**Patron** **API Documentation**

**Base URL: /api/patrons**

**1. Get All Patrons**

* **Endpoint**: GET /api/patrons
* **Description**: Retrieves a list of all patrons.
* **Response**:
  + **200 OK**: Returns an array of patrons.
* **Response Example**:

json

[

{

"id": 1,

"name": "John Doe",

"contactInfo": "Address 1",

"email": "john@example.com",

"phoneNumber": "1234567890"

},

...

]

**2. Get Patron by ID**

* **Endpoint**: GET /api/patrons/{id}
* **Description**: Retrieves details of a specific patron by their ID.
* **Parameters**:
  + id (Path Variable): ID of the patron to retrieve.
* **Response**:
  + **200 OK**: Returns the details of the patron.
  + **404 Not Found**: Returns an error if the patron with the specified ID is not found.
* **Response Example**:

json

{

"resultCode": 200,

"resultDescription": "Success",

"message": "Patron details retrieved successfully",

"data": {

"id": 1,

"name": "John Doe",

"contactInfo": "Address 1",

"email": "john@example.com",

"phoneNumber": "1234567890"

}

}

**3. Add a New Patron**

* **Endpoint**: POST /api/patrons
* **Description**: Adds a new patron to the collection.
* **Request Body**:

json

{

"name": "New Patron Name",

"contactInfo": "New Address",

"email": "new@example.com",

"phoneNumber": "9876543210"

}

* **Response**:
  + **201 Created**: Returns the newly created patron.
* **Response Example**:

json

{

"resultCode": 201,

"resultDescription": "Success",

"message": "Patron created successfully",

"data": {

"id": 26,

"name": "New Patron Name",

"contactInfo": "New Address",

"email": "new@example.com",

"phoneNumber": "9876543210"

}

}

**4. Update Patron by ID**

* **Endpoint**: PUT /api/patrons/{id}
* **Description**: Updates details of an existing patron by their ID.
* **Parameters**:
  + id (Path Variable): ID of the patron to update.
* **Request Body**:

json

{

"name": "Updated Patron Name",

"contactInfo": "Updated Address",

"email": "updated@example.com",

"phoneNumber": "1234567890"

}

* **Response**:
  + **200 OK**: Returns the updated patron details.
  + **404 Not Found**: Returns an error if the patron with the specified ID is not found.
* **Response Example**:

json

{

"resultCode": 200,

"resultDescription": "Success",

"message": "Patron updated successfully",

"data": {

"id": 1,

"name": "Updated Patron Name",

"contactInfo": "Updated Address",

"email": "updated@example.com",

"phoneNumber": "1234567890"

}

}

**5. Delete Patron by ID**

* **Endpoint**: DELETE /api/patrons/{id}
* **Description**: Deletes a specific patron by their ID.
* **Parameters**:
  + id (Path Variable): ID of the patron to delete.
* **Response**:
  + **200 OK**: Indicates successful deletion with no data.
  + **404 Not Found**: Returns an error if the patron with the specified ID is not found.
  + **500 Internal Server Error**: Returns an error if there was an issue deleting the patron.
* **Response Example (404 Error)**:

json

{

"resultCode": 404,

"resultDescription": "Error",

"message": "Error deleting Patron: Patron not found"

}

* **Response Example (500 Error)**:

json

{

"resultCode": 500,

"resultDescription": "Error",

"message": "Error deleting Patron"

}

**Response Structure**

Each API response follows this structure:

* **resultCode**: Numeric status code (e.g., 200 for success, 404 for not found).
* **resultDescription**: A brief description of the response outcome.
* **message**: Additional message (can be empty).
* **data**: (Optional) The object returned on success.
* **list**: (Optional) A list of objects returned on success for endpoints that return multiple items.

**Error Handling**

* **400 Bad Request**: Validation failure or missing required fields.
* **404 Not Found**: If the patron with the specified ID is not found.
* **500 Internal Server Error**: For unexpected server issues or errors.