The ward ID
name	string	The ward name
prefix	string	The ward prefix
streets	object[]	All street
id	int	The street ID
name	string	The street name
prefix	string	The street prefix

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200329204555
// http://127.0.0.1:8000/api/location/

[
  {
    "id": 1,
    "name": "Hồ Chí Minh",
    "code": "SG",
    "districts": [
      {
        "id": 1,
        "name": "Bình Chánh",
        "wards": [
          {
            "id": 1,
            "name": "An Phú Tây",
            "prefix": "Xã"
          },
          {
            "id": 2,
            "name": "Bình Chánh",
            "prefix": "Xã"
          },
          ...],
        "streets": [
          {
            "id": 1,
            "name": "1",
            "prefix": "Đường"
          },
          {
            "id": 2,
            "name": "10",
            "prefix": "Đường"
          },
          ...],

```

```
"id": 2,  
"name": "Bình Tân",  
"wards": [  
  {}, {}, ..., ],  
"streets": [  
  {}, {}, ..., ],  
},  
{},  
{},  
....]
```

Response (example): Failed

b. `/api/province/<int:id>`

GET

Description: Return a special province

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
id	int	The province ID
name	string	The province name
code	string	The province code
districts	object[]	All districts

id	int	The district ID
name	string	The district name
wards	object[]	All wards
id	int	The ward ID
name	string	The ward name
prefix	string	The ward prefix
streets	object[]	All street
id	int	The street ID
name	string	The street name
prefix	string	The street prefix

Error 4xx

Field	Type	Description

Response (example): Success

<pre>// 20200329204555 // http://127.0.0.1:8000/api/province/1 { "id": 1, "name": "Hồ Chí Minh", "code": "SG", "districts": [{ "id": 1, "name": "Bình Chánh", "wards": [{ "id": 1, "name": "An Phú Tây", "prefix": "Xã" }] }] }</pre>
--

```

    },
    {
      "id": 2,
      "name": "Bình Chánh",
      "prefix": "Xã"
    },
    ...],
    "streets": [
      {
        "id": 1,
        "name": "1",
        "prefix": "Đường"
      },
      {
        "id": 2,
        "name": "10",
        "prefix": "Đường"
      },
      ...],
    "id": 2,
    "name": "Bình Tân",
    "wards": [
      {}, {}, ..., ],
    "streets": [
      {}, {}, ..., ],

```

Response (example): Failed

c. `/api/province/<int:province_id>/district/<int:district_id>`

GET

Description: Return a special district of a province

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
id	int	The district ID
name	string	The district name
wards	object[]	All wards
id	int	The ward ID
name	string	The ward name
prefix	string	The ward prefix
streets	object[]	All street
id	int	The street ID
name	string	The street name
prefix	string	The street prefix

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200329210653
// http://127.0.0.1:8000/api/province/2/district/25
{
  "id": 25,
  "name": "Ba Đình",
  "wards": [
    {
      "id": 327,
      "name": "Cổng Vệ",
      "prefix": "Phường"
```

```

    },
    {
      "id": 328,
      "name": "Điện Biên",
      "prefix": "Phường"
    },
    {...],
    "streets": [
      {
        "id": 7219,
        "name": "10",
        "prefix": "Đường"
      },
      {
        "id": 7220,
        "name": "An Xá",
        "prefix": "Phố"
      },
      {...],
    }
  }
}

```

Response (example): Failed

d. `/api/s/province/`

GET

Description: Return all provinces (it only contains: id, name, code)

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
id	int	The province ID
name	string	The province name

code	string	The province code
------	--------	-------------------

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200414120622
// https://127.0.0.1:8000/api/s/province/

