# **Event Management System API Documentation**

## **Base URL**

https://EGO/api/v1

# **Authentication**

All protected routes require a JWT token in the cookie header. The token is obtained by logging in via the /login endpoint.

# **User Management**

# Register a new user

- Endpoint: POST /register
- Description: Creates a new user account
- Request Body:{
   "name": "string",
   "email": "string",
   "password": "string",
   "role": "string" // Optional, defaults to "Standard User"
- Success Response: 201 Created
- Error Responses:

}

- o 409 Conflict User already exists
- o 500 Internal Server Error Server error

# Login

- **Endpoint**: POST /login
- **Description**: Authenticates user and returns JWT token in cookie
- Request Body:{
   "email": "string",
   "password": "string"
  }
- Success Response: 200 OK with user details
- Error Responses:
  - o 404 Not Found Email not found
  - o 405 Method Not Allowed Incorrect password
  - o 500 Internal Server Error Server error

#### **Password Reset**

- 1. Request OTP
  - a. Endpoint: POST /sendOtp
  - b. **Description**: Sends OTP to user's email for password reset
  - c. Request Body:{
     "email": "string"
    }
  - d. Success Response: 200 OK
  - e. Error Responses:
    - i. 404 Not Found User not found
    - ii. 500 Internal Server Error-Server error
- 2. Reset Password

}

- a. Endpoint: PUT /forgetPassword
- b. **Description**: Resets user password with valid OTP
- c. Request Body:{
   "email": "string",
   "otp": "string",
   "password": "string"

d. Success Response: 200 OK

#### e. Error Responses:

- i. 400 Bad Request Incorrect OTP or same password
- ii. 404 Not Found User not found
- iii. 500 Internal Server Error-Server error

#### **Get Current User Profile**

- **Endpoint**: GET /users/profile
- Authentication: Required (All roles)
- **Description**: Returns current user's profile
- Success Response: 200 OK with user details
- Error Response: 500 Internal Server Error

### **Update Current User Profile**

- **Endpoint**: PUT /users/profile
- Authentication: Required (All roles)
- **Description**: Updates current user's profile
- Request Body: User fields to update
- Success Response: 200 OK
- Error Responses:
  - o 400 Bad Request Trying to use same password
  - o 404 Not Found User not found
  - o 500 Internal Server Error Server error

#### **Admin: Get All Users**

- **Endpoint**: GET /users
- Authentication: Required (System Admin only)
- **Description**: Returns list of all users
- Success Response: 200 OK with array of users
- Error Response: 500 Internal Server Error

# Admin: Get User by ID

- Endpoint: GET /users/:id
- Authentication: Required (System Admin only)
- **Description**: Returns details of a specific user

- Success Response: 200 OK with user details
- Error Response: 500 Internal Server Error

## **Admin: Update User Role**

- Endpoint: PUT /users/:id
- Authentication: Required (System Admin only)
- **Description**: Updates a user's role
- Request Body:{
   "role": "string" // "System Admin", "Organizer", or "Standard User"
   }
- Success Response: 200 OK
- Error Response: 500 Internal Server Error

#### **Admin: Delete User**

- Endpoint: DELETE /users/:id
- Authentication: Required (System Admin only)
- **Description**: Deletes a user
- Success Response: 200 OK
- Error Response: 500 Internal Server Error

# **Event Management**

#### **Get Approved Events**

- **Endpoint**: GET /events
- **Description**: Returns list of all approved events (public)
- Success Response: 200 OK with array of events
- Error Response: 500 Internal Server Error

#### **Admin: Get All Events**

• Endpoint: GET /events/all

- Authentication: Required (System Admin only)
- **Description**: Returns list of all events regardless of status
- Success Response: 200 OK with array of events
- Error Response: 500 Internal Server Error

### **Get Event by ID**

- Endpoint: GET /events/:id
- **Description**: Returns details of a specific event (public)
- Success Response: 200 OK with event details
- Error Responses:
  - o 404 Not Found Event not found
  - o 500 Internal Server Error

