

A Simple Admission Application System

Objective:

Create an Object-Oriented Admission Application Program

Problem Statement:

You are tasked with designing an admission application system that allows an administrator to manage applications for a university/college. The system should support the following operations:

- Add: Add new admission applications.
- Search: Search for applications based on criteria such as applicant name, program applied for, or prior education.
- Update: Modify existing application details.
- Delete: Remove applications from the system.
- Display: Show a list of all applications.

Requirements:

- The admission application form should contain fields such as applicant name, contact details, address, program applied for, previous education, and extracurricular activities.
- Applicants may have multiple education records (e.g., high school, undergraduate, certifications).
- Extracurricular activities should be stored as a list for each applicant.
- The system should maintain the application status (e.g., Pending, Reviewed, Accepted, Rejected).
- Provide a user-friendly menu for the administrator to perform all operations.

Implementation Guidelines:

- Use an object-oriented approach to structure your program.
- Create appropriate classes to represent different components (e.g., Application, Applicant, Education, Extracurricular, AdmissionSystem).
- Implement methods within these classes to handle the specified operations.
- Ensure proper encapsulation, inheritance, and abstraction.
- Additionally, create a UML class diagram using the “drawio” tool to visualize the relationships between classes.

Admission Application Form (Sample)

Applicant Information

- Full Name: _____

- Contact Number: _____
- Email Address: _____
- Address: _____

Program Applied For

- Program Name: _____

Previous Education (can add multiple entries)

1. Institution: _____
Degree/Level: _____
Year Completed: _____
2. Institution: _____
Degree/Level: _____
Year Completed: _____

Extracurricular Activities (can add multiple entries)

- Activity Name: _____
- Description: _____

Application Status (Admin Use Only)

- Pending
- Reviewed
- Accepted
- Rejected

Signature of Applicant: _____

Date: _____