

EVENT MANAGEMENT SERVICE SYSTEM

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I. Problem Statement

The complexity of large-scale events requires perfect timing and coordination across multiple specialized teams (Catering, Decorations, Entertainment, Logistics). The Event Manager needs a system that moves beyond manual checklists to provide **real-time visibility, automated scheduling, and guaranteed alerts** to ensure all preparations are on track and delivered on time.

Key Objectives

- Streamlined Planning:** Centralized Event Setup and detailed Task Assignment.
- Reliable Communication:** Automated, scheduled, and triggered notifications/reminders.
- Real-Time Monitoring:** Immediate alerts for delays or critical issues.

Key challenges include:

- Delayed communication to service teams
- No automated reminders for critical tasks
- Inability to track team progress
- No centralized notification mechanism
- No real-time alerting on issues or deadlines

II. Proposed Solution Architecture

Overview: The Reactive Stack (Play + Akka + Kafka)

Our solution utilizes a modern, reactive microservice architecture to achieve resilience, scalability, and responsiveness—essential qualities for a high-stakes event coordination system.

Component	Technology	Primary Role

API	Play Framework (REST API)	Event creation, task assignment, status updates, and manager.
Notification Engine	Akka Microservice (Actors/Scheduler)	Handles all asynchronous scheduling, business logic for reminders, and alert processing.
Messaging Bus	Apache Kafka	Decouples the system. Guarantees reliable delivery and ordering of all notifications and events.
Data Persistence	Database	Stores all event plans, task assignments, deadlines, and current status.

Play Framework Backend (Microservice 1)

- Provides REST APIs for event creation and task assignment
- Saves event/task information using Slick & database
- Schedules reminders using an internal Scheduler
- Publishes notifications/reminders to Kafka topics
- Handles all business logic

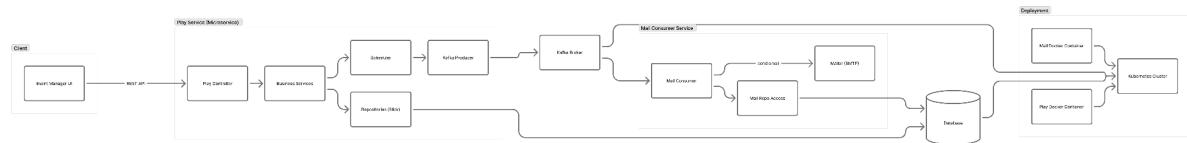
Kafka Message Broker

Acts as an asynchronous communication channel between the services.

3.3 Mail Consumer Service (Microservice 2)

- Consumes Kafka notifications
- Fetches event/task/team details from database
- Sends emails using SMTP
- Independent of Play service

High-Level Architectural Flow



1. **Manager Action:** Event Manager uses the **Play API** to create an event and assign tasks.
2. **Event Persistence:** Play writes the Task data (deadline, team, details) to the Database.
3. **Akka Trigger:** The Play service sends a message/event to the **Akka Service** (or Akka polls the DB) with the task ID and required notification schedule.
4. **Scheduling:** The **Akka Service** schedules future notifications (e.g., "1-day reminder," "2-hour reminder").
5. **Reliable Delivery:** When a notification is due, the Akka Actor **produces a message** into the appropriate **Kafka Topic** (e.g., **notifications-queue**).
6. **Final Dispatch:** A consumer (e.g., a simple microservice or another Akka component) reliably reads from Kafka and dispatches the message via Email.

III. Component Deep Dive and Responsibilities

1. Play Framework (Event Coordination API)

The Play application acts as the primary interface and API gateway.

- **Business Logic:** Validates data, calculates key dates, and persists core event information.
- **Asynchronous Hand-off:** After saving an event/task, it immediately sends an event to the Akka microservice to initiate the notification schedule.
- **Role-Based Access Control (RBAC):** Admin, Event Management, Team Member. Each role has separate access privileges.

2. Akka Microservice

This dedicated microservice ensures non-blocking, efficient handling of all time-sensitive logic.

- **Akka Scheduler:** Used to schedule all future reminders (1 Day Before, A Few Hours Before).
- **Task Actor:** A dedicated Akka Actor is created for each event. This actor is responsible for:
 - Managing the lifecycle of the event's notifications.
 - Canceling scheduled reminders if a task is marked **Completed** early.
 - Triggering an **Issue Alert** upon receiving a "Delayed" status from a team.
- **Kafka Producer:** Akka Actors produce formatted JSON messages into the Kafka queue for guaranteed delivery.

3. Apache Kafka (Message Queue)

Kafka acts as a durable, high-throughput buffer for all inter-service communication.

- **Decoupling:** Play doesn't need to know how notifications are sent; it just sends the data to Akka, which uses Kafka.
- **Reliable Delivery:** If the final Notification Dispatcher fails, the messages remain in the Kafka topic, ensuring delivery once the dispatcher recovers.
- **Notification Queueing:** All reminders and alerts are queued, smoothing out traffic spikes and preventing the Akka service from blocking on external HTTP calls (Email/SMS gateways).

IV. Requirement Mapping

This architecture directly addresses all stated system requirements:

Requirement	Implementation Strategy
1. Event Setup & Task Assignment	Play Framework: Dedicated REST endpoints for creating events and assigning tasks. Data is persisted in the database.
2a. Task Assignment Notification	Play → Akka → Kafka: Play triggers an immediate event to Akka. Akka produces a "Task Assigned" message to Kafka, which is instantly consumed and dispatched.
2b. Preparation Reminders	Akka Scheduler: The Akka Task Actor calculates the exact timing (1 day/few hours before) and schedules messages using the internal scheduler. When the time is due, it publishes to Kafka.
2c. Progress Check-In	Akka & Play: Play provides the <code>PUT /tasks/{id}/status</code> endpoint. Akka also periodically generates "Update Status" reminder messages via Kafka to prompt teams for updates.