[
  {
    "id": 1,
    "name": "Hồ Chí Minh",
    "code": "SG"
  },
  {
    "id": 2,
    "name": "Hà Nội",
    "code": "HN"
  },
  {
    "id": 3,
    "name": "Đà Nẵng",
    "code": "DDN"
  }
]
```

Response (example): Failed

e. `/api/s/district/<int:province_id>`

GET

Description: Return all district (it only contains: id, name, prefix)

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
id	int	The district ID
name	string	The district name
prefix	string	The district prefix

Error 4xx

Field	Type	Description

Response (example): Success

<pre>/ 20200414120837 // https://127.0.0.1:8000/api/s/district/1 [{ "id": 1, "name": "Bình Chánh", "prefix": "Huyện" }, { "id": 2, "name": "Bình Tân", "prefix": "Quận" }, { "id": 3,</pre>

```
[{"name": "Bình Thạnh",
  "prefix": "Quận"},
{"id": 4,
  "name": "Cần Giờ",
  "prefix": "Huyện"}]
```

Response (example): Failed

f. `/api/s/ward/<int:district_id>`

GET

Description: Return all ward (it only contains: id, name, prefix)

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
id	int	The ward ID
name	string	The ward name
prefix	string	The ward prefix

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200414121009
// https://127.0.0.1:8000/api/s/ward/1

[
  {
    "id": 1,
    "name": "An Phú Tây",
    "prefix": "Xã"
  },
  {
    "id": 2,
    "name": "Bình Chánh",
    "prefix": "Xã"
  },
  {
    "id": 3,
    "name": "Bình Hưng",
    "prefix": "Xã"
  }
]
```

Response (example): Failed

g. `/api/s/street/<int:district_id>`

GET

Description: Return all street (it only contains: id, name, prefix)

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
id	int	The street ID
name	string	The street name
prefix	string	The street prefix

Error 4xx

Field	Type	Description

Response (example): Success

<pre>// 20200414121009 // https://127.0.0.1:8000/api/s/street/1 [{ "id": 1, "name": "1", "prefix": "Đường" }, { "id": 2, "name": "10", "prefix": "Đường" }, { "id": 3, "name": "10A", "prefix": "Đường" }]</pre>

Response (example): Failed

--

h. `/api/s/project/<int:district_id>`

GET

Description: Return all project (it only contains: id, name, lat, ng)

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
id	int	The project ID
name	string	The project name
lat	float	The project lat
lng	float	The project lng

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200414121009
// https://127.0.0.1:8000/api/s/project/1

[
  {
    "id": 1,
    "name": "13B Conic Phong Phú",
    "lat": 10.71240234375,
    "lng": 106.64177703857
  }
]
```



```

},
{
  "id": 2,
  "name": "13D Asia Phú Mỹ",
  "lat": 10.705533027649,
  "lng": 106.64806365967
},
{
  "id": 3,
  "name": "13E Phong Phú",
  "lat": 10.704967498779,
  "lng": 106.64633178711
}
]

```

Response (example): Failed

i. `/api/estatetype/`

GET

Description: Return all estate type

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
	object[]	List estate type
id	int	Estate type ID
name	string	Estate type name

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200329211216
// http://127.0.0.1:8000/api/estatetype/

[
  {
    "id": 1,
    "name": "Nhà riêng"
  },
  {
    "id": 2,
    "name": "Căn hộ, chung cư"
  },
  {
    "id": 3,
    "name": "Biệt thự"
  },
  ...
]
```

Response (example): Failed

j. [/api/estatestatus/](#)

GET

Description: Return all estate status

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
	object[]	List estate status
id	int	Estate status ID
status	string	Estate status name

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200329211918
// http://127.0.0.1:8000/api/estatestatus/

[
  {
    "id": 10,
    "status": "Open"
  },
  {
    "id": 11,
    "status": "Close"
  }
]
```

Response (example): Failed

k. `/api/transaction/`

GET

Description: Return all transaction

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
	object[]	List transaction
id	int	Transaction ID
name	string	Transaction name

Error 4xx

Field	Type	Description

Response (example): Success

<pre>// 20200329212046 // http://127.0.0.1:8000/api/transaction/ [{ "id": 5, "name": "Mua" }, { "id": 6, "name": "Bán" }]</pre>
--

Response (example): Failed

1. `/api/project/`

GET

Description: Return all project

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
	object[]	List project
id	int	Project ID
name	string	Project name
lat	float	lat address
lng	float	lng address

Error 4xx

Field	Type	Description

Response (example): Success

// 20200329212141
// http://127.0.0.1:8000/api/project/

