# Web Services and Cloud – Services Explanations

## Login and Register Services

### Register user

For testing purposes, do not create usernames containing dots in them. For example create "ivaylokenov" but no "ivaylo.kenov". Otherwise IIS will make you cry. You can add validation to the Register action, but it will not give you additional points! ☺

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Request** | | | | |
| **HTTP Method:** | POST | **URL:** | [http://localhost:XXXXX/**api/account/register**](http://localhost:XXXXX/api/account/register) | |
| **Headers** | Content-Type: *application/x-www-form-urlencoded* | | | |
| **Request Body:** | **Username=ivaylokenov**&Email=ivaylo@kenov.com&Password=123456q&ConfirmPassword=123456q | | | |
| **Response** | | | | |
| **Status Code:** | 200 Ok | **Body:** | | empty |

### Login user

A user provides a username, password and grant\_type and if they are correct receives an **access\_token**. The access\_token is used to authenticate the user against the server and use the private services (those that require aunthentication)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Request** | | | | |
| **HTTP Method:** | POST | **URL:** | [http://localhost:XXXXX/**token**](http://localhost:XXXXX/token) | |
| **Headers** | Content-Type: *application/x-www-form-urlencoded* | | | |
| **Request Body:** | Username=ivaylokenov&Password=123456q&grant\_type=password | | | |
| **Response** | | | | |
| **Status Code:** | 200 Ok | **Body:** | | {  **"access\_token": "LONG\_STRING",**  "token\_type": "bearer",  "expires\_in": 1209599,  "userName": "doncho@minkov.it",  ".issued": "Mon, 22 Sep 2014 11:25:34 GMT",  ".expires": "Mon, 06 Oct 2014 11:25:34 GMT"  } |

## Real estate services

### Get public real estates

Does not require authentication

Returns paged real estates, added previously from users. *Skip* and *Take* are optional query string parameters. If they are missing, default *skip* is 0 and default *take* is 10. Take cannot be more than 100.

Real estates are sorted by their time of creation in descending order.

|  |  |  |  |
| --- | --- | --- | --- |
| **Request** | | | |
| **HTTP Method:** | GET | **URL:** | http://localhost:XXXXX/**api/RealEstates*?skip=2&take=5*** |
| **Headers** | Content-Type: *application/json* | | |
| **Request Body:** | empty | | |
| **Response** | | | |
| **Status Code:** | 200 Ok | **Body:** | [  {  "Id": 2,  "Title": "My house is for sale!",  "SellingPrice": 28000,  "RentingPrice": null,  "CanBeSold": true,  "CanBeRented": false  },  {  "Id": 1,  "Title": "Some very interesting office",  "SellingPrice": 120000,  "RentingPrice": 500,  "CanBeSold": true,  "CanBeRented": true  }  ] |

### Get public real estate details

Does not require authentication

Returns part of the full information for a real estate by the provided ID.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Request** | | | | |
| **HTTP Method:** | GET | **URL:** | [http://localhost:XXXXX/**api/RealEstates/*ID***](http://localhost:XXXXX/api/RealEstates/ID) | |
| **Headers** | Content-Type: *application/json* | | | |
| **Request Body:** | empty | | | |
| **Response** | | | | |
| **Status Code:** | 200 Ok | **Body:** | | {  "CreatedOn": "2015-11-22T16:06:27.97",  "ConstructionYear": 2005,  "Address": "Mladost 1A, Telerik Academy building",  "RealEstateType": "Office",  "Description": "You will love it. The view is great!",  "Id": 1,  "Title": "Some very interesting office",  "SellingPrice": 120000,  "RentingPrice": 500,  "CanBeSold": true,  "CanBeRented": true  } |

### Get private real estate details

Requires an authentication

Returns the same as above but with additional contact information and comments for each real estate.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Request** | | | | |
| **HTTP Method:** | GET | **URL:** | http://localhost:XXXXX/**api/RealEstates/*ID*** | |
| **Headers** | Content-Type: *application/json*  Authorization: *Bearer ACCESS\_TOKEN (received after login)* | | | |
| **Request Body:** | empty | | | |
| **Response** | | | | |
| **Status Code:** | 200 Ok | **Body:** | | {  "Contact": "0888-888-888",  "Comments": [  {  "Content": "Wow, such a bargain! I want to see the place!",  "UserName": "ivaylokenov",  "CreatedOn": "2015-11-22T16:40:03.123"  },  {  "Content": "Lol, why? I like it!",  "UserName": "ivaylokenov",  "CreatedOn": "2015-11-22T16:41:22.733"  }  ],  "CreatedOn": "2015-11-22T16:39:03.74",  "ConstructionYear": 1985,  "Address": "Dragovishtica",  "RealEstateType": null,  "Description": "very cheap, no rats!",  "Id": 3,  "Title": "My house is for sale!",  "SellingPrice": 28000,  "RentingPrice": null,  "CanBeSold": true,  "CanBeRented": false  } |

### Create a new real estate ad

Requires authentication

Creates a new real estate ad.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Request** | | | | |
| **HTTP Method:** | POST | **URL:** | [http://localhost:XXXXX/**api/RealEstates**](http://localhost:XXXXX/api/RealEstates) | |
| **Headers** | Content-Type: *application/json*  Authorization: *Bearer ACCESS\_TOKEN (received after login)* | | | |
| **Request Body:** | {  "Title": "Some very interesting office",  "Description": "You will love it. The view is great!",  "Address": "Mladost 1A, Telerik Academy building",  "Contact": "0888-888-888",  "ConstructionYear": 2005,  "SellingPrice": 120000,  "RentingPrice": 500,  "Type": 2  } | | | |
| **Response** | | | | |
| **Status Code:** | 201 Created | **Body:** | {  "Id": 1,  "Title": "Some very interesting office",  "SellingPrice": 120000,  "RentingPrice": 500,  "CanBeSold": true,  "CanBeRented": true  } |

## 

## Comments services

### Get comments for a real estate

Requires an authentication

Returns paged comments for a real estate provided by real estate id, added previously from users. *Skip* and *Take* are optional query string parameters. If they are missing, default *skip* is 0 and default *take* is 10. Take cannot be more than 100.

