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### Implementation Description

The Student class sets up the properties of ID, name, age, gpa, and major. The constructor sets up the objects to be used within the code. The display info method displays the properties in a specified format, and the update gpa allows for the user to update gpa's into the database.

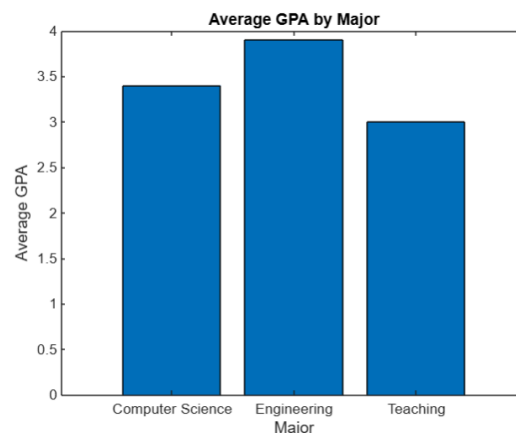
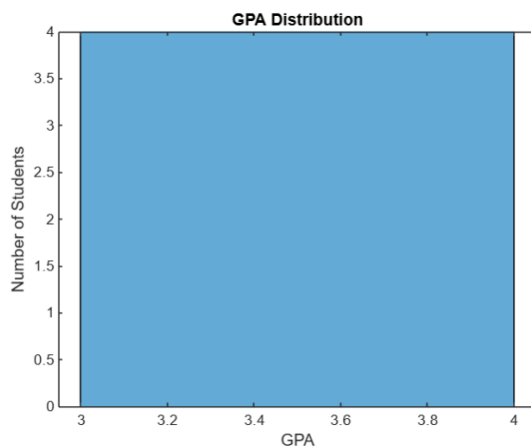
The Student Database class allows the user to save and upload .mat files to the program. It also sets up the addStudent, findStudentByID, and getStudentsByMajor which are utilized in the main script. It also sets up the plots to visualize the student data in three graphs.

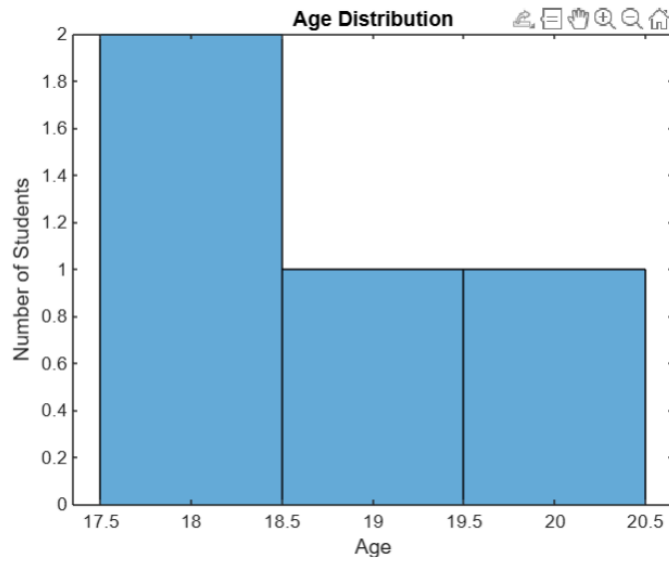
The main script first initiates the Student Database object db, then adds sample students to the database, and allows the user to save or load a .mat file. Then the script searches for a person with an ID of 3 who is me "Matt". Then it lists out the Computer Science majors and their information. Then it creates three visualizations of GPADistribution, AverageGPAByMajor, and AgeDistribution.

### Instructions

In the main script input the students and their information or load a .mat database. Set the searches to the variables you want and then run the script to see the requested information and visualizations.

### Visualizations





#### List of Implemented Features

- Adding students to database
- Save and Load the database
- Find student by an ID number
- Find students within their major
- Generate visualizations from the data