```
{
  "id": 1,
  "name": "13B Conic Phong Phú",
  "lat": 10.71240234375,
  "lng": 106.64177703857
},
{
  "id": 2,
  "name": "13D Asia Phú Mỹ",
  "lat": 10.705533027649,
  "lng": 106.64806365967
},
]
```

Response (example): Failed

m. `/api/estate/?page=<int>`

GET

Description: Return all estate. User can call this api without *page* param, default return page 1. Default: Items per page = 25

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
current_page	string	Current page
total_page	string	Total page
result	object[]	
id	int	Estate ID

title	string	Estate title
province	string	Estate Province
district	string	Estate District
contact	string	Contact
area	string	Area estate
price	string	Price estate
lat	string	Estate lat
lng	string	Estate lng
created_day	string	Create day
project	object	
id	int	Project id
name	string	Project name
lat	float	Project lat
lng	float	Project lng
images	object[]	
id	string	Image ID
image	string	Image URL

Error 4xx

Field	Type	Description

Response (example): Success

<pre>// 20200402175712 // http://127.0.0.1:8000/api/estate/?page=1</pre>
--

```

{
  "current_page": 1,
  "total_page": "1",
  "result": [
    {
      "id": 24,
      "title": "Bán mặt tiền Nguyễn Huy Tự, phường Đa Kao, quận 1, DT 90,5m2, LH 0903732***",
      "images": [

      ],
      "province": "Hồ Chí Minh",
      "district": "Quận 1",
      "contact": "0903 732 682",
      "area": 56.0,
      "price": 2100,
      "created_day": "2020-04-15T06:07:56.515816Z",
      "project": {
        "id": 1,
        "name": "13B Conic Phong Phú",
        "lat": 10.71240234375,
        "lng": 106.64177703857
      }
    },
    {
      "id": 25,
      "title": "Bán mặt tiền Nguyễn Huy Tự, phường Đa Kao, quận 1, DT 90,5m2, LH 0903732***",
      "images": [

      ],
      "province": "Hồ Chí Minh",
      "district": "Quận 1",
      "contact": "0903 732 682",
      "area": 56.0,
      "price": 2100,
      "created_day": "2020-04-15T06:07:56.515816Z",
      "project": {
        "id": 1,
        "name": "13B Conic Phong Phú",
        "lat": 10.71240234375,
        "lng": 106.64177703857
      }
    }
  ]
}

```


Response (example): Failed

```
// 20200402180325
// http://127.0.0.1:8000/api/estate/?page=10

{
  "error_code": "0",
  "error_message": "fail - index out of range"
}
```

n. `/api/estate/<int:id>`

GET

Description: Return a special estate

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
user	object	
name	string	Username
email	string	Email
phoneNumber	string	Phone Number
estate	object	
id	int	Estate ID
estateType	string	Estate Type
images	object[]	

id	string	Image ID
image	string	Image URL
project	object	
id	int	Project id
name	string	Project name
lat	float	Project lat
lng	float	Project lng
province	string	Estate Province
district	string	Estate district
ward	string	Estate ward
street	string	Estate street
addressDetail	string	Estate address detail
title	string	Estate title
numberOfRoom	string	Number of room
description	string	Description
detail	string	Detail
price	int	Price
area	float	Area
contact	string	Contract
lat	string	Estate lat
lng	string	Estate lng
dateFrom	string	Date post
dateTo	string	Date expire

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200330002452
// http://192.168.0.103:5000/api/estate/1

"user": {
  "name": "Admin - Đặng Anh Hào",
  "email": "anhvanbt7@gmail.com",
  "phoneNumber": "090123456"
},
"estate": {
  "id": 143,
  "images": [

  ],
  "estateType": "Nhà riêng",
  "project": "",
  "province": "Hồ Chí Minh",
  "district": "Bình Chánh",
  "ward": "",
  "street": "",
  "title": "test expire day = 10",
  "numberOfRoom": 0,
  "description": null,
  "detail": null,
  "price": 0,
  "area": 0.0,
  "contact": "1234"
},
"dateFrom": "2020-04-17T07:46:09.387137Z",
"dateTo": "2020-04-27T07:46:09.387145Z"
}
```