2d. Event Day Alert	Akka Scheduler: A final, highly critical scheduled event in Akka to alert all parties on the event day morning.
2e. Issue Alert	Play → Akka: When a team reports a "Delay" status via the Play API, Play triggers a specific, high-priority message to the Akka Actor. The Actor immediately produces a high-priority "Issue Alert" message to a dedicated Kafka topic (or a priority queue).

Microservices Architecture Overview

1. Play Service (REST + Scheduler + Producer)

- Handles event creation and task assignment
- Triggers reminders at scheduled times
- Publishes Kafka messages (task assignment, reminder, alerts)

2. Kafka Broker

- Manages notification event streaming
- Provides decoupling between microservices

3. Mail Consumer Service

- Listens to Kafka topics
- Fetches required data from DB
- Sends emails using SMTP

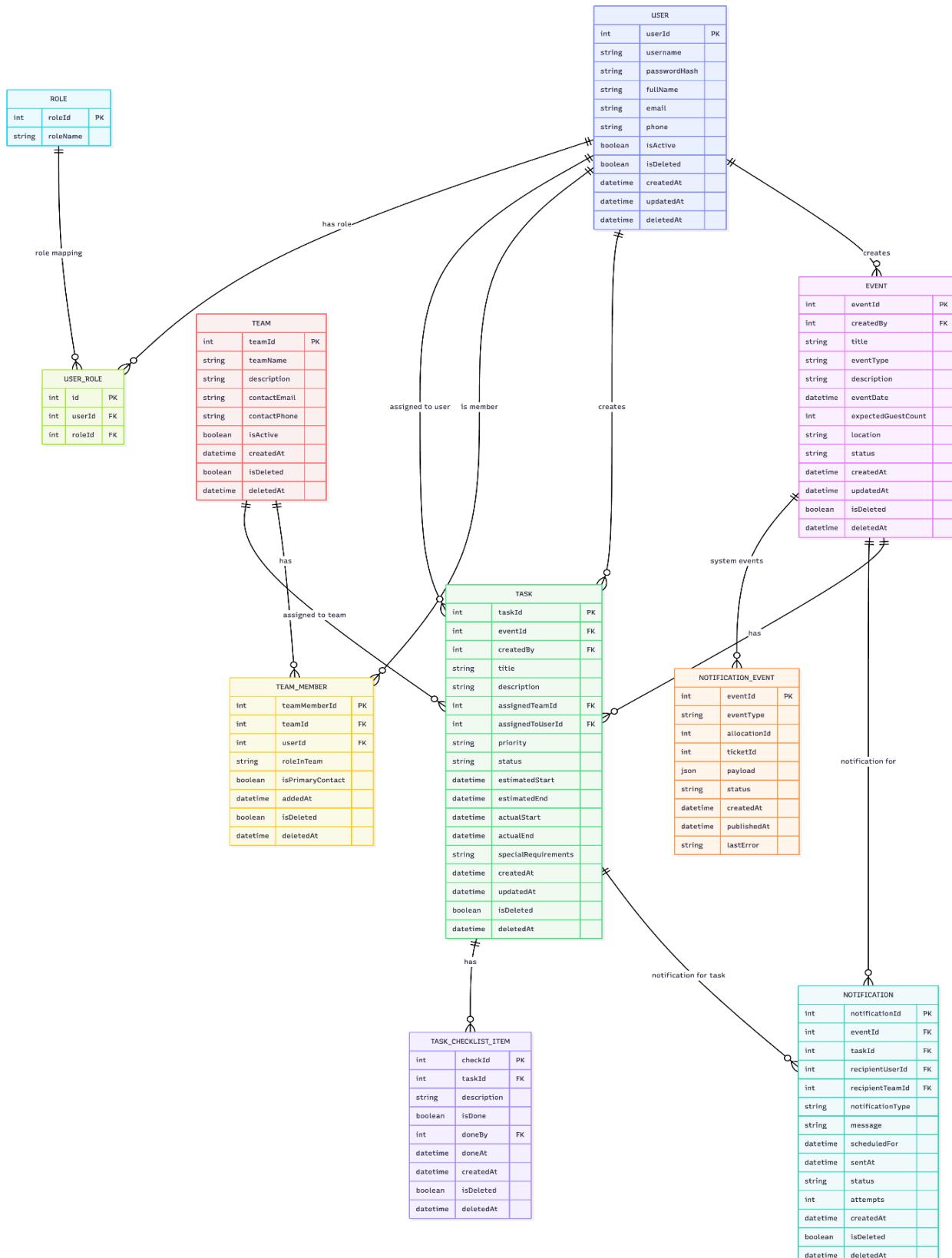
4. Database

- Stores event, tasks, team, schedule

5. Deployment Infrastructure

- Docker containers deployed in Kubernetes cluster

Database:



Sample Data:

