**PROG3170 – Assignment 1**

**RESTful API design**

**CRUD operations   
(Method used: GET, POST, DELETE, PUT)**

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1. **Log in the Service**

Request:

Request Method: **POST**

URI: /auth

Description: user login their account

Request Header

- Content-Type : application/json

- Authorization: Token {TOKEN}

Request Body:   
{

"username": "user1",

"password": "abcxyz"

}

RESPONSE example:

{

"access\_token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJleHAiOjE1Mzc0MDkzMDcsImlhdCI6MTUzNzQwOTAwNywibmJmIjoxNTM3NDA5MDA3LCJpZGVudGl0eSI6MX0.U-9gG2Yiyl2sn4nvQ2y66MlO\_62PxS18iijFLPlVMU8"

}

Status:

204 OK

401 Unauthorized

404 Not Found

1. **Get a list of all song**

Request:

Request Method: **GET**

URI: /music

Description: This should return song list with JSON format.

Request Header

- Content-Type: application/json

- Authorization: Token {TOKEN}

Request Body: N/A  
  
RESPONSE:

{

"musics": [

{

"ids": 1,

"Album": "Gypsy Renaissance",

"Title": "Simimering Souls",

"Artist": "Behzad",

"Download": "“https://allmusic.com/music/download/IndiansEnnio.mp3”",

"EntryDate": "2018-09-18",

"review": []

},

{

"ids": 2,

"Album": "Unknown Albam",

"Title": "Jingle Bells",

"Artist": "Jemes Lord Pierpont",

"Download": "“https://allmusic.com/music/download/IndiansEnnio.mp3”",

"EntryDate": "2018-09-18",

"review": []

}

]

}

Status:

204 OK

401 Unauthorized

404 Not Found

1. **Get details about a specific song**

Request:

Request Method: **GET**

URI: /music/{ID}

Example: /music/130

Description: This should return specific song details with JSON format.

Request Header

- Content-Type: application/json

- Authorization: Token {TOKEN}

Request Body: N/A  
  
  
RESPONSE:

{

"id": "1",

"album": "Gypsy Renaissance",

"title": "Simmering Souls",

"artist": "Behzad",

"download": "“https://allmusic.com/music/download/IndiansEnnio.mp3”",

"entryDate": "2018-09-18",

}

"review": [

{"id": "1",

"commentID": "23",

"commenter": "Jenny Kim",

"comment": "A mind blowing song",

"entryDate": " 2018-09-18"

}

]

Status:

204 OK

401 Unauthorized

404 Not Found

1. **Upload a new song**

Request:

Request Method: **POST**

URI: /music

Description: Song should be uploaded as a new song with details. If the song already exist, it would be failed to upload.

Request Headers:

- Content-Type: application/json

- Authorization: Token {TOKEN}

Request Body:

{

"Album": "Gypsy Renaissance",

"Title": "Simmering Souls",

"Artist": "Behzad",

"Download”:"C:\song\IndiansEnnio.mp3",

}

Response Body:

{

"id": "1",

"Album": "Gypsy Renaissance",

"Title": "Simmering Souls",

"Artist": "Behzad",

"Download": "“https://allmusic.com/music/download/IndiansEnnio.mp3”",

"EntryDate": "2018-09-18",

"review": []

}

Status:

204 OK

401 Unauthorized

404 Not Found

1. **Add review to an existing song**

Request:

Request Method: **POST**

URI: /review/{ID}

Description: It will append review in the specific existing song ID.

Request Headers:

- Content-Type: application/json

- Authorization: Token {TOKEN}

Request Body:

{

"commenter": "Jenny Kim",

"comment": "A mind blowing song"

}

Response Body:

{

"id": "1",

"commentID": "23",

"commenter": " Jenny Kim ",

"comment": " A mind blowing song "

"entryDate": " 2018-09-18"

}

Status:

204 OK

401 Unauthorized

404 Not Found

1. **Delete any song**

Request:

Request Method: **DELETE**

URI: /music/{ID}

Description: It should delete specific song from database.

Request Headers:

- Content-Type: application/json

- Authorization: Token {TOKEN}

Request Body: N/A

Response Body:

{

"Message": "Song deleted"

}

Status:

204 OK

401 Unauthorized

404 Not Found

1. **Update any song**

Request:

Request Method: **PUT**

URI: /music/{ID}

Description: It should update information of specific song ID. If song exit, it will update otherwise upload as new song.

Request Headers:

- Content-Type: application/json

- Authorization: Token {TOKEN}

Request Body (example shows as update):

{

"Album": "Gypsy Renaissance GR",

"Title": "Souls",

}

Response Body:

{

"ids": "131",

"Album": "Gypsy Renaissance GR",

"Title": "Souls",

"Artist": "Behzad",

"Download": "“https://allmusic.com/music/download/IndiansEnnio.mp3”",

"EntryDate": "2018-09-18",

}

Status:

204 OK

401 Unauthorized

1. t Found
2. **Upload any song**

Request:

Request Method: **PUT**

URI: /music

Description: Song should upload as a new song with details.

Request Headers:

- Content-Type: application/json

- Authorization: Token {TOKEN}

Request Body (example shows as update):

{

"Album": "Unknown Albam",

"Title": "Jingle Bells",

"Artist": "Jemes Lord Pierpont",

"Download": "“D:\songs/JingleBells.mp3”",

}

Response Body:

{

"ids": "2",

"Album": "Unknown Albam",

"Title": "Jingle Bells",

"Artist": "Jemes Lord Pierpont",

"Download": "“https://allmusic.com/music/download/JingleBells.mp3”",

"EntryDate": "2018-09-18",

}

Status:

204 OK

401 Unauthorized

404 Not Found

Note: All response body shows as an example. Status would be customizable.