### **Hotel Lister API Guide**

This guide documents the endpoints available in the Hotel Lister API, including authentication, hotel search, and bookmark functionality.

### Authentication

Register a New User

• URL: /api/auth/register/

• Method: POST

• **Permissions:** AllowAny

## **Request Body:**

```
{ "username": "your_username", "email": "your_email@example.com", "password": "your password"}
```

• **Response:** User details with JWT tokens

# Login

• URL: /api/auth/login/

• Method: POST

• **Permissions:** AllowAny

### **Request Body:**

```
{ "username": "your_username", "password": "your_password"}
Response:
{ "refresh": "refresh_token", "access": "access_token"}
```

#### Refresh Token

• **URL:** /api/auth/refresh/

• Method: POST

• **Permissions:** AllowAny

## **Request Body:**

```
{ "refresh": "your refresh token"}
```

• **Response:** New access token

#### **User Profile**

• URL: /api/auth/profile/

• Method: GET

• Permissions: IsAuthenticated

• **Headers:** Authorization: Bearer {access token}

• **Response:** User profile information

#### List/Search Hotels

URL: /api/hotels/ Method: GET

Permissions: AllowAnyQuery Parameters:

o search: Search in name, description, location

min\_price: Minimum price filtermax price: Maximum price filter

o location: Filter by location (partial match)

o name: Filter by name (partial match)

o description: Filter by description (partial match)

o star\_rating: Filter by exact star rating

o star\_rating\_\_gte: Filter by minimum star rating

o star\_rating\_\_lte: Filter by maximum star rating

has\_pool: Filter by pool availability (true/false)

o ordering: Sort results (e.g., name, -star rating, indicative price)

### **Get Hotel Details**

• **URL:** /api/hotels/{id}/

• Method: GET

• **Permissions:** AllowAny

• Response: Detailed hotel information

## Hotel Search by Location

• URL: /api/search/hotels/

• Method: GET

Permissions: AllowAnyQuery Parameters:

o location: Location to search for (required)

min\_price: Minimum price filtermax price: Maximum price filter

- o star rating: Filter by exact star rating
- has pool: Filter by pool availability (true/false)
- o ordering: Sort results (e.g., name, -star rating)
- **Response:** List of hotels matching criteria
- Note: If hotels for a location don't exist, the API will generate sample data

# **Bookmark Management**

### List User Bookmarks

• URL: /api/bookmarks/

• Method: GET

• Permissions: IsAuthenticated

• **Headers:** Authorization: Bearer {access\_token}

• **Response:** List of user's bookmarked hotels

# Toggle Bookmark

• URL: /api/bookmarks/toggle/

• Method: POST

• Permissions: IsAuthenticated

• **Headers:** Authorization: Bearer {access\_token}

## **Request Body:**

```
{ "hotel_id": 1}
```

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- Response:
  - o If bookmark added: Bookmark details
  - If bookmark removed: {"status": "removed"}

## **API** Documentation

## Swagger UI

• URL: /swagger/

• Method: GET

• **Permissions:** AllowAny

• **Description:** Interactive API documentation with Swagger UI

# **Error Handling**

The API returns appropriate HTTP status codes and error messages:

- 400 Bad Request: Invalid input or missing required parameters
- 401 Unauthorized: Authentication failed or token expired
- 500 Internal Server Error: Server-side errors

### Authentication Flow

- 1. Register a new user or login with existing credentials
- 2. Store the received access and refresh tokens
- 3. Include the access token in the Authorization header for protected endpoints
- 4. When the access token expires, use the refresh token to obtain a new access token

Example authenticated request header:

Authorization: Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9...