Club Management System

A Java-Based Event & Member Management Application

Presented by: [Shravani Patil]

Overview

- A Java project for managing college clubs, members, events, and achievements.
- Incorporates DSA concepts such as Arrays and LinkedLists.
- Implements role-based access and real-time event tracking.

Part A - Core Functionality

- Implemented using ArrayList for club storage and a custom LinkedList for participants and members.
- Key operations: Add/view clubs, add members/events/achievements, register participants.
- Data persistence via serialization, validation checks, and exception handling included.

Part B - Role-based Operations

- Case 1: View clubs and navigate their details.
- Case 2: Club Registration
- Case 3: Participant login view/register for upcoming events.
- Case 4: Student Registration
- Case 5: Member login manage events, add achievements with proper authentication.
- Case 6: Member Registration

Data Structures & Algorithms Used

- HashMap: Used for storing participants and members and clubs.
- ArrayList: Manages dynamic collection of clubs.
- Date parsing and comparisons: Identify and show only upcoming events.

Unique Features

- HashMap, ArrayList and OOP concepts integration with real-world role simulation.
- Event Calendar: Updates and filters based on deadlines.
- Validation checks to restrict unauthorized actions.

Conclusion

- Project simulates real-world club management effectively.
- DSA concepts are implemented in practical ways.
- Robust design with room for UI expansion using Swing in the future.