# **API Specification Doc**

## (UF Nestmate)

Version	Date	Author	Description
1.0	28-Feb-2025	Rohit Bogulla	Initial draft
1.1	03-March-2025	Jatin Shivaprakash	Adding comment apis specification

## Methods

## 1. User login

Authenticate the user with the system with username and password. The authentication will be changed to OAuth in next version.

#### Request

Method	URL
POST	api/user/login

Туре	Params	Values
POST	username	string
POST	password	string

#### Response

Status	Response	
200	{response: "login successful"}	
400	{"error":"Please provide username."}	
400	{"error":"Please provide password."}	
401	{"error":"Incorrect username or password."}	
500	{"error":"Something went wrong. Please try again later."}	

### 2. User registration

Adds a new user to the system

Method	URL
POST	/api/user/register

Туре	Params	Values
POST	FirstName LastName UserName Password Email	String String String String Email

UserName

Unique across the system.

Basic user details required.

### Response

Status	Response	
200	{"response": "user registration successful"}	
400	{"error":"username already exists"}	
500	{"error":"Something went wrong. Please try again later."}	

## 3. Apartment Registration

Adds a new apartment or property to the application.

Method	URL
POST	/api/housing/add

Туре	Params	Values	Required (DefaultValue)
POST	ID	String	Optional (current timestamp)
	Name	String	Required
	Address	String	Required
	Vacancy	Integer	Optional (0)
	Rating	Float	Optional (0)
	Description	String	Optional

ID

Unique ID across all the properties. If not given current timestamp will be used for ID.

Name, Address, Vacancy, Rating

Basic details of the property. If not provided will be using default values mentioned above.

#### Description

Optional. In future will be populated based on comments and reviews on the apartment.

#### Response

Status	Response	
200	{"response": "property added successful"}	
400	{"error":"property ID already exists"}	
400	{"error":"invalid vacancy count"}	
400	{"error":"Error unmarshalling Json"}	
500	{"error":"Something went wrong. Please try again later."}	

## 4. Update Apartment details

Update apartment details. Mostly will be used to change description, vacancy or ratings.

Method	URL
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POST	/api/housing/update
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Туре	Params	Values	Required
POST	ID	String	Required
	Name	String	Optional
	Address	String	Optional
	Vacancy	Integer	Optional
	Rating	Float	Optional
	Description	String	Optional

Details of the property that needs to be updated.

ID:

Required, to update the appropriate entry.

### Response

Status	Response
200	{"response": "property updated successful"}
400	{"error":"property Id doesn't exists"}
500	{"error":"Something went wrong. Please try again later."}

## **5. Comments on Apartment**

Add comments on apartments.

Method	URL
POST	/api/comments/add

Туре	Params	Values	Required
POST	ID	String	Required
	HousingID	String	Required
	Comment	String	Required
	Rating	Float	Optional

ID

Unique ID for comments.

HousingID

ID of the apartment for which the comment is intended.

Comment, Rating

Specifics of the comments.

#### Response

Status	Response
200	{"response": "comment successfully added"}
400	{"error":"the apartment doesn't exist"}
500	{"error":"Something went wrong. Please try again later."}

### 6. Getter for comments

Getter apis for comments

Method	URL
GET	/api/comments/get

Туре	Params	Values	Required
GET	ID	String	Optional
	HousingID	String	Optional

#### HousingID

ID of the apartment for which the comments are to be fetched. If provided, other fields will be ignored and all comments specific to this apartment will be fetched.

#### ID

ID for the comment to be fetched. Will be read only when HousingId not provided. Only the specific comment will be fetched.

#### Response

Status	Response
200	{"commentId" : ["commentId", "housingId", "comment", "rating"]}
400	{"error":"the apartment doesn't exist"}
500	{"error":"Something went wrong. Please try again later."}

## 7. Getters for Users, Apartments

Getter apis for users and apartments

Method	URL
GET	/api/users /api/housing/get

Туре	Params	Values	Required
GET user getter	Username	String	Required
GET housing getter	HousingID	String	Optional

#### UserName

Retrieve specific user information from database.

#### HousingID

Retrieve specific housing information from database

### Response

Status	Response
200	{""username":["username", "first name", "last name", "email"]} {"housingID":["name", "address", "housingID", "vacancy", "rating"]}
400	{"error":"username doesn't exist"} {"error":"housing doesn't exist"}
500	{"error":"Something went wrong. Please try again later."}