Министерство науки и высшего образования Российской Федерации   
Федеральное государственное бюджетное образовательное учреждение высшего образования

«Российский экономический университет им. Г.В. Плеханова»

Документация к API

Выполнил студент группы

ПКо-31

Бойков Григорий Михайлович

Пермь 2023

# 1. Основная информация

|  |  |
| --- | --- |
| **Автор** | Бойков Григорий Михайлович |
| **Задача** | Разработать API для агентства недвижимости |

## 1.1 История изменений документа

|  |  |  |  |
| --- | --- | --- | --- |
| **Версия** | **Дата** | **Автор** | **Описание изменений** |
| 1.0 | 04.02.2023 | Бойков Григорий Михайлович | Создана первая версия документа |

# 2. Запрос/Ответ

|  |  |
| --- | --- |
| **Запрос** | **Ответ** |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=add\_client&name={name}&phone={phone} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Клиент добавлен в базу данных",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"04",  "s":"23",  "full":"2023-02-06 08:04:23"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=add\_employee&name={name}&phone={phone}&address={address}&work\_experiense={work\_experiense} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Сотрудник добавлен в базу данных",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"06",  "s":"03",  "full":"2023-02-06 08:06:03"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=add\_apartments&price={price}&number\_of\_rooms={number\_of\_rooms}&address={address}&floor={floor}&area={area}&desc={desc}&deal\_type={deal\_type}&object\_type={object\_type} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"квартира добавлена в базу данных",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"06",  "s":"52",  "full":"2023-02-06 08:06:52"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=add\_house&price={price}&number\_of\_rooms={number\_of\_rooms}&address={address}&number\_of\_floors={number\_of\_floors}&house\_area={house\_area}&area={area}&desc={desc}&deal\_type={deal\_type}&object\_type={object\_type} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"дом добавлен в базу данных",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"07",  "s":"42",  "full":"2023-02-06 08:07:42"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=add\_office&price={price}&address={address}&floor={floor}&area={area}&desc={desc}&deal\_type={deal\_type} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"коммерческая недвижимость добавлена в базу данных",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"08",  "s":"22",  "full":"2023-02-06 08:08:22"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=create\_apartment\_deal&apartment\_id={apartment\_id}&client\_id={client\_id}&employee\_id={employee\_id}&datetime={datetime} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"сделка добавлена в базу данных",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"10",  "s":"03",  "full":"2023-02-06 08:10:03"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=create\_house\_deal&house\_id={house\_id}&client\_id={client\_id}&employee\_id={employee\_id}&datetime={datetime} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"сделка добавлена в базу данных",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"13",  "s":"04",  "full":"2023-02-06 08:13:04"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=create\_office\_deal&office\_id={office\_id}&client\_id={client\_id}&employee\_id={employee\_id}&datetime={datetime} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"сделка добавлена в базу данных",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"13",  "s":"04",  "full":"2023-02-06 08:13:04"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=list\_client&phone={phone}&client\_id={client\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Список клиентов выведен",  "other":[  {  "id":"1",  "name":"Кумаркин Геннадий Иванович",  "phone":" 79000000000"  },  {  "id":"2",  "name":"Петр",  "phone":" 79002281337"  }  ],  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"14",  "s":"12",  "full":"2023-02-06 08:14:12"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=list\_employee&phone={phone}&employee\_id={employee\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Список сотрудников выведен",  "other":[  {  "id":"1",  "name":"Иванов Иван Иванович",  "phone":" 79128284392",  "address":"ул. Дружбы, 16, Пермь, Пермский край, Россия",  "work\_experiense":"5"  },  {  "id":"2",  "name":"Петров Степан Андреевич",  "phone":" 79121337228",  "address":null,  "work\_experiense":null  }  ],  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"14",  "s":"56",  "full":"2023-02-06 08:14:56"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=list\_apartments&apartments\_id={apartments\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Список квартир выведен",  "other":[  {  "id":"1",  "price":"5680000",  "number\_of\_rooms":null,  "address":"Пермь, улица Николая Островского, 15А",  "floor":"2",  "area":"47.8",  "description":null,  "deal\_type":"Продажа",  "object\_type":"Квартира"  },  {  "id":"2",  "price":"6000000",  "number\_of\_rooms":null,  "address":null,  "floor":null,  "area":null,  "description":null,  "deal\_type":null,  "object\_type":null  }  ],  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"15",  "s":"31",  "full":"2023-02-06 08:15:31"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=list\_houses&house\_id={house\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Список домов выведен",  "other":[  {  "id":"1",  "price":"10500000",  "number\_of\_rooms":"3",  "address":"Пермский край, Пермь, Ново-Гайвинская ул., 118",  "number\_of\_floors":"1",  "house\_area":"62.8",  "area":"8",  "description":null,  "deal\_type":"Продажа",  "object\_type":"Дом"  },  {  "id":"2",  "price":"12500000",  "number\_of\_rooms":null,  "address":null,  "number\_of\_floors":null,  "house\_area":null,  "area":null,  "description":null,  "deal\_type":null,  "object\_type":null  }  ],  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"16",  "s":"07",  "full":"2023-02-06 08:16:07"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=list\_offices&office\_id={office\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Список коммерческой недвижимости выведен",  "other":[  {  "id":"1",  "price":"75000",  "address":"Пермский край, Пермь, Комсомольский просп., 71",  "floor":"1",  "area":"58.7",  "description":null,  "deal\_type":"Аренда"  },  {  "id":"2",  "price":"25000",  "address":null,  "floor":null,  "area":null,  "description":null,  "deal\_type":null  }  ],  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"16",  "s":"49",  "full":"2023-02-06 08:16:49"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=list\_apartment\_deals&deal\_id={deal\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Список сделок по квартирам