#### **Create Event**

- **Endpoint**: POST /events
- **Authentication**: Required (Organizer only)
- **Description**: Creates a new event
- Request Body:{

```
"title": "string",
  "description": "string",
  "date": "ISO Date",
  "location": "string",
  "category": "string",
  "ticketPrice": number,
  "ticketAvailable": number
}
```

- Success Response: 201 Created with event details
- Error Response: 400 Bad Request or 500 Internal Server Error

## **Update Event**

- Endpoint: PUT /events/:id
- Authentication: Required (Organizer or System Admin)
- **Description**: Updates an existing event
  - Organizers can only update their own events (cannot change status)

- Admins can update any event and change status
- Request Body: Event fields to update
- Success Response: 200 OK with updated event
- Error Responses:
  - o 404 Not Found Event not found or unauthorized
  - o 400 Bad Request or 500 Internal Server Error

#### **Delete Event**

- Endpoint: DELETE /events/:id
- Authentication: Required (Organizer or System Admin)
- Description: Deletes an event
  - o Organizers can only delete their own events
  - Admins can delete any event
- Success Response: 200 OK
- Error Responses:
  - 404 Not Found Event not found or unauthorized
  - o 500 Internal Server Error

# **Organizer: Get My Events**

- Endpoint: GET /users/events
- Authentication: Required (Organizer only)
- **Description**: Returns list of events created by current organizer
- Success Response: 200 OK with array of events
- Error Response: 500 Internal Server Error

#### **Organizer: Get Event Analytics**

- Endpoint: GET /users/events/analytics
- Authentication: Required (Organizer only)
- **Description**: Returns booking analytics for organizer's events
- Success Response: 200 OK with analytics data
- Error Response: 500 Internal Server Error

# **Booking Management**

#### **Book Tickets**

- Endpoint: POST /bookings
- Authentication: Required (Standard User only)
- **Description**: Books tickets for an event
- Request Body:{
   "eventId": "string",
   "numberOfTickets": number
- Success Response: 201 Created with booking details
- Error Responses:
  - o 400 Bad Request Not enough tickets available
  - o 404 Not Found Event not found
  - o 500 Internal Server Error

## **Get Booking by ID**

- Endpoint: GET /bookings/:id
- Authentication: Required (Standard User only)
- **Description**: Returns details of a specific booking (must belong to current user)
- Success Response: 200 OK with booking details
- Error Responses:
  - o 404 Not Found Booking not found or unauthorized
  - o 500 Internal Server Error

# **Cancel Booking**

- Endpoint: DELETE /bookings/:id
- Authentication: Required (Standard User only)
- **Description**: Cancels a booking (must belong to current user)
- Success Response: 204 No Content
- Error Responses:
  - o 404 Not Found Booking not found
  - o 500 Internal Server Error

# **User: Get My Bookings**

- Endpoint: GET /users/bookings
- Authentication: Required (Standard User only)
- **Description**: Returns list of bookings for current user
- Success Response: 200 OK with array of bookings
- Error Response: 500 Internal Server Error

# **Models**

#### User

```
interface User {
   _id: string;
   name: string;
   email: string;
   password: string;
   role: "System Admin" | "Organizer" | "Standard User";
   createdAt: Date;
   updatedAt: Date;
}
```

#### **Event**

```
interface Event {
   _id: string;
   title: string;
   description: string;
   date: Date;
   location: string;
   category: string;
   ticketPrice: number;
   ticketAvailable: number;
   ticketSold: number;
   organizer: User | string; // Reference to User
   status: "pending" | "approved" | "rejected";
```

```
createdAt: Date;
updatedAt: Date;
}
```

# **Booking**

```
interface Booking {
   _id: string;
   user: User | string; // Reference to User
   event: Event | string; // Reference to Event
   numberOfTickets: number;
   totalPrice: number;
   status: "confirmed" | "cancelled";
   createdAt: Date;
   updatedAt: Date;
}
```