Response (example): Failed

o. /api/post/?page=<int>

GET

Description: Return all posts of special user. User can call this api without *page* param, default return page 1. Default: Items per page = 25

Permission: Anyone

Parameter : Get posts of current user

(*) required

Required: Add token to Authorization

Field	Type	Description

Parameter : Get posts of a any user

(*) required

Field	Type	Description
id (*)	string	Author ID

Success 200

Field	Type	Description
current_page	string	Current page
total_page	string	Total page
result	object[]	
estate	object	
id	int	Estate ID
estateType	string	Estate Type
images	object[]	
id	string	Image ID
image	string	Image URL

project	object	
id	int	Project id
name	string	Project name
lat	float	Project lat
lng	float	Project lng
province	string	Estate Province
district	string	Estate district
ward	string	Estate ward
street	string	Estate street
addressDetail	string	Estate address detail
title	string	Estate title
numberOfRoom	string	Number of room
description	string	Description
detail	string	Detail
price	int	Price
area	float	Area
contact	string	Contract
lat	string	Estate lat
lng	string	Estate lng
dateFrom	string	Date post
dateTo	string	Date expire

Error 4xx

Field	Type	Description

Response (example): Success

```
{
  "current_page": "1",
  "total_page": "3",
  "result": [
    {
      "estate": {
        "id": 24,
        "images": [],
        "estateType": "Đất nền",
        "project": {
          "id": 1,
          "name": "13B Conic Phong Phú",
          "lat": 10.71240234375,
          "lng": 106.64177703857
        },
        "province": "Hồ Chí Minh",
        "district": "Quận 1",
        "ward": "",
        "street": "Nguyễn Huy Tự",
        "addressDetail": null,
        "title": "Bán mặt tiền Nguyễn Huy Tự, phường Đa K",
        "numberOfRoom": 0,
        "description": "Tôi chính chủ ",
        "detail": "Tôi chính chủ ",
        "price": 28000000000,
        "area": 91.0,
        "contact": "0903 732 682",
        "lat": null,
        "lng": null
      },
      "dateFrom": "2020-03-30T00:00:00Z",
      "dateTo": "2020-04-29T00:00:00Z"
    },
  ],
}
```

Response (example): Failed

```
// 20200402180325
// http://127.0.0.1:8000/api/estate/?page=10

{
  "error_code": "0",
}
```

```
"error_message": "fail - index out of range"
}
```

POST

Description: Call when user want to create a new post

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Parameter

Field	Type	Description
title (*)	string	The post title
estateType (*)	string	The estate type ID. (Get ID from /api/estatetype)
expireAfter (*)	int	The post will expire after <int> day
project	string	The project ID of estate (Get ID from /api/project)
province (*)	string	The province ID of the estate
district (*)	string	The district ID of the estate
ward	string	The ward ID of the estate
street	string	The street ID of the estate
numberOfRoom	string	The number of room
description (*)	string	The post description
image	file	The image list of the post
detail	string	The post detail
price	string	The price of the estate
area	string	The estate area
contact	string	The user contact

transaction (*)	string	The transaction ID (Get ID from /api/transaction)
addressDetail	string	The estate address detail
lat	string	The estate lat
lng	string	The estate lng

Success 200

Field	Type	Description
error_code	string	If success, return 1
error_message	string	Something

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success

<pre>// 20200330002452 // http://192.168.0.103:5000/api/post/ { "error_code": "1", "error_message": "Success." }</pre>