{

```
"users": [
  {
    "user_id": 1,
    "username": "admin",
    "password_hash": "$2a$10$tiz4DMflpziftQDin9usteO8cVV9FWnQdw8XdL0Ruxpz.lqyNVEsi",
    "full_name": "Admin User",
    "email": "admin@example.com",
    "phone": "9876543210",
    "is_active": 1,
    "is_deleted": 0,
    "created_at": "2025-11-18 12:31:42",
    "updated_at": "2025-11-18 12:31:42",
    "deleted_at": null
  },
  {
    "user_id": 2,
    "username": "john.doe",
    "password_hash": "$2a$10$.Q9njxtaHZDWHfencv5rqOy6WzNbwEsp5l65/0TOeMnvqySx3p8aW",
    "full_name": "John Doe",
    "email": "john.doe@example.com",
    "phone": "9876543210",
    "is_active": 1,
    "is_deleted": 0,
    "created_at": "2025-11-18 14:44:33",
    "updated_at": "2025-11-18 14:44:33",
    "deleted_at": null
  },
  {
    "user_id": 3,
    "username": "maria.lee",
    "password_hash": "$2a$10$60ITwFik8bIV5TSf5KXYM.qbCWWC2IgDG.3LsdikPi8s0bvG/PEY2",
    "full_name": "Maria Lee",
    "email": "maria.lee@example.com",
    "phone": "9000011122",
    "is_active": 1,
    "is_deleted": 0,
    "created_at": "2025-11-18 14:56:51",
    "updated_at": "2025-11-18 14:56:51",
    "deleted_at": null
  }
]
```

```
"user_id": 4,  
"username": "sam.kumar",  
"password_hash": "$2a$10$hjcCTEvCd.mKGehYILmBBOPmG5ihomagaWPaNnFoh.VapFo4cOw3u",  
"full_name": "Sam Kumar",  
"email": "sam.kumar@example.com",  
"phone": "9000022233",  
"is_active": 1,  
"is_deleted": 0,  
"created_at": "2025-11-18 14:57:46",  
"updated_at": "2025-11-18 14:57:46",  
"deleted_at": null  
},  
{  
"user_id": 5,  
"username": "event.manager",  
"password_hash": "$2a$10$tiz4DMflpziftQDin9usteO8cVV9FWnQdw8XdL0Ruxpz.lqyNVEsi",  
"full_name": "Event Manager",  
"email": "manager@example.com",  
"phone": "9000011111",  
"is_active": 1,  
"is_deleted": 0,  
"created_at": "2025-11-20 17:06:11",  
"updated_at": "2025-11-20 17:06:11",  
"deleted_at": null  
},  
{  
"user_id": 6,  
"username": "catering.user",  
"password_hash": "$2a$10$tiz4DMflpziftQDin9usteO8cVV9FWnQdw8XdL0Ruxpz.lqyNVEsi",  
"full_name": "Catering Lead",  
"email": "catering@example.com",  
"phone": "9000022222",  
"is_active": 1,  
"is_deleted": 0,  
"created_at": "2025-11-20 17:06:11",  
"updated_at": "2025-11-20 17:06:11",  
"deleted_at": null  
},  
{  
"user_id": 7,  
"username": "decor.user",
```

```
"password_hash": "$2a$10$tiz4DMflpziftQDin9usteO8cVV9FWnQdw8XdL0Ruxpz.lqyNVEsi",
"full_name": "Decorations Lead",
"email": "decor@example.com",
"phone": "9000033333",
"is_active": 1,
"is_deleted": 0,
"created_at": "2025-11-20 17:06:11",
"updated_at": "2025-11-20 17:06:11",
"deleted_at": null
},
{
"user_id": 8,
"username": "entertain.user",
"password_hash": "$2a$10$tiz4DMflpziftQDin9usteO8cVV9FWnQdw8XdL0Ruxpz.lqyNVEsi",
"full_name": "Entertainment Lead",
"email": "entertain@example.com",
"phone": "9000044444",
"is_active": 1,
"is_deleted": 0,
"created_at": "2025-11-20 17:06:11",
"updated_at": "2025-11-20 17:06:11",
"deleted_at": null
},
{
"user_id": 9,
"username": "logistics.user",
"password_hash": "$2a$10$tiz4DMflpziftQDin9usteO8cVV9FWnQdw8XdL0Ruxpz.lqyNVEsi",
"full_name": "Logistics Lead",
"email": "logistics@example.com",
"phone": "9000055555",
"is_active": 1,
"is_deleted": 0,
"created_at": "2025-11-20 17:06:11",
"updated_at": "2025-11-20 17:06:11",
"deleted_at": null
}
],
"roles": [
{ "role_id": 4, "role_name": "Admin" },
{ "role_id": 6, "role_name": "CateringTeam" },
```

```
{ "role_id": 7, "role_name": "DecorationsTeam" },
{ "role_id": 8, "role_name": "EntertainmentTeam" },
{ "role_id": 5, "role_name": "EventManager" },
{ "role_id": 2, "role_name": "InventoryTeam" },
{ "role_id": 9, "role_name": "LogisticsTeam" },
{ "role_id": 3, "role_name": "MaintenanceTeam" },
{ "role_id": 1, "role_name": "ReceptionStaff" }
],
```

```
"user_roles": [
  { "id": 1, "user_id": 1, "role_id": 4 },
  { "id": 2, "user_id": 2, "role_id": 1 },
  { "id": 3, "user_id": 3, "role_id": 2 },
  { "id": 4, "user_id": 4, "role_id": 3 },
  { "id": 5, "user_id": 5, "role_id": 5 },
  { "id": 6, "user_id": 6, "role_id": 6 },
  { "id": 7, "user_id": 7, "role_id": 7 },
  { "id": 8, "user_id": 8, "role_id": 8 },
  { "id": 9, "user_id": 9, "role_id": 9 }
],
```

```
"teams": [
  {
    "team_id": 1,
    "team_name": "Catering Team",
    "description": "Food & beverage services for events",
    "contact_email": "catering@example.com",
    "contact_phone": "9000022222",
    "is_active": 1,
    "is_deleted": 0,
    "created_at": "2025-11-20 17:09:10",
    "deleted_at": null
  },
  {
    "team_id": 2,
    "team_name": "Decorations Team",
    "description": "Stage & venue decor and florals",
    "contact_email": "decor@example.com",
    "contact_phone": "9000033333",
    "is_active": 1,
    "is_deleted": 0,
  }
]
```

```
"created_at": "2025-11-20 17:09:10",
"deleted_at": null
},
{
"team_id": 3,
"team_name": "Entertainment Team",
"description": "DJ, AV and performers",
