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College Chancer

A decorative teal brushstroke consisting of two curved lines that meet at a point, resembling a stylized arrow or a flourish, positioned below the title.

Mission Statement

Create an app that takes in the user's stats and predicts their acceptance rate to different colleges.



Functionality

This application allows the user to input their stats, for example, GPA or SAT, and gauge their chances at gaining admission to a certain college. Users begin by creating a detailed profile through a guided form, where they can enter both quantitative metrics (like GPA and standardized test scores). Then, they input the colleges they are interested in, along with their acceptance rates. The application then computes the user's chance of gaining admission to that college based on the inputted data.

Components

- Inputting and storing user data
- Inputting and storing college data
- Method to calculate chances
- UI

How it works

1. User inputs personal parameters
2. College chancer function called with parameters
3. College chancer method outputs personal chance percentage
4. User can add interested colleges + parameters
5. Personal chance percentage compared with interested colleges

```
J main1.java X J college.java
J main1.java > ...
1 import javax.swing.*;
2 import java.util.ArrayList;
3
4 public class main1 {
5     Run [Debug]
6     public static void main(String[] args) {
7         System.out.println(x:"Instructions ");
8         ArrayList<college> colleges = new ArrayList<>();
9         JOptionPane.showMessageDialog(parentComponent:null, message:"Welcome to the College Chancer Program!");
10
11         double gpa = Double.parseDouble(JOptionPane.showInputDialog(message:"Enter your GPA :"));
12         int sat = Integer.parseInt(JOptionPane.showInputDialog(message:"Enter your SAT Score (400 - 1600):"));
13
14         boolean ib = JOptionPane.showConfirmDialog(parentComponent:null, message:"Are you in IB?", title:"IB Status",
15             JOptionPane.YES_NO_OPTION) == JOptionPane.YES_OPTION;
16
17         int clubCount = Integer.parseInt(JOptionPane.showInputDialog(message:"How many clubs are you involved in?"));
18
19         double personalChance = collegeChancer(gpa, sat, ib, clubCount);
20         JOptionPane.showMessageDialog(parentComponent:null, "Your calculated chance of college acceptance: " + personalChance + "%");
21
22         int numColleges = Integer.parseInt(JOptionPane.showInputDialog(message:"How many colleges would you like to enter?"));
23
24         for (int i = 0; i < numColleges; i++) {
25             String name = JOptionPane.showInputDialog("Enter the name of College " + (i + 1) + ":");
26             double rate = Double.parseDouble(JOptionPane.showInputDialog("Enter the acceptance rate for " + name + " (%):"));
27             colleges.add(new college(name, rate));
28         }
29
30         StringBuilder result = new StringBuilder(str:"Comparison of your chances with the entered colleges:\n");
31         for (college college : colleges) {
32             result.append(college.compareAcceptanceRate(personalChance)).append(str:"\n");
33         }
34         JOptionPane.showMessageDialog(parentComponent:null, result.toString());
35     }
36 }
```

Test Plan

Error Handling Checks:

- Incorrect inputs
- Blank required fields
- Out of range inputs

Expected Behavior:

All invalid inputs should be flagged with clear and concise error messages.

The user should be prevented from submitting until required fields are valid.

No system crashes or broken outputs should occur due to malformed input.

Potential Expansions

- Major specific chancing
- Integrating real-time admissions data from sources like Common Data Set
- Integrating different application cycles into chancing
- Application that uses results to help strengthen user's application

Live Demo!