Response (example): Failed

<pre>{ "error_code": "0",</pre>

```
"error_message": "Something fail",
}
```

PUT

Description: Modify a exist post

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Parameter

Field	Type	Description
id (*)	string	The estate id
title	string	The post title
estateType	string	The estate type ID. (Get ID from /api/estatetype)
expireAfter	int	The post will expire after <int> day
project	string	The project ID of estate (Get ID from /api/project)
province	string	The province ID of the estate
district	string	The district ID of the estate
ward	string	The ward ID of the estate
street	string	The street ID of the estate
numberOfRoom	string	The number of room
description	string	The post description
oldImage	string[]	The image id list
newImage	file[]	The image list of the post
detail	string	The post detail
price	string	The price of the estate
area	string	The estate area

contact	string	The user contact
transaction	string	The transaction ID (Get ID from /api/transaction)
addressDetail	string	The estate address detail
lat	string	The estate lat
lng	string	The estate lng

Success 200

Field	Type	Description
error_code	string	If success, return 1
error_message	string	Something

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success

```
// 20200330002452
// http://192.168.0.103:5000/api/post/

{
  "error_code": "1",
  "error_message": "Success."
}
```

Response (example): Failed

```
{
  "error_code": "0",
  "error_message": "Something fail",
}
```

p. [/api/sorttype/](#)

GET

Description: Return all sort type

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
	object[]	List sort type
id	int	Sort type ID
name	string	Sort type name

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200402185224
// http://127.0.0.1:8000/api/sorttype/
[
```

```
{
  "id": 1,
  "name": "Thông thường"
},
{
  "id": 2,
  "name": "Tin mới nhất"
},
{
  "id": 3,
  "name": "Giá thấp nhất"
},
{
  "id": 4,
  "name": "Giá cao nhất"
},
{
  "id": 5,
  "name": "Diện tích nhỏ nhất"
},
{
  "id": 6,
  "name": "Diện tích lớn nhất"
}
]
```

Response (example): Failed

q. `/api/filtermaxprice/`

GET

Description: Return all filter max price type

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
	object[]	List filter max price type
id	int	Filter max price type ID
name	string	Filter max price type name

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200411130417
// http://127.0.0.1:8000/api/filtermaxprice/

[
  {
    "id": 1,
    "name": "Tất cả"
  },
  {
    "id": 2,
    "name": "500 triệu"
  },
  {
    "id": 3,
    "name": "800 triệu"
  },
  {
    "id": 4,
    "name": "1 tỷ"
  },
  {
    "id": 5,
    "name": "2 tỷ"
  },
  {
    "id": 6,
```

```

    "name": "3 tŷ"
  },
  {
    "id": 7,
    "name": "5 tŷ"
  },
  {
    "id": 8,
    "name": "7 tŷ"
  },
  {
    "id": 9,
    "name": "10 tŷ"
  },
  {
    "id": 10,
    "name": "15 tŷ"
  },
  {
    "id": 11,
    "name": "30 tŷ"
  }
]

```

Response (example): Failed

r. `/api/filterminprice/`

GET

Description: Return all filter min price type

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
	object[]	List filter min price type
id	int	Filter min price type ID
name	string	Filter min price type name

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200411130417
// http://127.0.0.1:8000/api/filterminprice/

[
  {
    "id": 1,
    "name": "Tất cả"
  },
  {
    "id": 2,
    "name": "500 triệu"
  },
  {
    "id": 3,
    "name": "800 triệu"
  },
  {
    "id": 4,
    "name": "1 tỷ"
  },
  {
    "id": 5,
    "name": "2 tỷ"
  },
  {
    "id": 6,
    "name": "3 tỷ"
  }
]
```

```

},
{
  "id": 7,
  "name": "5 tý"
},
{
  "id": 8,
  "name": "7 tý"
},
{
  "id": 9,
  "name": "10 tý"
},
{
  "id": 10,
  "name": "15 tý"
},
{
  "id": 11,
  "name": "30 tý"
}
]

```

Response (example): Failed

s. [/api/filterarea/](#)

GET

Description: Return all filter area type

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
	object[]	List filter area type
id	int	Filter area type ID
name	string	Filter area type name

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200411130631
// http://127.0.0.1:8000/api/filterarea/

[
  {
    "id": 3,
    "name": "Tất cả"
  },
  {
    "id": 4,
    "name": "< 30 m2"
  },
  {
    "id": 5,
    "name": "30 - 50 m2"
  },
  {
    "id": 6,
    "name": "50 - 70 m2"
  },
  {
    "id": 7,
    "name": "70 - 100 m2"
  },
  {
    "id": 8,
    "name": "100 - 150 m2"
  }
]
```

```

    },
    {
      "id": 9,
      "name": "150 - 250 m2"
    },
    {
      "id": 10,
      "name": "250 - 500 m2"
    },
    {
      "id": 11,
      "name": "500 - 1000 m2"
    },
    {
      "id": 12,
      "name": "1000 - 2000 m2"
    },
    {
      "id": 13,
      "name": "> 2000 m2"
    }
  ]