"contact_email": "entertain@example.com",
"contact_phone": "9000044444",
"is_active": 1,
"is_deleted": 0,
"created_at": "2025-11-20 17:09:10",
"deleted_at": null
},
{
"team_id": 4,
"team_name": "Logistics Team",
"description": "Transport, guest handling, setup/teardown",
"contact_email": "logistics@example.com",
"contact_phone": "9000055555",
"is_active": 1,
"is_deleted": 0,
"created_at": "2025-11-20 17:09:10",
"deleted_at": null
}
],
"team_members": [
{
"team_member_id": 1,
"team_id": 1,
"user_id": 6,
"role_in_team": "Team Lead",
"is_primary_contact": 1,
"added_at": "2025-11-20 17:09:18",
"deleted_at": null,
"is_deleted": 0
},
{
"team_member_id": 2,
"team_id": 2,
```

```
"user_id": 7,  
"role_in_team": "Team Lead",  
"is_primary_contact": 1,  
"added_at": "2025-11-20 17:09:18",  
"deleted_at": null,  
"is_deleted": 0  
},  
{  
"team_member_id": 3,  
"team_id": 3,  
"user_id": 8,  
"role_in_team": "Team Lead",  
"is_primary_contact": 1,  
"added_at": "2025-11-20 17:09:18",  
"deleted_at": null,  
"is_deleted": 0  
},  
{  
"team_member_id": 4,  
"team_id": 4,  
"user_id": 9,  
"role_in_team": "Team Lead",  
"is_primary_contact": 1,  
"added_at": "2025-11-20 17:09:18",  
"deleted_at": null,  
"is_deleted": 0  
}  
],
```

```
"events": [  
{  
"event_id": 1,  
"created_by": 5,  
"title": "John & Maria Wedding",  
"event_type": "Wedding",  
"description": "Full wedding planning and coordination",  
"event_date": "2025-12-25 17:00:00",  
"expected_guest_count": 300,  
"location": "Blue Diamond Hall",  
"status": "Planned",  
"is_deleted": 0,
```

```
"created_at": "2025-11-20 17:09:28",
"updated_at": "2025-11-20 17:09:28",
"deleted_at": null
},
{
  "event_id": 2,
  "created_by": 1,
  "title": "Diwali Corporate Celebration",
  "event_type": "Corporate",
  "description": "Annual corporate Diwali celebration event",
  "event_date": "2025-11-25 23:30:00",
  "expected_guest_count": 300,
  "location": "Hyderabad Convention Center",
  "status": "planned",
  "is_deleted": 0,
  "created_at": "2025-11-20 23:13:01",
  "updated_at": "2025-11-20 23:13:01",
  "deleted_at": null
}
// ...continue remaining events (3 to 16)
],
```

```
"tasks": [
  {
    "task_id": 1,
    "event_id": 1,
    "created_by": 5,
    "title": "Catering Preparation",
    "description": "Prepare dinner & beverage service; final menu",
    "assigned_team_id": 1,
    "assigned_to_user_id": 6,
    "priority": "High",
    "status": "Assigned",
    "estimated_start": "2025-12-25 10:00:00",
    "estimated_end": "2025-12-25 16:00:00",
    "actual_start": null,
    "actual_end": null,
    "special_requirements": "Vegetarian buffet & allergy notes",
    "is_deleted": 0,
    "created_at": "2025-11-20 17:09:35",
    "updated_at": "2025-11-20 17:09:35",
  }
]
```

```

    "deleted_at": null
  },
  {
    "task_id": 7,
    "event_id": 2,
    "created_by": 1,
    "title": "Stage Decoration Setup",
    "description": "Setup stage flowers, lights & backdrop",
    "assigned_team_id": 2,
    "assigned_to_user_id": null,
    "priority": "High",
    "status": "assigned",
    "estimated_start": "2025-11-24 14:30:00",
    "estimated_end": "2025-11-24 18:30:00",
    "actual_start": null,
    "actual_end": null,
    "special_requirements": "White & Gold Theme",
    "is_deleted": 0,
    "created_at": "2025-11-20 23:20:00",
    "updated_at": "2025-11-20 23:20:00",
    "deleted_at": null
  }
],
"checklist_items": [
  {
    "check_id": 1, "task_id": 1, "description": "Confirm menu & quantities with client", "is_done": 0, "done_by": null, "done_at": null, "created_at": "2025-11-20 17:09:45"
  },
  {
    "check_id": 2, "task_id": 1, "description": "Arrange service staff and schedule", "is_done": 0, "done_by": null, "done_at": null, "created_at": "2025-11-20 17:09:45"
  },
  {
    "check_id": 3, "task_id": 2, "description": "Install stage backdrop & lighting", "is_done": 0, "done_by": null, "done_at": null, "created_at": "2025-11-20 17:09:45"
  }
],
"notifications": [
  {
    "notification_id": 1,
    "event_id": 2,
    "task_id": 7,
    "recipient_user_id": null,
    "recipient_team_id": 2,
    "notification_type": "task_assignment",
    "message": "Task assigned: Stage Decoration Setup. Start: 2025-11-24T09:00:00Z",
    "scheduled_for": "2025-11-20 23:20:00",
    "sent_at": "2025-11-21 00:22:51"
  }
]
```

```

    "status": "sent",
    "attempts": 0,
    "created_at": "2025-11-20 23:20:00",
    "deleted_at": null,
    "is_deleted": 0
  },
],
"event_queue": [
  {
    "event_id": 37,
    "event_type": "EVENT",
    "allocation_id": null,
    "ticket_id": null,
    "payload": {
      "title": "Annual Leadership Summit",
      "eventId": 3,
      "createdBy": 1,
      "eventDate": "2025-12-05T10:00:00Z",
      "eventType": "CREATE"
    },
    "status": "PUBLISHED",
    "created_at": "2025-11-21 06:04:31",
    "published_at": "2025-11-21 11:34:31",
    "last_error": null
  }
]
}

