**Book Management APIs**

API Specification Document

Revision – v1.0

## **Validation Classes**

|  |  |
| --- | --- |
| **Class** | **Description** |
| INTEGER | A single integer value. |
| INTEGER\_LIST | A comma separated list of integer values. Note that a single integer value must also be acceptable. |
| FLOAT | A single floating point number. |
| STRING | An alphanumeric string of characters. |
| JSON | A JSON string. |
| DATE | Date in the format yyyy-mm-dd |
| YEAR\_MONTH | Part of date containing only the year and month in the format yyyy-mm |
| YEAR | Part of date containing only the year in the format yyyy |
| EMAIL | An email address. |
| FILE | A raw file uploaded in multi-part form data. |
| FILE\_REFERENCE | A string containing a reference to a media store object. |
| BOOLEAN | Either of the following strings – true, false |
| DATE\_GROUP\_SPEC | One of the following strings – DAY, MONTH, or YEAR |
| DATE\_GROUP | Either of the following classes - DATE, YEAR\_MONTH, or YEAR |
| DATE\_TIME | A timestamp in the format yyyy-mm-dd hh:mm:ss. |

## **Response Format**

All APIs must return response in this same format. The standard API response format shall be as follows.

{

"**message**": <STRING: *message-describing-outcome-of-API-execution*>,

}

|  |  |
| --- | --- |
| **Status** | **Description** |
| 200 | Everything went well and API executed successfully. |
| 400 | Bad request due to insufficient parameters, or parameters not in specified format. Response message must clearly indicate what fields are missing or are not in the required format. |
| 401 | A valid token was not provided in the request, and as such the application was unable to determine the privileges for the given user. |
| 403 | A valid token was provided, but it did not have sufficient privileges for the requested operation. |
| 404 | Indicates that the requested resource was not found. Note that this is different from the 404 HTTP status code, which would indicate the API endpoint is invalid. |
| 405 | Returned if an undefined method is requested on an endpoint, for instance, if POST is requested when only GET is defined. This may automatically be handled by the framework, and not need additional handling by the developer. |
| 409 | Returned when the result of a request would conflict with an existing state in the system. For instance, if a user creation request specifies a username that is already in use. |

## **Authentication**

A Token based authentication system shall be used. The login method will return an “token” after successful authentication. The access token should be passed to Authorization Header like below:-

“Authorization” : ”Token <access\_token>”

# **API Definitions**

## **Admin Sign Up**

|  |  |
| --- | --- |
| **Endpoint** | /user/sign\_up/ |
| **Method** | POST |
| **Authenticated** | No |

**Query Parameters:**

**None**

**Body Parameters:**

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Value** | **Optional** |
| first\_name | String | No |
| last\_name | String | No |
| email | String | No |
| password | String | No |

**Response:**

{

 "**message**": <STRING: *message-describing-outcome-of-API-execution*>,

}

**Description:**

The API will Create a Admin User.

**Schemas Referenced:**

- library\_adminuser

## **Admin Login**

|  |  |
| --- | --- |
| **Endpoint** | /user/login/ |
| **Method** | POST |
| **Authenticated** | No |

**Query Parameters:**

**None**

**Body Parameters:**

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Value** | **Optional** |
| email | String | No |
| password | String | No |

**Response:**

{

 "**token**": “<token\_value>”,

}

**Description:**

The API will logs in an Admin User and return a token.

**Schemas Referenced:**

- library\_adminuser

## **Book Crud - Get all books**

|  |  |
| --- | --- |
| **Endpoint** | /books/ |
| **Method** | GET |
| **Authenticated** | YES |

**Query Parameters:**

**None**

**Body Parameters:**

None

**Response:**

{

 [“list of Books”]

}

**Description:**

The API will Create a Admin User.

**Schemas Referenced:**

- library\_books

## **Book Crud - Add a Book**

|  |  |
| --- | --- |
| **Endpoint** | /books/ |
| **Method** | POST |
| **Authenticated** | YES |

**Query Parameters:**

**None**

**Body Parameters:**

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Value** | **Optional** |
| name | String | No |
| isbn | Integer | No |
| author | String | No |
| category | String | No |

**Response:**

{

 <created book>

}

**Description:**

The API will add a book

**Schemas Referenced:**

- library\_books

## **Book Crud - Update a Book**

|  |  |
| --- | --- |
| **Endpoint** | /books/<book\_id> |
| **Method** | PATCH |
| **Authenticated** | YES |

**Query Parameters:**

**None**

**Body Parameters:**

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Value** | **Optional** |
| name | String | YES |
| isbn | Integer | YES |
| author | String | YES |
| category | String | YES |

**Response:**

{

 <created book>

}

**Description:**

The API will add a book

**Schemas Referenced:**

- library\_books

## **Book Crud - Delete a Book**

|  |  |
| --- | --- |
| **Endpoint** | /books/<book\_id> |
| **Method** | Delete |
| **Authenticated** | YES |

**Query Parameters:**

**None**

**Body Parameters:**

None

**Response:**

**{**

}

**Description:**

The API will Destroy the book

**Schemas Referenced:**

- library\_books