CSE248 Final Project
College Application System

Project Description:

Each year, the U.S. government collects data from over 7,000 colleges in the country regarding their operations. The following link provides detailed background information: https://nces.ed.gov/ipeds/about-ipeds

The objective is to construct an Android application to facilitate college applications in the United States. The application will be called College Application System (CAS).

Methodology:

1. Data source: Data will be retrieved from the National Center of Education Statistics (NCES) by using their APIs. The details are presented here: https://collegescorecard.ed.gov/data/documentation
2. Data Structures: Data must first be retrieved and stored in appropriate SQL Database stored locally for efficient processing.
3. Application features the following modules:

1) A data retrieval module to obtain data using APIs. However, if you cannot retrieve data using APIs, you may use a more cumbersome method as provided here: https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx. But you will lose 10 points for taking this route as it will make future data update difficult.

2) A user profile module with GUI to allow users to enter and store information such as their name, email address, SAT Reading and Math scores, username, and password. An appropriate data structure is needed to store such data for an unknown number of users.

3) A user login module with GUI to allow user to use their unique username and password to log in or to create a new profile.

4) A college search module with GUI to allow users to search for colleges based on college name and ipeds id. This is similar to the web application used here: https://nces.ed.gov/collegenavigator. When implementing name search, you must display all college names that contain the word(s) entered in real time. When a particular college is selected by the user, the following basic information regarding that college will be displayed: 1. IPEDS ID 2. College name 3. Address 4. City 5. Zip 6. State 7. Institutions Web Address 8. Admissions Office Web Address 9. Total Cost of attendance for both an in-state and out-of-state student 10. SAT 25th percentile and 75th percentile Reading and Math scores

5) A college match module with GUI to display the user's chance of acceptance by simply comparing the SAT requirements of the selected college and the user's own SAT scores stored in his/her user profile.

6) A **README** file detailing the functionality of each of the above 5 modules.

Deadline: Monday, 12/16 before class. The project must be presented that day in class. So please submit in time to avoid penalties. The penalty is 20 out of 100 points for submissions after deadline up to the first 24 hours and an additional 10 points for each additional 24 hours or less.