```

Deployment Plan:

Environment Setup:

Component	Technology
Backend	Scala + Play

Actor System	Akka
Event Bus	Kafka
Database	MySQL
Build Tool	SBT
Deployment Container	Docker

Steps

1. Build the application

`sbt clean compile stage`

2. Containerize

Dockerfile

`docker build -t event-coordination.`

3. Deploy Kafka

Using docker-compose or managed Kafka.

`docker-compose up -d kafka zookeeper`

4. Deploy Database

`docker run -p 3306:3306 --name events-db mysql`

5. Run the Application

`docker run -p 9000:9000 event-coordination`

Output:

HTTP <http://0.0.0.0:9001/api/login>

POST <http://0.0.0.0:9001/api/login>

Body [Docs](#) [Params](#) [Authorization](#) [Headers \(9\)](#) [Body](#) [Scripts](#) [Settings](#) [Cookies](#) [Save](#) [Share](#) [Send](#)

none form-data x-www-form-urlencoded raw binary GraphQL JSON [Beautify](#)

```
1 {  
2   "username": "admin",  
3   "password": "password@123"  
4 }
```

Body Cookies Headers (3) Test Results [Save](#) [Share](#) [Send](#) 200 OK 674 ms 344 B [Beautify](#)

{ } JSON [Preview](#) [Visualize](#)

```
1 {  
2   "token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.  
     eyJzdWIiOiIxIiwiaXNzIjoiZXZlbnQtbWFuYWdlbWVudCIsImV4cCI6MTc2Mzg4MTc4OSwiaWF0IjoxNzYzNzk1Mzg5fQ.",  
3   "userId": 1,  
4   "username": "admin",  
5   "expiresIn": 86400  
6 }
```

HTTP <http://0.0.0.0:9001/api/events>

POST <http://0.0.0.0:9001/api/events>

Body [Docs](#) [Params](#) [Authorization](#) [Headers \(9\)](#) [Body](#) [Scripts](#) [Settings](#) [Cookies](#) [Save](#) [Share](#) [Send](#)

none form-data x-www-form-urlencoded raw binary GraphQL JSON [Beautify](#)

```
1 {  
2   "createdBy": 3,  
3   "title": "AI & ML Innovators Summit 2026",  
4   "eventType": "Conference",  
5   "description": "A global summit focused on AI, machine learning breakthroughs, responsible AI, and enterprise adoption.",  
6   "eventDate": "2026-06-10T09:30:00Z",  
7   "expectedGuestCount": 2000,  
8   "location": "Hyderabad Convention Center",  
9   "status": "Scheduled",  
10  "createdAt": "2025-11-22T11:00:00Z",  
11  "updatedAt": "2025-11-22T11:00:00Z",  
12  "isDeleted": false,  
13  "deletedAt": null  
14 }
```

Body Cookies Headers (3) Test Results [Save](#) [Share](#) [Send](#) 201 Created 1.21 s 127 B [Beautify](#)

{ } JSON [Preview](#) [Visualize](#)

```
1 {  
2   "eventId": 16  
3 }
```

```

[akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by json={"eventType":"CREATE","eventId":16,"title":"AI & ML Innovators Summit 2026","description":"Executive leadership annual meeting with keynote speakers","location":"Bangalore Tech Park Auditorium","expectedGuestCount":150,"status":"planned","createdDate": "2025-12-05T15:30:00Z","updatedDate": "2025-11-21T06:04:31Z","isDeleted": false}
[akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by key='Some(EVENT)' -> routeKey='EVENT' (offset=13)
[akka://EventManagementSystem/user/event-actor] [EventActor] Received CREATE payload: {"eventType":"CREATE","eventId":16,"title":"AI & ML Innovators Summit 2026","description":"Executive leadership annual meeting with keynote speakers","location":"Bangalore Tech Park Auditorium","expectedGuestCount":150,"status":"planned","createdDate": "2025-12-05T15:30:00Z","updatedDate": "2025-11-21T06:04:31Z","isDeleted": false}
[akka://EventManagementSystem/user/event-actor] [EventActor] Email sent to admin@example.com role=Manager eventId=16

```

eventManagementConsumer > src > main > resources > application.conf Amazon Q AWS: No credentials selected [T] [C] 5:1 (144 chars, 6 line breaks) LF UTF-8 4 spaces [I]

[Event Created] AI & ML Innovators Summit 2026

12:40 PM (2 hours ago)



to admin

[Event Created] AI & ML Innovators Summit 2026

Title: AI & ML Innovators Summit 2026

Type: Conference

Date: 2026-06-10 15:00:00 IST

Location: Hyderabad Convention Center

Guests: 2000

Performed by: Admin User

SentAt: 2025-11-22 12:40:13 IST

HTTP <http://0.0.0.0:9001/api/events/3>

GET <http://0.0.0.0:9001/api/events/3>

Docs Params Authorization Headers (9) Body Scripts Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```

1 {
2   "eventId": 3,
3   "title": "Annual Leadership Summit",
4   "eventType": "Corporate",
5   "eventDate": "2025-12-05T15:30:00",
6   "location": "Bangalore Tech Park Auditorium",
7   "expectedGuestCount": 150,
8   "status": "planned"
9 }
10

```

200 OK • 863 ms • 480 B

Body Cookies Headers (3) Test Results

{ } JSON

```

1 {
2   "eventId": 3,
3   "createdBy": 1,
4   "title": "Annual Leadership Summit",
5   "eventType": "Corporate",
6   "description": "Executive leadership annual meeting with keynote speakers",
7   "eventDate": "2025-12-05T10:00:00Z",
8   "expectedGuestCount": 150,
9   "location": "Bangalore Tech Park Auditorium",
10  "status": "planned",
11  "createdAt": "2025-11-21T06:04:31Z",
12  "updatedAt": "2025-11-21T06:04:31Z",
13  "isDeleted": false
14 }

```

HTTP <http://0.0.0.0:9001/api/events>

GET <http://0.0.0.0:9001/api/events> **Send**

Docs Params Authorization • Headers (9) **Body** • Scripts Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary GraphQL **JSON** **Beautify**

