**API Documentation**

**Base URL**

The base URL for all API endpoints is:

http://localhost:5000

**Routes Overview**

The following routes are available in the API:

1. **User Authentication Routes**
   * **POST /auth**
   * **POST /auth/login**
   * **GET /auth/logout**
2. **Book Routes**
   * **GET /books**
   * **GET /books/search**
   * **GET /books/:id**
3. **Checkout History Routes**
   * **GET /checkout-history/:email**
   * **POST /checkout-history**
4. **Email Verification Routes**
   * **GET /email-verification/:email**
   * **POST /email-verification**
   * **POST /email-verification/verify**
   * **DELETE /email-verification/:email**
5. **Payment Routes**
   * **GET /payments**
   * **POST /payments**
   * **DELETE /payments**
6. **Shipping Info Routes**
   * **GET /shipping-info/:email**
   * **POST /shipping-info**
   * **PUT /shipping-info**
   * **DELETE /shipping-info/:email**
7. **Shopping Cart Routes**
   * **GET /shopping-cart**
   * **POST /shopping-cart**
   * **DELETE /shopping-cart**
8. **User Routes**
   * **GET /user**
   * **GET /user/:email**
   * **POST /user**
   * **PUT /user**
   * **DELETE /user/:email**

**1. User Authentication Routes**

**POST /auth**

**Description:**  
Authenticates the user and generates an authentication token.

**Request Body:**

{

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

"password": "userpassword"

}

**POST /auth/login**

**Description:**  
Logs in the user and generates an authentication token.

**Request Body:**

{

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

"password": "userpassword"

}

**GET /auth/logout**

**Description:**  
Logs the user out by clearing the authentication token.

**2. Book Routes**

**GET /books**

**Description:**  
Fetches a list of 20 random books from an external API (Google Books).

**Query Parameters:**

* None

**Response Example:**

[

{

"id": "book\_id\_123",

"title": "Book Title",

"authors": ["Author Name"],

"price": 29,

"description": "This is a book description.",

"thumbnail": "image\_url",

"stock": 10

},

...

]

**GET /books/search**

**Description:**  
Search for books based on a query string.

**Query Parameters:**

* q (string): Search query (e.g., "fiction")

**Response Example:**

[

{

"id": "book\_id\_123",

"title": "Book Title",

"authors": ["Author Name"],

"price": 29,

"description": "This is a book description.",

"thumbnail": "image\_url",

"stock": 10

},

...

]

**GET /books/:id**

**Description:**  
Fetches a specific book by its ID from Google Books.

**Path Parameters:**

* id: Book ID (e.g., book\_id\_123)

**Response Example:**

{

"id": "book\_id\_123",

"title": "Book Title",

"authors": ["Author Name"],

"price": 29,

"description": "This is a book description.",

"thumbnail": "image\_url",

"stock": 10

}

**3. Checkout History Routes**

**GET /checkout-history/:email**

**Description:**  
Fetches the checkout history for a specific email.

**Path Parameters:**

* email: The email of the user.

**Response Example:**

[

{

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

"book\_isbn": "978-3-16-148410-0",

"total\_price": 29,

"qty": 2,

"checkout\_date\_and\_time": "2025-04-30T10:30:00"

},

...

]

**POST /checkout-history**

**Description:**  
Adds a new checkout entry.

**Request Body:**

{

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

"book\_isbn": "978-3-16-148410-0",

"total\_price": 29,

"qty": 2,

"checkout\_date\_and\_time": "2025-04-30T10:30:00"

}

**4. Email Verification Routes**

**GET /email-verification/:email**

**Description:**  
Fetches the verification code for a specific email.

**Path Parameters:**

* email: The email for verification.

**Response Example:**

{

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

"code": "123456"

}

**POST /email-verification**

**Description:**  
Generates and sends a verification code to the specified email.

**Request Body:**

{

"email": "user@example.com"

}

**POST /email-verification/verify**

**Description:**  
Verifies the code sent to the user's email.

**Request Body:**

{

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

"code": "123456"

}

**DELETE /email-verification/:email**

**Description:**  
Deletes the verification code for a specific email.

**Path Parameters:**

* email: The email for verification.

**5. Payment Routes**

**GET /payments**

**Description:**  
Fetches billing information from cookies.

**Response Example:**

{

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

"payment\_method": "Credit Card",

"card\_number": "\*\*\*\*-\*\*\*\*-\*\*\*\*-1234",

"exp\_date": "12/23"

}

**POST /payments**

**Description:**  
Stores billing information in cookies.

**Request Body:**

{

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

"payment\_method": "Credit Card",

"card\_number": "1234567812345678",

"exp\_date": "12/23"

}

**DELETE /payments**

**Description:**  
Clears billing information from cookies.

**6. Shipping Info Routes**

**GET /shipping-info/:email**

**Description:**  
Fetches shipping information for a specific email.

**Path Parameters:**

* email: The email of the user.

**Response Example:**

{

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

"address": "123 Main St, City, Country",

"postalcode": "12345",

"country": "Country Name"

}

**POST /shipping-info**

**Description:**  
Adds new shipping information.

**Request Body:**

{

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

"address": "123 Main St, City, Country",

"postalcode": "12345",

"country": "Country Name"

}

**PUT /shipping-info**

**Description:**  
Updates existing shipping information.

**Request Body:**

{

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

"address": "456 New St, City, Country",

"postalcode": "67890",

"country": "Country Name"

}

**DELETE /shipping-info/:email**

**Description:**  
Deletes shipping information for a specific email.

**Path Parameters:**

* email: The email of the user.

**7. Shopping Cart Routes**

**GET /shopping-cart**

**Description:**  
Fetches the user's shopping cart from cookies.

**Response Example:**

{

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

"items": [

{

"isbn": "978-3-16-148410-0",

"title": "Book Title",

"quantity": 2,

"unit\_price": 29

}

],

"total": 58,

"number\_of\_books": 2

}

**POST /shopping-cart**

**Description:**  
Adds or updates an item in the shopping cart.

**Request Body:**

{

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

"isbn": "978-3-16-148410-0",

"title": "Book Title",

"quantity": 2,

"unit\_price": 29

}

**DELETE /shopping-cart**

**Description:**  
Clears the shopping cart.

**8. User Routes**

**GET /user**

**Description:**  
Fetches all users.

**Response Example:**

[

{

"name": "User Name",

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

"phone\_number": "123-456-7890"

}

]

**GET /user/:email**

**Description:**  
Fetches a single user by email.

**Path Parameters:**

* email: The email of the user.

**Response Example:**

{

"name": "User Name",

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

"phone\_number": "123-456-7890"

}

**POST /user**

**Description:**  
Creates a new user and sends a verification code.

**Request Body:**

{

"name": "User Name",

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

"phone\_number": "123-456-7890",

"password": "userpassword"

}

**PUT /user**

**Description:**  
Updates the user details.

**Request Body:**

{

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

"name": "Updated Name",

"phone\_number": "098-765-4321",

"password": "newpassword"

}

**DELETE /user/:email**

**Description:**  
Deletes a user by email.

**Path Parameters:**

* email: The email of the user.