

## Assignment Title: Event Registration System

### Objective:

Create a console-based application to manage event registrations using **LinkedHashSet** to maintain **unique** and **ordered** participant entries.

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### Requirements:

#### 1. Entities:

- Participant: with fields participantId, name, email, and eventName

#### 2. Use LinkedHashSet to:

- Store participants while maintaining insertion order and ensuring no duplicates
- Prevent duplicate registrations (based on participantId)

#### Java

```
LinkedHashSet<Participant> participants = new LinkedHashSet<>();
```

Override equals() and hashCode() in Participant to ensure uniqueness by participantId.

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### Functional Requirements:

1. Register a Participant
2. Remove a Participant
3. Check if a Participant is Registered
4. List All Participants (in order of registration)
5. Count Total Participants
6. List Participants by Event Name

### Sample Operations:

#### Java

```
participants.add(new Participant("P001", "Amit", "amit@example.com", "TechTalk"));  
participants.add(new Participant("P002", "Neha", "neha@example.com", "Workshop"));
```

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### Bonus Challenges:

- Use TreeSet to sort participants by name or email

- Export participant list to a CSV file
- Add a search feature by email or name