```

1 {
2   "eventId": 3,
3   "title": "Annual Leadership Summit",
4   "eventType": "Corporate",
5   "eventDate": "2025-12-05T15:30:00",
6   "location": "Bangalore Tech Park Auditorium",
7   "expectedGuestCount": 150,
8   "status": "planned"
9 }

```

Body Cookies Headers (3) Test Results |

200 OK • 772 ms • 6.03 KB •

{ } JSON ▾ ▶ Preview Visualize |

```

1 [
2   {
3     "eventId": 16,
4     "createdBy": 1,
5     "title": "AI & ML Innovators Summit 2026",
6     "eventType": "Conference",
7     "description": "A global summit focused on AI, machine learning breakthroughs, responsible AI, and enterprise adoption.",
8     "eventDate": "2026-06-10T09:30:00Z",
9     "expectedGuestCount": 2000,
10    "location": "Hyderabad Convention Center",
11    "status": "planned",
12    "createdAt": "2025-11-22T07:10:10Z",
13    "updatedAt": "2025-11-22T07:10:10Z",
14    "isDeleted": false
15  },
16  {
17    "eventId": 15,
18    "createdBy": 1,

```

⋮

HTTP <http://0.0.0.0:9001/api/events/3>

PUT <http://0.0.0.0:9001/api/events/3> **Send**

Docs Params Authorization • Headers (9) **Body** • Scripts Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary GraphQL **JSON** **Beautify**

```

1 {
2   "title": "Annual Leadership Summit - Revised",
3   "description": "Updated keynote schedule.",
4   "location": "Bangalore Convention Center",
5   "status": "updated"
6 }

```

Body Cookies Headers (3) Test Results |

200 OK • 1.02 s • 128 B •

{ } JSON ▾ ▶ Preview Visualize |

```

1 {
2   "status": "updated"
3 }

```

The screenshot shows the Postman application interface. At the top, the URL `http://0.0.0.0:9001/api/teams/2` is entered in the address bar, along with a `HTTP` protocol indicator. To the right of the address bar are buttons for `Save`, `Share`, and a copy icon. Below the address bar, the method `GET` is selected, and the full URL `http://0.0.0.0:9001/api/teams/2` is displayed again. The `Body` tab is active, showing options for `none`, `form-data`, `x-www-form-urlencoded`, `raw` (which is selected), `binary`, and `GraphQL`. The `JSON` button is also present. On the far right, there are `Cookies` and `Beautify` buttons. The main body area contains the text `1 ^nP to Ask AI`. Below this, the response section is visible, showing a `200 OK` status with a response time of `809 ms` and a size of `331 B`. The `Body` tab is selected, displaying the JSON response:

```
{ } JSON ▾ > Preview ⌂ Visualize ▾
```

```
1 {  
2   "teamId": 2,  
3   "teamName": "Decorations Team",  
4   "description": "Stage & venue decor and florals",  
5   "contactEmail": "decor@example.com",  
6   "contactPhone": "9000033333",  
7   "isActive": true,  
8   "createdAt": "2025-11-20T11:39:10Z",  
9   "isDeleted": false  
10 }
```

The screenshot shows the Postman application interface. At the top, the URL `http://0.0.0.0:9001/api/teams` is entered in the address bar, along with the method `GET`. To the right are buttons for `Save`, `Share`, and a copy icon. Below the address bar, the response status is shown as `200 OK` with a green background, indicating a successful request. The response body is displayed as JSON, showing two team objects:

```
[{"teamId": 1, "teamName": "Catering Team", "description": "Food & beverage services for events", "contactEmail": "catering@example.com", "contactPhone": "9000022222", "isActive": true, "createdAt": "2025-11-20T11:39:10Z", "isDeleted": false}, {"teamId": 2, "teamName": "Decorations Team", "description": "Stage & venue decor and florals", "contactEmail": "decor@example.com", "contactPhone": "9000033333", "isActive": true, "createdAt": "2025-11-20T11:39:10Z"},]
```

The interface includes tabs for `Body`, `Cookies`, `Headers (3)`, and `Test Results`. On the right side, there are various sharing and export options.

HTTP <http://0.0.0.0:9001/api/teams/4>

PUT <http://0.0.0.0:9001/api/teams/4>

Body [Send](#)

Docs Params Authorization Headers (9) Body Scripts Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```

1 {
2   "teamName": "Logistics & Operations Team",
3   "description": "Updated logistics workload",
4   "contactEmail": "logistics.ops@example.com"
5 }
6

```

Body Cookies Headers (3) Test Results | [Copy](#)

200 OK 859 ms 128 B [View Response](#) [Copy](#) [Share](#) [Link](#)

{ } JSON ▾ ▶ Preview [Visualize](#) | [Copy](#)

```

1 {
2   "status": "updated"
3 }

```

POST <http://0.0.0.0:9001/api/teams>

Body [Send](#)

Docs Params Authorization Headers (9) Body Scripts Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```

1 {
2   "teamName": "Security Team",
3   "description": "Handles guest security and emergency response",
4   "contactEmail": "security@example.com",
5   "contactPhone": "9000066666"
6 }
7

```

Body Cookies Headers (3) Test Results | [Copy](#)

201 Created 2.74 s 125 B [View Response](#) [Copy](#) [Share](#) [Link](#)

{ } JSON ▾ ▶ Preview [Visualize](#) | [Copy](#)

```

1 {
2   "teamId": 5
3 }

```

ka-consumer-actor] [KafkaConsumerActor] Routing by json={"eventType":"CREATE","teamId":5,"teamName":"Security Team","createdBy":1,"createdAt":"2025-11-22T09:21:59.57509Z"}
ka-consumer-actor] [KafkaConsumerActor] Routing by key='Some(TEAM)' -> routeKey='TEAM' (offset=0)
m-actor] [TeamActor] CREATE payload: {"eventType":"CREATE","teamId":5,"teamName":"Security Team","createdBy":1,"createdAt":"2025-11-22T09:21:59.575095Z"}
m-actor] [TeamActor] notifyTeamEvent preparing action=CREATE team=Security Team recipients=security@example.com
m-actor] [TeamActor] Email sent to=security@example.com action=CREATE team=

managementConsumer > src > main > resources > application.conf Amazon Q AWS: No credentials selected [T](#) [C](#) 5:1 (144 chars, 6 line breaks) LF UTF-8 [4 spaces](#) [①](#)

[Team Created] Security Team

S to security ▾

2:52 PM (0 minutes ago)