```

Response (example): Failed

t. `/api/filternumberofroom/`

GET

Description: Return all filter number of room type

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
	object[]	List filter number of room type
id	int	Filter number of room type ID
name	string	Filter number of room type name

Error 4xx

Field	Type	Description

Response (example): Success

<pre>// 20200411130804 // http://127.0.0.1:8000/api/filternumberofroom/ [{ "id": 1, "name": "Tất cả" }, { "id": 2, "name": "1" }, { "id": 3, "name": "2" }, { "id": 4, "name": "3" }, { "id": 5, "name": "4" }, { "id": 6, "name": "5" }]</pre>
--

```
},
{
  "id": 7,
  "name": "6+"
}
]
```

Response (example): Failed

u. </api/filterposttime/>

GET

Description: Return all filter post time type

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
	object[]	List filter post time type
id	int	Filter post time type ID
name	string	Filter post time type name

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200411130921
// http://127.0.0.1:8000/api/filterposttime/

[
  {
    "id": 1,
    "name": "Tất cả"
  },
  {
    "id": 2,
    "name": "Cách đây 1 ngày"
  },
  {
    "id": 3,
    "name": "Cách đây 3 ngày"
  },
  {
    "id": 4,
    "name": "Cách đây 7 ngày"
  },
  {
    "id": 5,
    "name": "Cách đây 15 ngày"
  },
  {
    "id": 6,
    "name": "Cách đây 30 ngày"
  }
]
```

Response (example): Failed

v. `/api/search/?page=<int>`

POST

(Beta version)

Description: Return estates with argument received. User can call this api without *page* param, default return page 1. Default: Items per page = 25

Permission: Anyone

(*) required

Parameter

Field	Type	Description
keyword	string	Search with keyword in title
province	string	Province ID
district	string	District ID
ward	string	Ward ID
street	string	Street ID
estate_type	string	Estate ID (Get ID from /api/estatetype)
sort	string	Sort ID
filter_max_price	string	Filter max price type ID (Get ID from /api/filtermaxprice)
filter_min_price	string	Filter min price type ID (Get ID from /api/filterminprice)
filter_area	string	Filter area type ID (Get ID from /api/filterarea)
filter_number_of_room	string	Filter number of room type ID (Get ID from /api/filternumberofroom)
filter_post_time	string	Filter number of room type ID (Get ID from /api/filterposttime)

Success 200

Field	Type	Description
current_page	string	Current page
total_page	string	Total page
result	object[]	

id	int	Estate ID
title	string	Estate title
province	string	Estate Province
district	string	Estate District
contact	string	Contact
area	string	Estate area
price	string	Estate price
created_day	string	Create day
lat	string	Estate lat
lng	string	Estate lng
project	object	
id	int	Project id
name	string	Project name
lat	float	Project lat
lng	float	Project lng
images	object[]	
id	string	Image ID
image	string	Image URL

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200402175712
```

```
// http://127.0.0.1:8000/api/search/?page=1

{
  "current_page": "1",
  "total_page": "4",
  "result": [
    {
      "id": 24,
      "title": "Bán mặt tiền Nguyễn Huy Tự, phường Đa Kao, quận 1, DT 90,5m2, LH 0903732***",
      "images": [
        {
          "image": "http://127.0.0.1:8000/media/estate/24/2.jpg"
        },
        {
          "image": "http://127.0.0.1:8000/media/estate/24/1.jpg"
        }
      ],
      "province": "Hồ Chí Minh",
      "district": "Quận 1",
      "contact": "0903 732 682",
      "created_day": "",
      "area": "",
      "price": "",
      "lat": "",
      "lng": "",
      "project": {
        "id": 1,
        "name": "13B Conic Phong Phú",
        "lat": 10.71240234375,
        "lng": 106.64177703857
      }
    },
    {
      "id": 25,
      "title": "Bán mặt tiền Nguyễn Huy Tự, phường Đa Kao, quận 1, DT 90,5m2, LH 0903732***",
      "images": [
        {
          "image": "http://127.0.0.1:8000/media/estate/25/2.jpg"
        },
        {
          "image": "http://127.0.0.1:8000/media/estate/25/1.jpg"
        }
      ],
      "province": "Hồ Chí Minh",
      "district": "Quận 1",

