Abstract

Celero is an innovative placement organizing desktop application designed to streamline the campus recruitment process for students and placement cells.

The application empowers students to upload and manage resumes, log and track events such as competitions and conferences, and receive personalized job matches based on their academic performance, skill sets, and participation history.

Key features include automated notifications when job opportunities match a student's profile, ensuring that students and the placement cell are both informed in real time.

Students can prioritize opportunities and view detailed job listings within the college or open positions accessible outside the institution.

The application is developed using Java Swing for the desktop interface, with a clear modular class hierarchy:

Core Data Classes:

- Student: Stores student details, CGPA, resume, and skills.

- Event: Records events attended and attributes gained.

- PlacementOpportunity: Defines job opportunities and requirements.

- PlacementOffer: Tracks offers received.

Manager Classes:

- ResumeManager: Handles resume upload and validation.

- EventManager: Manages event records and attributes.

- MatchingEngine: Matches students with jobs based on requirements.

- NotificationManager: Sends notifications to students and placement staff.

Utility Classes:

- FileHandler: Handles file operations for resumes and certificates.

- Validator: Validates user inputs and files.

- DatabaseConnector: Connects to storage for data persistence.

User Interface (Swing GUI):

- MainDashboardFrame: Main window with sections for matched jobs, in-college jobs, and open jobs.

- UploadResumePanel: Interface for uploading resumes.

- AddEventPanel: Interface for logging events and skills.

- MatchedJobsPanel: Displays matching job listings.

- NotificationsPanel: Shows alerts and updates.

Celero's modular architecture ensures scalability and easy transition from a desktop application to a web-based platform in the future.

By integrating automated matching, notifications, and detailed tracking, Celero aims to make placement management transparent, efficient, and student-friendly.