выведен",  "other":[  {  "id":"1",  "apartment\_id":"1",  "client\_id":"1",  "employee\_id":"1",  "datetime":"2023-02-17 12:00:00",  "completed":"1"  },  {  "id":"2",  "apartment\_id":"2",  "client\_id":"2",  "employee\_id":"2",  "datetime":"2023-02-12 15:00:00",  "completed":"0"  }  ],  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"17",  "s":"32",  "full":"2023-02-06 08:17:32"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=list\_house\_deals&deal\_id={deal\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Список сделок по квартирам выведен",  "other":[  {  "id":"1",  "house\_deal":"2",  "client\_id":"2",  "employee\_id":"2",  "datetime":"2023-02-17 12:00:00",  "completed":"0"  }  ],  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"19",  "s":"40",  "full":"2023-02-06 08:19:40"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=list\_office\_deals&deal\_id={deal\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Список сделок по квартирам выведен",  "other":{  },  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"20",  "s":"33",  "full":"2023-02-06 08:20:33"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=list\_deals&deal\_id={deal\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Список сделок выведен",  "other":[  {  "id":"1",  "apartment\_deal\_id":"1",  "house\_deal\_id":null,  "office\_deal\_id":null,  "money":"5680000"  }  ],  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"21",  "s":"17",  "full":"2023-02-06 08:21:17"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=profit | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Ваша прибыль",  "other":"5680000",  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"22",  "s":"18",  "full":"2023-02-06 08:22:18"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=delete\_client&client\_id={client\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"Клиент удален",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"29",  "s":"45",  "full":"2023-02-06 08:29:45"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=delete\_employee&employee\_id={employee\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" сотрудник удален",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"29",  "s":"45",  "full":"2023-02-06 08:29:45"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=delete\_apartments&apartments\_id={apartments\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" квартира удалена",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"29",  "s":"45",  "full":"2023-02-06 08:29:45"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=delete\_house&house\_id={house\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" дом удален",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"29",  "s":"45",  "full":"2023-02-06 08:29:45"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=delete\_offices&office\_id={office\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" коммерческая недвижимость удалена",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"29",  "s":"45",  "full":"2023-02-06 08:29:45"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=delete\_apartment\_deal&deal\_id={deal\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" сделка удалена",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"29",  "s":"45",  "full":"2023-02-06 08:29:45"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=delete\_house\_deal&deal\_id={deal\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" сделка удалена",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"29",  "s":"45",  "full":"2023-02-06 08:29:45"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=delete\_office\_deal&deal\_id={deal\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" сделка удалена",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"29",  "s":"45",  "full":"2023-02-06 08:29:45"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=delete\_completed\_deal&deal\_id={deal\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" сделка удалена",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"29",  "s":"45",  "full":"2023-02-06 08:29:45"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=update\_client&client\_id={client\_id}&name={name}&phone={phone} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" клиент изменен",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"34",  "s":"54",  "full":"2023-02-06 08:34:54"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=update\_employee&employee\_id={employee\_id}&name={name}&phone={phone}&address={address}&work\_experiense={work\_experiense} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" сотрудник изменен",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"34",  "s":"54",  "full":"2023-02-06 08:34:54"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=update\_apartments&apartments\_id={apartments\_id}&price={price}&number\_of\_rooms={number\_of\_rooms}&address={address}&floor={floor}&area={area}&desc={desc}&deal\_type={deal\_type}&object\_type={object\_type} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" квартира изменена",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"34",  "s":"54",  "full":"2023-02-06 08:34:54"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=update\_house&house\_id={house\_id}&price={price}&number\_of\_rooms={number\_of\_rooms}&address={address}&number\_of\_floors={number\_of\_floors}&house\_area={house\_area}&area={area}&desc={desc}&deal\_type={deal\_type}&object\_type={object\_type} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" дом изменен",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"34",  "s":"54",  "full":"2023-02-06 08:34:54"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=update\_office&office\_id={office\_id}&price={price}&address={address}&floor={floor}&area={area}&desc={desc}&deal\_type={deal\_type} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":" коммерческая недвижимость изменена",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"34",  "s":"54",  "full":"2023-02-06 08:34:54"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=complete\_apartment\_deal&deal\_id={deal\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"сделка совершена",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"37",  "s":"38",  "full":"2023-02-06 08:37:38"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=complete\_house\_deal&deal\_id={deal\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"сделка совершена",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"37",  "s":"38",  "full":"2023-02-06 08:37:38"  }  } |
| https://dev.rea.hrel.ru/BGM/?token=testtoken&type=complete\_office\_deal&deal\_id={deal\_id} | {  "error":false,  "type":"SUCCESS",  "title":"Успех!",  "desc":"сделка совершена",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"37",  "s":"38",  "full":"2023-02-06 08:37:38"  }  } |