```



```

    "contact": "0903 732 682",
    "project": {
      "id": 1,
      "name": "13B Conic Phong Phú",
      "lat": 10.71240234375,
      "lng": 106.64177703857
    }
  },
  {
    "id": 26,
    "title": "Bán mặt tiền Nguyễn Huy Tự, phường Đa Kao, quận 1, DT 90,5m2, LH 0903732***",
    "images": [
      {
        "image": "http://127.0.0.1:8000/media/estate/26/2.jpg"
      },
      {
        "image": "http://127.0.0.1:8000/media/estate/26/1.jpg"
      }
    ],
    "province": "Hồ Chí Minh",
    "district": "Quận 1",
    "contact": "0903 732 682"
  }
]
}

```

Response (example): Failed

w. /api/favorite/?page=<int>

GET

Description: Return all favorite estate of current user. User can call this api without page param, default return page 1. Default: Items per page = 25

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Field	Type	Description

Success 200

Field	Type	Description
current_page	string	Current page
total_page	string	Total page
result	object[]	
estate	object	
id	int	Estate ID
estateType	string	Estate Type
images	object[]	
id	string	Image ID
image	string	Image URL
project	object	
id	int	Project id
name	string	Project name
lat	float	Project lat
lng	float	Project lng
province	string	Estate Province
district	string	Estate district
ward	string	Estate ward
street	string	Estate street
addressDetail	string	Estate address detail
title	string	Estate title
numberOfRoom	string	Number of room

description	string	Description
detail	string	Detail
price	int	Price
area	float	Area
contact	string	Contract
lat	string	Estate lat
lng	string	Estate lng

Error 4xx

Field	Type	Description

Response (example): Success

<pre>{ "current_page": "1", "total_page": "1", "result": [{ "estate": { "id": 93, "images": [], "estateType": "Căn hộ, chung cư", "project": { "id": 1682, "name": "Nam Đô Complex", "lat": 20.979711532593, "lng": 105.84483337402 } }, "province": "Hà Nội", "district": "Hoàng Mai", "ward": "Thịnh Liệt", "street": "Trương Định", "addressDetail": "793/12", "title": "test page", }] }</pre>
--

```

        "numberOfRoom": 2,
        "description": "Bán căn 406 CT2B Chung cư Nam Đô Complex 609 Trương
        Định, phường Thịnh Liệt, quận Hoàng Mai, Hà Nội.",
        "detail": "",
        "price": 2350,
        "area": 88.7,
        "contact": "083.551.8688",
        "lat": "2.3342",
        "lng": "4.234934"
    }
}
]
}

```

Response (example): Failed

```

// 20200402180325
// http://127.0.0.1:8000/api/estate/?page=10

{
  "error_code": "0",
  "error_message": "fail - index out of range"
}

```

POST

Description: Add a new favorite estate

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Parameter

Field	Type	Description
id (*)	string	The estate id

Success 200

Field	Type	Description
-------	------	-------------

error_code	string	If success, return 1
error_message	string	Something

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success

```
// 20200330002452
// http://192.168.0.103:5000/api/favorite/

{
  "error_code": "1",
  "error_message": "Success."
}
```

Response (example): Failed

```
{
  "error_code": "0",
  "error_message": "Something fail",
}
```

