Abraham Andersen and Elijah Budd

Friday, May 9, 2025

Final Pseudocode: Student Database

**Pseudocode:**

Hey Elijah, here is some rough pseudocode of what we need to make it sounded like it was supposed to be something about students so I went ahead and chose 7 different identifying characteristics of a student and stuck that in there though it is somewhat tentative. It should be somewhat explanatory. Sorry for not getting on this sooner in the week.

**Function create\_student\_database(db\_name):**

* Start.
* Connect to the SQLite database specified by db\_name. If the database file doesn't exist, create it.
* Create a cursor object to execute SQL commands.
* Check if the students table already exists in the database.
* If the students table exists, drop it (delete it) and recreate it.
* Create the students table with the following fields:
  + id\_number
  + first\_name
  + last\_name
  + date\_of\_birth
  + major
  + gpa
  + email
* Show a message that says the database and table were created successfully.
* Insert initial data into the students table.
* Commit the changes to the database.
* Solve potential errors during database operations:
  + If an error occurs, print an error message and do not proceed.
* Close the connection to the database.
* End.

**Main part of the program:**

* Call the create\_student\_database() function to create the database.

**Data Creation:**

I don’t know if the students are supposed to be real or not so I am doing fake students.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| John | Doe | 1389403-01 | 1/24/71 | Economics | 3.73 | jjdoe@students.ucw.edu |
| Mary | Jane | 1389403-02 | 12/6/69 | History | 3.82 | mjjane@students.ucw.edu |
| Bill | Forbes | 1389403-03 | 3/3/70 | Areal Photography | 2.21 | bxforbes@students.ucw.edu |
| Phin | Whignberger | 1389403-04 | 2/19/71 | English | 2.89 | plwhignberger@students.ucw.edu |
| Whit | Quiering | 1389403-05 | 8/24/70 | Physics | 2.44 | wequiering@students.ucw.edu |
| Jars | Govner | 1389403-06 | 11/29/69 | Art | 4.00 | jngovner@students.ucw.edu |
| Norma | Kinota | 1389403-07 | 7/21/69 | German | 3.62 | nhkinota@students.ucw.edu |
| Mooney | Houston | 1389403-08 | 7/16/69 | Astronomy | 1.202 | mtxhouston@students.ucw.edu |
| Caeleb | Dalten | 1389403-09 | 6/4/72 | Civil Engineering | 3.25 | cadalten@students.ucwa.edu |
| Israel | Achman | 1389403-10 | 10/23/71 | Math | 3.84 | iowachman@students.ucw.edu |
| First | Last | ID Number | DOB | Major | GPA | Email |

These students were found at the wrong end of a time machine at the University of Colorado-Wartberg, but left behind a database with some of their valuable information and credentials for the research group to find in the future. This is the reason that their birthdays are old, but they have emails.