Comments are sorted by their time of creation in ascending order.

|  |  |  |  |
| --- | --- | --- | --- |
| **Request** | | | |
| **HTTP Method:** | GET | **URL:** | http://localhost:XXXXX/**api/Comments/*ID?skip=2&take=5*** |
| **Headers** | Content-Type: *application/json*  Authorization: *Bearer ACCESS\_TOKEN (received after login)* | | |
| **Request Body:** | empty | | |
| **Response** | | | |
| **Status Code:** | 200 Ok | **Body:** | [  {  "Content": "Wow, such a bargain! I want to see the place!",  "UserName": "ivaylokenov",  "CreatedOn": "2015-11-22T16:40:03.123"  },  {  "Content": "Lol, why? I like it!",  "UserName": "ivaylokenov",  "CreatedOn": "2015-11-22T16:41:22.733"  }  ] |

### Get comments from specific user

Requires an authentication

Returns paged comments from specific user provided by username. *Skip* and *Take* are optional query string parameters. If they are missing, default *skip* is 0 and default *take* is 10. Take cannot be more than 100.

Comments are sorted by their time of creation in ascending order.

|  |  |  |  |
| --- | --- | --- | --- |
| **Request** | | | |
| **HTTP Method:** | GET | **URL:** | http://localhost:XXXXX/**api/Comments/ByUser/*USERNAME?skip=2&take=5*** |
| **Headers** | Content-Type: *application/json*  Authorization: *Bearer ACCESS\_TOKEN (received after login)* | | |
| **Request Body:** | empty | | |
| **Response** | | | |
| **Status Code:** | 200 Ok | **Body:** | [  {  "Content": "Wow, such a bargain! I want to see the place!",  "UserName": "ivaylokenov",  "CreatedOn": "2015-11-22T16:40:03.123"  },  {  "Content": "Lol, why? I like it!",  "UserName": "ivaylokenov",  "CreatedOn": "2015-11-22T16:41:22.733"  }  ] |

### Add new comment to a real estate

Requires an authentication

Adds a comment to a specific real estate

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Request** | | | | |
| **HTTP Method:** | POST | **URL:** | http://localhost:XXXXX/**api/Comments** | |
| **Headers** | Content-Type: *application/json*  Authorization: *Bearer ACCESS\_TOKEN (received after login)* | | | |
| **Request Body:** | {  "RealEstateId": 2,  "Content": "It's a trap! Don't go there!"  } | | | |
| **Response** | | | | |
| **Status Code:** | 201 Created | **Body:** | | {  "Content": "It's a trap! Don't go there!",  "UserName": "somerandomguy",  "CreatedOn": "2015-11-22T16:25:49.29"  } |

## Users services

### User details

Does not require authentication

Returns statistics about a user by providing his/her username – total real estates, total comments, average rating.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Request** | | | | |
| **HTTP Method:** | GET | **URL:** | http://localhost:XXXXX/**api/Users/*USERNAME*** | |
| **Headers** | Content-Type: *application/json* | | | |
| **Request Body:** | *empty* | | | |
| **Response** | | | | |
| **Status Code:** | 200 Ok | **Body:** | | {  "UserName": "kenovivaylo",  "RealEstates": 3,  "Comments": 16,  "Rating": 3.111111111111111  } |

### Rate user

Adds new rating to the user, from 1 to 5. Users cannot rate themselves. Multiple ratings can be given by the same user (for spam purposes :D).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Request** | | | | |
| **HTTP Method:** | PUT | **URL:** | [http://localhost:XXXXX/**api/Users/Rate**](http://localhost:XXXXX/api/Users/Rate) | |
| **Headers** | Content-Type: *application/json*  Authorization: *Bearer ACCESS\_TOKEN (received after login)* | | | |
| **Request Body:** | *{*  *"UserId": "6f2e4cb0-423c-41b5-988c-5495affc4acd",*  *"Value": "3"*  *}* | | | |
| **Response** | | | | |
| **Status Code:** | 200 Ok | **Body:** | | *empty* |

## User services

**Implement with WCF (only HTTP, SOAP is not required)**

### Get users

Does not require authentication

Returns top 10 users, sorted by average rating

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Request** | | | | |
| **HTTP Method:** | GET | **URL:** | [http://localhost:YYYYY/**users/top.svc**](http://localhost:YYYYY/users/top.svc)**/** | |
| **Headers** | Content-Type: *application/json* | | | |
| **Request Body:** | *empty* | | | |
| **Response** | | | | |
| **Status Code:** | 200 Ok | **Body:** | | [  {  "UserName": "ivaylokenov",  "Rating": 4.6  },  {  "UserName": "kenovivaylo",  "Rating": 4.2  },  ] |