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Subject: OOP

Potential Objects and Classes

According to the project domain, we have determined the following Objects and Classes:
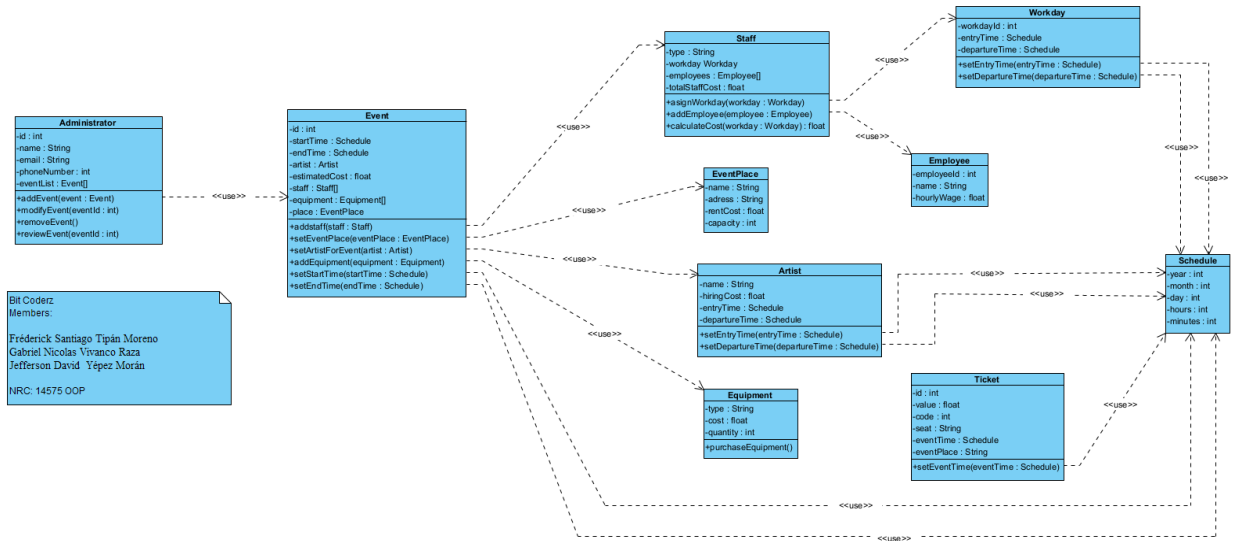
✅ Object   ❌ Class   ⬛ Neither

NAME	TYPE
Event	❌
Place	❌
Ticket	❌
Lightning	✅
Equipment	❌
Budget	⬛
Employee	❌
Inflatable games	✅
Guests	✅
Report	✅
Administrator	❌
Reservation	✅

Invitation	✅
Sponsor	◼
Transport	◼
Schedule	❌
Photos	✅
Internet	◼
Stage	✅
Furniture	✅
Artist	❌
First Aid Kit	✅
Signaling	✅
Experience	◼
Staff	❌
Security	✅
Permissions	✅
Workday	❌
Snacks seller	✅
Decorations	✅

UML DIAGRAM

UML class diagram — classes: Administrator, Event, Staff, Workday, Employee, EventPlace, Artist, Schedule, Ticket, Equipment.

Administrator
- -id : int
- -name : String
- -email : String
- -phoneNumber : int
- -eventList : Event[]
- +addEvent(event : Event)
- +modifyEvent(eventId : int)
- +removeEvent()
- +reviewEvent(eventId : int)

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Event
- -id : int
- -startTime : Schedule
- -endTime : Schedule
- -artist : Artist
- -estimatedCost : float
- -staff : Staff[]
- -equipment : Equipment[]
- -place : EventPlace
- +addStaff(staff : Staff)
- +setEventPlace(eventPlace : EventPlace)
- +setArtistForEvent(artist : Artist)
- +addEquipment(equipment : Equipment)
- +setStartTime(startTime : Schedule)
- +setEndTime(endTime : Schedule)

Staff
- -type : String
- -workday Workday
- -employees : Employee[]
- -totalStaffCost : float
- +asignWorkday(workday : Workday)
- +addEmployee(employee : Employee)
- +calculateCost(workday : Workday) : float

Workday
- -workdayId : int
- -entryTime : Schedule
- -departureTime : Schedule
- +setEntryTime(entryTime : Schedule)
- +setDepartureTime(departureTime : Schedule)

EventPlace
- -name : String
- -adress : String
- -rentCost : float
- -capacity : int

Employee
- -employeeId : int
- -name : String
- -hourlyWage : float

Artist
- -name : String
- -hiringCost : float
- -entryTime : Schedule
- -departureTime : Schedule
- +setEntryTime(entryTime : Schedule)
- +setDepartureTime(departureTime : Schedule)

Equipment
- -type : String
- -cost : float
- -quantity : int
- +purchaseEquipment()

Ticket
- -id : int
- -value : float
- -code : int
- -seat : String
- -eventTime : Schedule
- -eventPlace : String
- +setEventTime(eventTime : Schedule)

Schedule
- -year : int
- -month : int
- -day : int
- -hours : int
- -minutes : int

```java
// Administrator.java
public class Administrator{
    private int id;
    private String name;
    private String email;
    private int phoneNumber;

    public void addEvent(Event event);
    public void modifyEvent(int eventId);
    public void removeEvent();
    public void reviewEvent(int eventId);
}
```

```java
// Event.java
public class Event{
    private int id;
    private Schedule startTime;
    private Schedule endTime;
    private Artist artist;
    private float estimatedCost;
    private Staff[] staff;
    private Equipment[] equipment;
    private EventPlace place;

    public void addStaff(Staff staff);
    public void setEventPlace(EventPlace eventPlace);
    public void setArtistForEvent(Artist artist);
    public void addEquipment(Equipment equipment);
    public void setStartTime(Schedule startTime);
    public void setEndTime(Schedule endTime);
}
```

```java
// Workday.java
public class Workday{
    private int workdayId;
    private Schedule entryTime;
    private Schedule departureTime;

    public void setEntryTime(Schedule entryTime);
    public void setDepartureTime(Schedule departureTime);
}
```

```java
// Ticket.java
public class Ticket{
    private int id;
    private float value;
    private int code;
    private String seat;
    private Schedule eventTime;
    private String eventPlace;

    public void setEventTime(Schedule eventTime);
}
```

```java
// Schedule.java
public class Schedule{
    private int year;
    private int month;
    private int day;
    private int hours;
    private int minutes;
}
```

```java
// Artist.java
public class Artist {

    private String name;
    private float hiringCost;
    private Schedule entryTime;
    private Schedule departureTime;

    public void setEntryTime(Schedule entryTime);
    public void setDepartureTime(Schedule departureTime);
}
```

```java
// Employee
public class Employee {

    private int employeeId;
    private String name;
    private float hourlyWage;
}
```

```java
// Staff.java
public class Staff {

    private String type;
    private Workday workday;
    private Employee[] employees;
    private float totalStaffCost;

    public void asingWorkday(Workday workday);
    public void addEmployee(Employee employee);
    public float calculateCost(Workday workday);
}
```

```java
public class EventPlace {

    private String name;
    private String adress;
    private float rentCost;
    private int capacity;
}
```

```java
public class Equipment {

    private String type;
    private float cost;
    private int quantity;

    public void purchaseEquipment();
}
```

Links: Google Docs Link Github Repository