

# 1337 Events Management System API

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A backend API for managing events at 1337, including user authentication, event management, feedback system, and a gamified leaderboard.

## Features

- User authentication and profile management
- Event creation and management
- Event attendance tracking
- Feedback system
- Gamified leaderboard with points and levels
- Monthly rankings

## Setup

1. Install dependencies:

```
npm install
```

2. Set up environment variables: Create a `.env` file with the following variables:

```
MONGODB_URI=mongodb://localhost:27017/1337-events
JWT_SECRET=your-super-secret-jwt-key-replace-in-production
PORT=3001
NODE_ENV=development
```

3. Start the server:

```
# Development mode
npm run dev

# Production mode
npm start
```

## API Endpoints

### User Management

#### **POST /api/users/register**

Register a new user

```
{
  "email": "user@example.com",
  "password": "securepassword",
  "nickname": "username"
}
```

### **POST /api/users/login**

Login user

```
{
  "email": "user@example.com",
  "password": "securepassword"
}
```

### **GET /api/users/profile**

Get user profile (requires authentication)

### **PATCH /api/users/profile**

Update user profile (requires authentication)

```
{
  "nickname": "newUsername",
  "picture": "picture_url"
}
```

### **GET /api/users/stats**

Get user statistics (requires authentication)

## **Event Management**

### **POST /api/events**

Create a new event (requires authentication)

```
{
  "title": "Event Title",
  "description": "Event Description",
  "time": "2025-06-20T15:00:00Z",
  "expectedTime": 120
}
```

## GET /api/events

List all events Query parameters:

- status: upcoming, ongoing, completed, cancelled
- upcoming: true/false

## GET /api/events/:id

Get event details by ID

## POST /api/events/:id/attend

Register for an event (requires authentication)

## PATCH /api/events/:id/attendance

Mark attendance status (requires authentication)

```
{
  "userId": "user_id",
  "status": "attended"
}
```

## POST /api/events/:id/feedback

Add feedback for an event (requires authentication)

```
{
  "rating": 5,
  "comment": "Great event!"
}
```

## Leaderboard

### GET /api/leaderboard

Get global leaderboard rankings

### GET /api/leaderboard/monthly

Get monthly leaderboard rankings

### GET /api/leaderboard/ranking

Get user's ranking details with nearby users (requires authentication)

## Points System

- Event Attendance: 10 points
- Giving Feedback: 5 points
- Level Up: Every 50 points
- Points contribute to wallet balance

## Authentication

All protected endpoints require a JWT token in the Authorization header:

```
Authorization: Bearer your-token-here
```

## Project Structure

```
src/  
├── models/  
│   ├── User.js  
│   └── Event.js  
├── routes/  
│   ├── userRoutes.js  
│   ├── eventRoutes.js  
│   └── leaderboardRoutes.js  
├── middleware/  
│   └── auth.js  
└── app.js
```

## Error Handling

The API returns appropriate HTTP status codes and error messages:

- 200: Success
- 201: Resource created
- 400: Bad request
- 401: Unauthorized
- 404: Not found
- 500: Server error

## Development

```
# Run in development mode with hot reload  
npm run dev  
  
# Run tests  
npm test
```

## Security Features

- Password hashing using bcrypt
- JWT-based authentication
- Protected routes
- Input validation
- CORS enabled