DELETE

Description: Remove a exist favorite estate

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Parameter

Field	Type	Description
id (*)	string	The estate id

Success 200

Field	Type	Description
error_code	string	If success, return 1
error_message	string	Something

Error 4xx

Field	Type	Description
error_code	string	If fail, return 0
error_message	string	Something

Response (example): Success

```
// 20200330002452
// http://192.168.0.103:5000/api/favorite/

{
  "error_code": "1",
  "error_message": "Success."
}
```

Response (example): Failed

```
{
  "error_code": "0",
  "error_message": "Something fail",
}
```

x. /api/favoriteid/

GET

Description: Return all favorite estate ID of current user.

Permission: Anyone

Parameter

(*) required

Required: Add token to Authorization

Field	Type	Description

Success 200

Field	Type	Description
	object[]	
estate_id	int	Estate ID

Error 4xx

Field	Type	Description

Response (example): Success

[{ "estate_id": 93 }, { "estate_id": 94 }, { "estate_id": 92 }]

```
    },
    {
      "estate_id": 91
    }
  ]
}
```

Response (example): Failed

```
// 20200402180325
// http://127.0.0.1:8000/api/favoriteid/

{
  "error_code": "0",
  "error_message": "fail - i"
}
```

y. /api/news/?page=<int>

GET

Description: Return all news. User can call this api without *page* param, default return page 1. Default: Items per page = 25

Permission: Anyone

Parameter

Field	Type	Description

Success 200

Field	Type	Description
current_page	string	Current page
total_page	string	Total page
result	object[]	
id	int	News ID

title	string	News title
subTitle	string	News subtitle
content	string	News content
newsType	string	News type (beta)
images	object[]	
id	string	Image ID
image	string	Image URL
description	string	Image description

Error 4xx

Field	Type	Description

Response (example): Success

```
// 20200424160203
// https://danganhhaotest.pythonanywhere.com/api/news/

{
  "current_page": 1,
  "total_page": "1",
  "result": [
    {
      "id": 1,
      "title": "TP.HCM: Giá sơ cấp căn hộ tăng nhẹ, thứ cấp giảm 5-10%",
      "subTitle": "Bất chấp tác động tiêu cực từ đại dịch Covid-19 đang khiến nhu cầu giao dịch nhà đất suy giảm, giá chào bán căn hộ chung cư tại TP.HCM vẫn tăng nhẹ và dự báo khó giảm trong các tháng tới đây.",
      "content": "Giá căn hộ sơ cấp tăng nhẹ\n\nDù số lượng sản phẩm chào bán và nhu cầu mua nhà giảm mạnh, giá BĐS, đặc biệt là phân khúc căn hộ vẫn ghi nhận tăng trong quý 1/2020 vừa qua. \n\nCụ thể, số liệu báo cáo thị trường nhà đất tại TP.HCM trong quý 1/2020 của Batdongsan.com.vn cho thấy, số lượng sản phẩm căn hộ chào bán trong 4 tháng đầu năm giảm đến 27% trong khi nhu cầu tìm kiếm phân khúc này cũng giảm xuống 16% so với 1 quý trước đó. ",
```

```

    "newsType": "Chung",
    "images": [
      {
        "id": 1,
        "image":
        "https://res.cloudinary.com/myrealestate/image/upload/v1587661334/news/1/91540.jpg",
        "description": "Giá căn hộ sơ cấp tại TP.HCM tăng nhẹ do nguồn cung hạn chế. Ảnh: Phương Uyên"
      },
      {
        "id": 2,
        "image":
        "https://res.cloudinary.com/myrealestate/image/upload/v1587661335/news/1/142022.jpg",
        "description": "Giá rao bán căn hộ tại TP.HCM tăng 2% dù lượng quan tâm giảm. Nguồn: Batdongsan.com.vn"
      }
    ]
  }
}

```

Response (example): Failed

```

// 20200402180325
// http://127.0.0.1:8000/api/news/?page=10

{
  "error_code": "0",
  "error_message": "fail - index out of range"
}

```

z.