# 3. Входные параметры

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **№** | **Параметр** | **Тип данных** | **Обязательность** | **Описание** |
| 1 | token | string | да | Токен |
| 2 | type | string | да | Тип запроса |
| 3 | name | string | да | Имя |
| 4 | phone | string | да | Телефон |
| 5 | address | string | Нет | Адрес сотрудника |
| 6 | work\_experiense | int | Нет | Опыт работы |
| 7 | price | string | Да | Цена |
| 8 | number\_of\_rooms | string | Нет | Кол-во комнат |
| 9 | floor | int | Нет | Этаж |
| 10 | area | int | Нет | Площадь |
| 11 | desc | string | Нет | Описание |
| 12 | deal\_type | string | Нет | Тип сделки (покупка/аренда) |
| 13 | object\_type | string | Нет | Тип объекта |
| 14 | number\_of\_floors | bool | Нет | Кол-во этажей |
| 15 | house\_area | string | Нет | Площадь дома |
| 16 | apartment\_id | int | Да | ID квартиры |
| 17 | client\_id | Int | Да | ID клиента |
| 18 | employee\_id | int | Да | ID сотрудника |
| 19 | datetime | datetime | Да | Дата и время встречи |
| 20 | house\_id | int | Да | ID дома |
| 21 | office\_id | int | Да | ID офиса |
| 22 | deal\_id | int | Да | ID сделки |

# 4. Выходные параметры

## 6.1 Положительный ответ

Параметры аналогичны входным

## 6.2 Ответ с ошибками

|  |  |
| --- | --- |
| **Ошибка** | **Ответ** |
| Отсутствует GET параметр | {  "error":true,  "type":"ERROR",  "title":"Ошибка!",  "desc":"Нет GET параметра token",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"05",  "H":"18",  "i":"56",  "s":"05",  "full":"2023-02-06 08:56:05"  }  } |
| Ошибка в запросе | {  "error":true,  "type":"ERROR",  "title":"Ошибка!",  "desc":" Ошибка в запросе!",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"05",  "H":"18",  "i":"56",  "s":"05",  "full":"2023-02-06 08:56:05"  }  } |
| Не сделано изменений в запросе на обновление | {  "error":"ERROR",  "type":null,  "title":"Ошибка!",  "desc":"Вы не внесли изменений!",  "other":null,  "datetime":{  "Y":"2023",  "m":"02",  "d":"06",  "H":"08",  "i":"40",  "s":"05",  "full":"2023-02-06 08:40:05"  }  } |