

Take Home Project - 1

Suppose that you are working for a home rental company located in UK. Your manager asks you to write a backend service for the company which fulfills following requirements:

- Users can register, login and logout the system.
- [Login required] Users can create new properties.
- [Login not required] Users can list all properties.
- [Login not required] Users can list one property.
- [Login required] Users can CReate, Update and Delete their own properties. (CRUD operations)

All I/O processes should be done in JSON format and they should be stored as JSON.

You should take following request types for your application.

To register:

Request

To: /register

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{username: [string], password: username: [string], properties: [], bookings: []}
```

Response (Dict)

```
{user_id: [string|unique]}
```

To login:

Request

To: /login

{username: [string], password: username: [string]}

Response (Dict)

{user_id: [string | nullable]}

To list all properties:

Request

To: /properties

Empty

Response (List of Dicts)

[{property_id:[string], name:[string], numberOfBedrooms:[int],
numberOfRooms:[int]}, ...]

To list one property:

Request

To: /property

{property_id: [string]}

Response (Dict)

{property_id:[string], name:[string], numberOfBedrooms:[int],
numberOfRooms:[int]}

To create a property:

Request

To: /property/create

{name:[string], numberOfBedrooms:[int], numberOfRooms:[int]}

Response (Dict)

{property_id:[string]}

To update a property:

Request

To: /property/update

{property_id:[string], name:[string], numberOfBedrooms:[int],
numberOfRooms:[int]}

Response (Bool)

true/false

To delete a property:

Request

To: /property/delete

{property_id:[string]}

Response (Bool)

true/false