```
Action : CREATE
Team : Security Team
TeamId : 5
By : Admin User
At : 2025-11-22 14:52:03 IST
```

Message : CREATE performed on team Security Team

POST http://0.0.0.0:9001/api/team-members

☰ Docs Params Authorization ● Headers (9) ● Body Scripts Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON ▼ Beautify

```

1 {
2   "teamId": 1,
3   "userId": 6,
4   "roleInTeam": "Senior Chef",
5   "isPrimaryContact": true
6 }
7

```

Body Cookies Headers (3) Test Results ↻

201 Created 1.06 s 131 B 🌐 ☰

[] JSON ▶ Preview ☒ Visualize ▼ ☰ | ☰ | 🔍 | 🗑 | 🌐 | ⚙ | ⌂

```

1 {
2   "teamMemberId": 5
3

```

```

kafka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by json={"eventType":"CREATE","teamId":5,"teamName":"Security Team","createdBy":1,"c
kafka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by key='Some(TEAM)' -> routeKey='TEAM' (offset=0)
kafka://EventManagementSystem/user/team-actor] [TeamActor] CREATE payload: {"eventType":"CREATE","teamId":5,"teamName":"Security Team","createdBy":1,"createdAt":"2025-11-
kafka://EventManagementSystem/user/team-actor] [TeamActor] notifyTeamEvent preparing action:CREATE team=Security Team recipients=security@example.com
kafka://EventManagementSystem/user/team-actor] [TeamActor] Email sent to=security@example.com action=CREATE team=5
kafka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by json={"eventType":"TEAM_MEMBER_ADDED","teamMemberId":5,"teamId":1,"userId":6,"add
kafka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by key='Some(Team_MEMBER_ADDED)' -> routeKey='TEAM_MEMBER_ADDED' (offset=1)
kafka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Unknown routeKey='TEAM_MEMBER_ADDED' - skipping event (offset=1)

agentConsumer > src > main > resources > application.conf
Amazon Q AWS: No credentials selected [T] (O) 25:42 LF UTF-8 ⌂ 4 spaces ⌂ ⓘ

```

POST http://0.0.0.0:9001/api/team-members/remove

Send

Docs Params Authorization Headers (9) Body Scripts Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {  
2   "teamMemberId": 3,  
3   "removedBy": 4  
4 }  
5
```

Body Cookies Headers (3) Test Results

200 OK 929 ms 128 B

{ } JSON Preview Visualize

```
1 {  
2   "status": "removed"  
3 }
```

patcher-7 [akka://EventManagementSystem/user/team-actor] [teamActor] notifyTeamEvent preparing action=CREATE team=Security team recipients=security@example.com
patcher-7 [akka://EventManagementSystem/user/team-actor] [TeamActor] Email sent to:security@example.com action=CREATE team=5
patcher-8 [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by json={"eventType":"TEAM_MEMBER_ADDED","teamMemberId":5,"teamId":1,"team":5}
patcher-8 [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by key='Some(TEAM_MEMBER_ADDED)' -> routeKey='TEAM_MEMBER_ADDED' (offset=1)
patcher-8 [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Unknown routeKey=TEAM_MEMBER_ADDED - skipping event (offset=1)
patcher-6 [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by json={"eventType":"TEAM_MEMBER_REMOVED","teamMemberId":3,"removedBy":4}
patcher-6 [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by key='Some(TEAM_MEMBER_REMOVED)' -> routeKey='TEAM_MEMBER_REMOVED' (offset=1)
patcher-6 [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Unknown routeKey=TEAM_MEMBER_REMOVED - skipping event (offset=14)

EventManagementConsumer > src > main > scala > actors Amazon Q AWS: No credentials selected 332:27 (15080 chars, 357 line breaks) LF UTF-8 2 spaces

POST http://0.0.0.0:9001/api/team-members/:teamMemberId/restore

Send

Docs Params Authorization Headers (9) Body Scripts Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {  
2   "restoredBy": 4  
3 }  
4
```

Body Cookies Headers (3) Test Results

200 OK 945 ms 129 B

{ } JSON Preview Visualize

```
1 {  
2   "status": "restored"  
3 }
```

POST http://0.0.0.0:9001/api/tasks

Send

Docs Params Authorization Headers (9) Body Scripts Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```

1 {
2   "eventId": 3,
3   "createdBy": 4,
4   "title": "Stage LED Wall Setup",
5   "description": "Install and configure LED wall for keynote session",
6   "assignedTeamId": 3,
7   "assignedUserId": 8,
8   "priority": "High",
9   "status": "Assigned",
10  "estimatedStart": "2025-12-05T08:00:00Z",
11  "estimatedEnd": "2025-12-05T10:30:00Z",
12  "specialRequirements": "4K video playback, HDMI splitter"
13 }
14

```

Body Cookies Headers (3) Test Results

201 Created 1.35 s 125 B

{ } JSON Preview Visualize

```

1 {
2   "taskId": 8
3 }

```

```

patcher-6] [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] unknown routeKey=TEAM_MEMBER_REMOVED - skipping event (offset=14)
patcher-8] [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by json={"eventType":"TEAM_MEMBER_RESTORED","teamMemberId":3,"restoredE
patcher-8] [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by key='Some(TEAM_MEMBER_RESTORED)' -> routeKey='TEAM_MEMBER_RESTORED'
patcher-8] [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Unknown routeKey=TEAM_MEMBER_RESTORED - skipping event (offset=2)
patcher-6] [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by json={"eventType":"CREATE","taskId":8,"eventId":3,"createdBy":1,"ass
patcher-6] [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] Routing by key='Some(TASK)' -> routeKey='TASK' (offset=3)
patcher-6] [akka://EventManagementSystem/user/task-actor] [TaskActor] Received CREATE payload: {"eventType":"CREATE","taskId":8,"eventId":3,"createdBy":1,"assignedTeam
patcher-8] [akka://EventManagementSystem/user/task-actor] [TaskActor] Prepared email -> to=[entertain@example.com] subject='[Task Created] Stage LED Wall Setup' preview

