**Tracking Number Generator**

This is a Spring Boot application that generates and manages unique tracking numbers.

**Prerequisites**

* Java 17
* Maven

**Setup**

1. Clone the repository:
2. git clone <repository-url>

cd trackingNumberGenerator

1. Build and run the application:
2. mvn clean install

mvn spring-boot:run

**API Endpoints**

**1. GET /api/next-tracking-number**

**Description**

Generates and returns a unique tracking number.

**Request Example**

GET http://localhost:8080/api/next-tracking-number?origin\_country\_id=US&destination\_country\_id=IN&weight=1.234&created\_at=2025-03-29T16:00:00Z&customer\_id=de619854-b59b-425e-9db4-943979e1bd49&customer\_name=RedBox Logistics&customer\_slug=redbox-logistics

**Response Example**

{

"trackingNumber": "A1B2C3D4E5F6G7H8",

"createdAt": "2025-03-29T16:20:00Z"

}

**2. GET /api/get-all-tracking**

**Description**

Returns a list of all tracking numbers stored in the system.

**Request Example**

GET http://localhost:8080/api/get-all-tracking

**Response Example**

[

{

"trackingNumber": "A1B2C3D4E5F6G7H8",

"createdAt": "2025-03-29T16:20:00Z"

},

{

"trackingNumber": "XYZ9876543210987",

"createdAt": "2025-03-29T16:22:00Z"

}

]

**3. POST /api/add-tracking-number**

**Description**

Adds a new tracking number manually. The tracking number must be unique and follow the pattern ^[A-Z0-9]{1,16}$.

**Request Example**

POST http://localhost:8080/api/add-tracking-number?trackingNumber=TRACK123456789

**Response Examples**

**Success:**

"Tracking number added successfully."

**Error - Invalid Format:**

{

"error": "Tracking number must match the pattern: ^[A-Z0-9]{1,16}$"

}

**Error - Duplicate Tracking Number:**

{

"error": "Tracking number must be unique."

}