

Data Cache:

When the user first authenticates with Spotify, the database will store their user ID as well as all the artists in their library in an array in the user artists collection. This way when a user logs back in, their artists are already stored, and can be looked up based on their user ID. Similarly, when an artist show is looked up via the remote API, it is added to the Show database. When artists need to be queried, they are first looked up in the Show database to see if a show with that artist in that location already exists in the database.

Data Documentation:

User Collection: stores documents for each user.

```
{
  "UserId": 111111,
  "FirstName": "Grace",
  "LastName": "Michnovicz",
  "Email": "gmich@bu.edu",
  "Password": "password"
}

{
  "definitions": {},
  "$schema": "http://json-schema.org/draft-07/schema#",
  "$id": "http://example.com/root.json",
  "type": "object",
  "title": "The Root Schema",
  "required": [
    "UserId",
    "FirstName",
    "LastName",
    "Email",
    "Password"
  ],
  "properties": {
    "UserId": {
      "$id": "#/properties/UserId",
      "type": "integer",
      "title": "The Userid Schema",
      "default": 0,
      "examples": [
        111111
      ]
    },
  },
}
```

```

"FirstName": {
  "$id": "#/properties/FirstName",
  "type": "string",
  "title": "The Firstname Schema",
  "default": "",
  "examples": [
    "Grace"
  ],
  "pattern": "^(.*)$"
},
"LastName": {
  "$id": "#/properties/LastName",
  "type": "string",
  "title": "The Lastname Schema",
  "default": "",
  "examples": [
    "Michnovicz"
  ],
  "pattern": "^(.*)$"
},
"Email": {
  "$id": "#/properties/Email",
  "type": "string",
  "title": "The Email Schema",
  "default": "",
  "examples": [
    "gmich@bu.edu"
  ],
  "pattern": "^(.*)$"
},
"Password": {
  "$id": "#/properties/Password",
  "type": "string",
  "title": "The Password Schema",
  "default": "",
  "examples": [
    "password"
  ],
  "pattern": "^(.*)$"
}
}
}

```

Shows Collection: Information stored about concerts

```
{
  "artist": "Tiesto",
  "city": "Los Angeles",
  "location": "1 Sunset Blvd."
  "description": "21+ only"
}
```

Generated JSON Schema -

```
{
  "definitions": {},
  "$schema": "http://json-schema.org/draft-07/schema#",
  "$id": "http://example.com/root.json",
  "type": "object",
  "title": "The Root Schema",
  "required": [
    "artist",
    "city",
    "location"
  ],
  "properties": {
    "artist": {
      "$id": "#/properties/artist",
      "type": "string",
      "title": "The Artist Schema",
      "default": "",
      "examples": [
        "Tiesto"
      ],
      "pattern": "^(.*)$"
    },
    "city": {
      "$id": "#/properties/city",
      "type": "string",
      "title": "The City Schema",
      "default": "",
      "examples": [
        "Los Angeles"
      ],
      "pattern": "^(.*)$"
    },
    "location": {
      "$id": "#/properties/location",
      "type": "string",

```

```

    "title": "The Location Schema",
    "default": "",
    "examples": [
        "1 Sunset Blvd."
    ],
    "pattern": "^(.*)$"
}
}
}

```

User artists collection: A User's top artists

```

{
  "UserId": 111111,
  "Artists": [
    "Tiesto",
    "Mac Miller"
  ]
}

```

```

{
  "definitions": {},
  "$schema": "http://json-schema.org/draft-07/schema#",
  "$id": "http://example.com/root.json",
  "type": "object",
  "title": "The Root Schema",
  "required": [
    "UserId",
    "Artists"
  ],
  "properties": {
    "UserId": {
      "$id": "#/properties/UserId",
      "type": "integer",
      "title": "The Userid Schema",
      "default": 0,
      "examples": [
        111111
      ]
    },

```

```
"Artists": {
  "$id": "#/properties/Artists",
  "type": "array",
  "title": "The Artists Schema",
  "items": {
    "$id": "#/properties/Artists/items",
    "type": "string",
    "title": "The Items Schema",
    "default": "",
    "examples": [
      "Tiesto",
      "Mac Miller"
    ],
    "pattern": "^(.*)$"
  }
}
```