```

ManagementConsumer > src > main > scala > actors

Amazon Q AWS: No credentials selected T 332:27 (15080 chars, 357 line breaks) LF UTF-8 2 spaces

1 of 894

[Task Created] Stage LED Wall Setup



my@gmail.com
to entertain

3:08 PM (0 minutes ago)



[Task Created] Stage LED Wall Setup

Title: Stage LED Wall Setup

Priority: High

Status: assigned

Assigned To: Entertainment Lead

Message: (no message)

Performed by: System

SentAt: 2025-11-22 15:08:54 IST

PUT http://0.0.0.0:9001/api/tasks/:id/status

Body (raw JSON)

```

1 {
2   "status": "InProgress",
3   "actualStart": "2025-12-05T08:10:00Z"
4 }
5

```

200 OK

```

1 {
2   "status": "updated"
3 }

```

[Task Status] Stage LED Wall Setup

vaddisanjeevkumar9676@gmail.com
to entertain

3:14 PM (0 minutes ago)

[Task Status] Stage LED Wall Setup

Title: Stage LED Wall Setup

Priority: High

Status: InProgress

Assigned To: Entertainment Lead

Message: (no message)

Performed by: Admin User

SentAt: 2025-11-22 15:14:20 IST

Reply Forward

```

SLF4J(W): See https://www.slf4j.org/codes.html#noProviders for further details.
[INFO] [11/22/2025 15:14:18.233] [EventManagementSystem-akka.actor.default-dispatcher-5] [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] F
[INFO] [11/22/2025 15:14:18.251] [EventManagementSystem-akka.actor.default-dispatcher-5] [akka://EventManagementSystem/user/kafka-consumer-actor] [KafkaConsumerActor] F
[INFO] [11/22/2025 15:14:18.255] [EventManagementSystem-akka.actor.default-dispatcher-5] [akka://EventManagementSystem/user/task-actor] [TaskActor] Received STATUS payload
[INFO] [11/22/2025 15:14:18.255] [EventManagementSystem-akka.actor.default-dispatcher-6] [akka://EventManagementSystem/user/task-actor] [TaskActor] Prepared email -> to
Task ID : 8
Title : Stage LED Wall Setup
Event ID : 3
AssignedTo : 8
AssignedTeam: 3

```

HTTP <http://0.0.0.0:9001/api/tasks/:id>

PUT <http://0.0.0.0:9001/api/tasks/:id>

Save Share ↻

Send ↻

Docs Params Authorization Headers (9) Body Scripts Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {
2   "title": "Stage LED Wall Setup - Revised",
3   "priority": "Medium",
4   "estimatedEnd": "2025-12-05T11:00:00Z",
5   "specialRequirements": "Updated visuals provided by client"
6 }
7
```

Body Cookies Headers (3) Test Results ⏱

200 OK • 912 ms • 128 B • ⓘ

{ } JSON ▾ Preview Visualize ▾

```
1 {
2   "status": "updated"
3 }
```

HTTP <http://0.0.0.0:9001/api/tasks/2>

GET <http://0.0.0.0:9001/api/tasks/2>

Save Share ↻

Send ↻

Docs Params Authorization Headers (9) Body Scripts Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {
2   "title": "Stage LED Wall Setup - Revised",
3   "priority": "Medium",
4   "estimatedEnd": "2025-12-05T11:00:00Z",
5   "specialRequirements": "Updated visuals provided by client"
6 }
7
```

Body Cookies Headers (3) Test Results ⏱

200 OK • 728 ms • 516 B • ⓘ

{ } JSON ▾ Preview Visualize ▾

```
1 {
2   "taskId": 2,
3   "eventId": 1,
4   "createdBy": 5,
5   "title": "Hall Decoration",
6   "description": "Stage, seating, and floral arrangements",
7   "assignedTeamId": 2,
8   "assignedToUserId": 7,
9   "priority": "High",
10  "status": "Assigned",
11  "estimatedStart": "2025-12-25T03:30:00Z",
12  "estimatedEnd": "2025-12-25T08:30:00Z",
13  "specialRequirements": "Pink & white theme",
14  "createdAt": "2025-11-20T11:39:35Z",
15  "updatedAt": "2025-11-20T11:39:35Z"
```

HTTP <http://0.0.0.0:9001/api/events/1/tasks>

GET <http://0.0.0.0:9001/api/events/1/tasks>

Send

Docs Params Authorization Headers (7) Body Scripts Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON Beautify

1 ^vP to Ask AI

Body Cookies Headers (3) Test Results

200 OK 698 ms 1.7 KB

{ } JSON Preview Visualize

```
12 "estimatedStart": "2025-12-25T04:30:00Z",
13 "estimatedEnd": "2025-12-25T10:30:00Z",
14 "specialRequirements": "Vegetarian buffet & allergy notes",
15 "createdAt": "2025-11-20T11:39:35Z",
16 "updatedAt": "2025-11-20T11:39:35Z",
17 "isDeleted": false
18 },
19 {
20   "taskId": 2,
21   "eventId": 1,
22   "createdBy": 5,
23   "title": "Hall Decoration",
24   "description": "Stage, seating, and floral arrangements",
25   "assignedTeamId": 2,
26   "assignedToUserId": 7,
27   "priority": "High",
28   "status": "Assigned",
29   "estimatedStart": "2025-12-25T03:30:00Z",
30   "estimatedEnd": "2025-12-25T08:30:00Z",
31 }
```

Runner Start Browser Cookies Vault Touch