**SkillSwap Categories API Documentation**

**Base URL**

The base URL for all API requests is **https://ws24-skillswap.onrender.com**.

**Endpoints Summary**

All endpoints are prefixed with **/api**.

**1. Create Category (Admin Only)**

Allows administrators to create a new category.

* **Endpoint:** **/api/categories/create**
* **Method:** POST
* **Access:** Admins only
* **Authorization:** Required. JWT token must be included in the HTTP-only cookie.
* **Body Parameters:**
  + **name**: String (required) - The name of the category.
* **Success Response:**
  + **Code:** 201 Created
  + **Content Example:** **{ "message": "New category successfully created", "category": "categoryId" }**
* **Error Response:**
  + **Code:** 400 Bad Request
  + **Content:** **{ "message": "Category could not be created", "error": "Error details" }**

**2. Retrieve All Categories (Users or Admins)**

Allows users or administrators to retrieve information about all available categories.

* **Endpoint:** **/api/categories**
* **Method:** GET
* **Access:** Users and Admins
* **Authorization:** Optional for public access or required for protected access, based on implementation.
* **Success Response:**
  + **Code:** 200 OK
  + **Content Example:** **[{ "message": "Array of all category objects" }]**
* **Error Response:**
  + **Code:** 500 Internal Server Error
  + **Content:** **{ "message": "An error occurred", "error": "Error details" }**

**3. Retrieve Category by ID (Users or Admins)**

Allows users or administrators to retrieve a specific category by ID.

* **Endpoint:** **/api/categories/:id**
* **Method:** GET
* **Access:** Users and Admins
* **Authorization:** Required for protected access.
* **URL Parameters:** **id** - The ID of the category to retrieve.
* **Success Response:**
  + **Code:** 200 OK
  + **Content Example:** **{ "\_id": "categoryId", "name": "Category Name" }**
* **Error Response:**
  + **Code:** 404 Not Found
  + **Content:** **{ "message": "Category not found" }**

**4. Update Category (Admin Only)**

Allows administrators to update information for a specific category by ID.

* **Endpoint:** **/api/categories/update/:id**
* **Method:** PUT
* **Access:** Admins only
* **Authorization:** Required. JWT token must be included in the HTTP-only cookie.
* **URL Parameters:** **id** - The ID of the category to update.
* **Body Parameters:** The fields to update (e.g., **name**: "Updated Category Name").
* **Success Response:**
  + **Code:** 200 OK
  + **Content Example:** **{ "message": "Update successful", "category": { updated category object } }**
* **Error Response:**
  + **Code:** 404 Not Found
  + **Content:** **{ "message": "Category not found" }**

**5. Delete Category (Admin Only)**

Allows administrators to delete a specific category by ID.

* **Endpoint:** **/api/categories/delete/:id**
* **Method:** DELETE
* **Access:** Admins only
* **Authorization:** Required. JWT token must be included in the HTTP-only cookie.
* **URL Parameters:** **id** - The ID of the category to delete.
* **Success Response:**
  + **Code:** 201 Created
  + **Content Example:** **{ "message": "Category successfully deleted", "category": { deleted category object } }**
* **Error Response:**
  + **Code:** 400 Bad Request
  + **Content:** **{ "message": "An error occurred", "error": "Error details" }**