**API Documentation**

**(*Habitual*)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Description** |
| 1.0 | 11/19/2023 | Luke Walder | Initial |

## 

## Habits

**Get All Habits**

Gets all habits for a specific user.

## Request

|  |  |
| --- | --- |
| **Method** | **URL** |
| **GET** | /habit/allhabits |

|  |  |  |
| --- | --- | --- |
| **Type** | **Params** | **Values** |
| GET | User\_id | integer |

## Response

|  |  |
| --- | --- |
| **Status** | **Response** |
| 200 | Date in ISOString format.  **Example response:**  **[**  **{**  **"id": 1,**  **"name": "Walk Dog",**  **"type": "good",**  **"difficulty": 3,**  **"date-added": 2023-10-05T14:48:00.000Z,**  **"user\_id": 12,**  **"repetitions\_day": 2,**  **"repetitions\_week": 0**  **}**  **{**  **"id": 2,**  **"name": "Workout",**  **"type": "good",**  **"difficulty": 4,**  **"date-added": 2023-11-02T20:59:06.000Z,**  **"user\_id": 12,**  **"repetitions\_day": 0,**  **"repetitions\_week": 4**  **}**  **{**  **"id": 3,**  **"name": "Make Bed",**  **"type": "good",**  **"difficulty": 1,**  **"date-added": 2023-10-06T11:28:00.000Z,**  **"user\_id": 12,**  **"repetitions\_day": 0,**  **"repetitions\_week": 6**  **}**  **]** |
| 404 | NOT FOUND |
| 500 | INTERNAL SERVER ERROR |

**Add Habit**

Adds a habit to the database.

## Request

|  |  |
| --- | --- |
| **Method** | **URL** |
| **POST** | /habit/add |

|  |  |  |
| --- | --- | --- |
| **Type** | **Params** | **Values** |
| POST | habitObject | name: string, type: string, Difficulty: int, user\_id: int, Date-added: Date, repetitions\_day: int, repetitions\_week: int |

## Response

|  |  |
| --- | --- |
| **Status** | **Response** |
| 200 | Confirmation message containing the number of rows affected.  Example response:  1 rows affected. Habit added |
| 404 | NOT FOUND |
| 500 | INTERNAL SERVER ERROR |

**Delete Habit**

## Request

|  |  |
| --- | --- |
| **Method** | **URL** |
| **POST** | /habit/remove |

|  |  |  |
| --- | --- | --- |
| **Type** | **Params** | **Values** |
| POST | User\_id, habit.name | int, string |

## Response

|  |  |
| --- | --- |
| **Status** | **Response** |
| 200 | Confirmation message containing the number of rows affected. Habit to remove identified by user\_id and name in POST request.  Example response:  1 rows affected. Habit removed |
| 404 | NOT FOUND |
| 500 | INTERNAL SERVER ERROR |

## 2. Records

**Get All Records**

Returns all records for all habits from specified user.

## Request

|  |  |
| --- | --- |
| **Method** | **URL** |
| **GET** | /records |

|  |  |  |
| --- | --- | --- |
| **Type** | **Params** | **Values** |
| GET | User\_id | Integer |

## Response

|  |  |
| --- | --- |
| **Status** | **Response** |
| 200 | Confirmation message containing the number of rows returned.  Example response:  142 rows returned |
| 404 | NOT FOUND |
| 500 | INTERNAL SERVER ERROR |

**Update Habit Record**

Adds 1 repetition to a habit.

## Request

|  |  |
| --- | --- |
| **Method** | **URL** |
| **POST** | /records/update |

|  |  |  |
| --- | --- | --- |
| **Type** | **Params** | **Values** |
| POST | User\_id, habit.name | Integer, string |

## Response

|  |  |
| --- | --- |
| **Status** | **Response** |
| 200 | Confirmation message containing the number of rows affected and the updated record count.  Example response:  1 rows affected. 23 recorded repetitions |
| 404 | NOT FOUND |
| 500 | INTERNAL SERVER ERROR |

**Subtract Habit Record**

Subtracts from a habit’s record count by 1.

## Request

|  |  |
| --- | --- |
| **Method** | **URL** |
| **POST** | /records/subtract |

|  |  |  |
| --- | --- | --- |
| **Type** | **Params** | **Values** |
| POST | user\_id, habit.name | integer, string |

## Response

|  |  |
| --- | --- |
| **Status** | **Response** |
| 200 | Confirmation message containing the number of rows affected and the updated record count.  Example response:  1 rows affected. 22 recorded repetitions |
| 404 | NOT FOUND |
| 500 | INTERNAL SERVER ERROR |

## 2. User Accounts

**Register New User**

## Request

|  |  |
| --- | --- |
| **Method** | **URL** |
| **POST** | /account/reg-user |

|  |  |  |
| --- | --- | --- |
| **Type** | **Params** | **Values** |
| POST | Username(email), password | String, string |

## Response

|  |  |
| --- | --- |
| **Status** | **Response** |
| 200 | Successful response:  1 rows affected. New user: Joe added  Unsuccessful response when username already exists:  0 rows affected. New user not registered. Username already in use |
| 404 | NOT FOUND |
| 500 | INTERNAL SERVER ERROR |

**Login User**

## Request

|  |  |
| --- | --- |
| **Method** | **URL** |
| **POST** | /account/login |

|  |  |  |
| --- | --- | --- |
| **Type** | **Params** | **Values** |
| POST | Username(email), password | String, string |

## Response

|  |  |
| --- | --- |
| **Status** | **Response** |
| 200 | Success confirmation message:  1 rows returned. User: Joe; logged in.  Unsuccessful response:  0 rows returned. Username or password incorrect. not logged in. |
| 404 | NOT FOUND |
| 500 | INTERNAL SERVER ERROR |

Glossary

## Conventions

* **Client** - Client application.
* **Status** - HTTP status code of response.
* All the possible responses are listed under ‘Responses’ for each method. Only one of them is issued per request server.
* All response are in JSON format.
* All request parameters are mandatory unless explicitly marked as [optional]
* The type of values accepted for a *request* parameter are shown the the values column like this [**10**|<any number>] .The | symbol means *OR*. If the parameter is [optional], the default value is shown in blue bold text, as **10** is written in [**10**|<any number>].

## Status Codes

All status codes are standard HTTP status codes. The below ones are used in this API.

2XX - Success of some kind

4XX - Error occurred in client’s part

5XX - Error occurred in server’s part

|  |  |
| --- | --- |
| **Status Code** | **Description** |
| 200 | OK |
| 201 | Created |
| 202 | Accepted (Request accepted, and queued for execution) |
| 400 | Bad request |
| 401 | Authentication failure |
| 403 | Forbidden |
| 404 | Resource not found |
| 405 | Method Not Allowed |
| 409 | Conflict |
| 412 | Precondition Failed |
| 413 | Request Entity Too Large |
| 500 | Internal Server Error |
| 501 | Not Implemented |
| 503 | Service Unavailable |