**SkillSwap Skills Management API Documentation**

**Base URL**

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

**Endpoints**

All endpoints are prefixed with **/api**

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

Allows administrators to create a new skill.

* **Endpoint:** **/api/skills/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 skill.
  + **category**: String (required) – the Object ID of the corresponding skill category
* **Success Response:**
  + **Code:** 201 Created
  + **Content Example:** **{ "message": "New skill successfully created", "skill": "skillId" }**
* **Error Response:**
  + **Code:** 400 Bad Request
  + **Content:** **{ "message": "Skill could not be created", "error": "Error details" }**

**2. Retrieve Skill (Users or Admins)**

Allows users or administrators to retrieve information about a specific skill by ID.

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

**3. Retrieve All Skills (Users or Admins)**

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

* **Endpoint:** **/api/skills**
* **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:**

**[**

**{ "\_id": "skillId1", "name": "Skill Name 1", “category”: “ObjectID of category” },**

**{ "\_id": "skillId2", "name": "Skill Name 2", “category”: “ObjectID of category” },**

**// additional skill objects**

**]**

* **Error Response:**
  + **Code:** 500 Internal Server Error
  + **Content: { "message": "An error occurred", "error": "Error details" }**

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

Allows administrators to update information about a specific skill by ID.

* **Endpoint:** **/api/skills/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 skill to update.
* **Body Parameters:** The fields to update (e.g., **name**: "New Skill Name").
* **Success Response:**
  + **Code:** 200 OK
  + **Content Example:** **{ "message": "Update successful", "skill": { updated skill object } }**
* **Error Response:**
  + **Code:** 404 Not Found
  + **Content:** **{ "message": "Skill not found" }**

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

Allows administrators to delete a specific skill by ID.

* **Endpoint:** **/api/skills/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 skill to delete.
* **Success Response:**
  + **Code:** 201 Created
  + **Content Example:** **{ "message": "Skill successfully deleted", "skill": { deleted skill object } }**
* **Error Response:**
  + **Code:** 400 Bad Request
  + **Content:** **{ "message": "An error occurred", "error": "Error details" }**

**Notes**

* **Secure Connections:** It is highly recommended to use HTTPS for all API interactions to ensure data privacy and security.
* **Authentication:** All protected routes require authentication. A valid JWT token must be presented in the request's HTTP-only cookie.
* **Roles and Permissions:** Access to certain actions is restricted based on the user's role, as indicated in the JWT token.