



Faculty of Engineering – Cairo University
Credit Hours System
Fall 2022



SBEN330 – Embedded Systems **C Project**

Name	ID
Omar Essam Eldine Ahmed	1190332
Shaimaa Ahmed Maged El Sayed Mohamed Eid	2200019
Youssef Moataz Saber Ibrahim Elgazar	1170275

User Requirements:

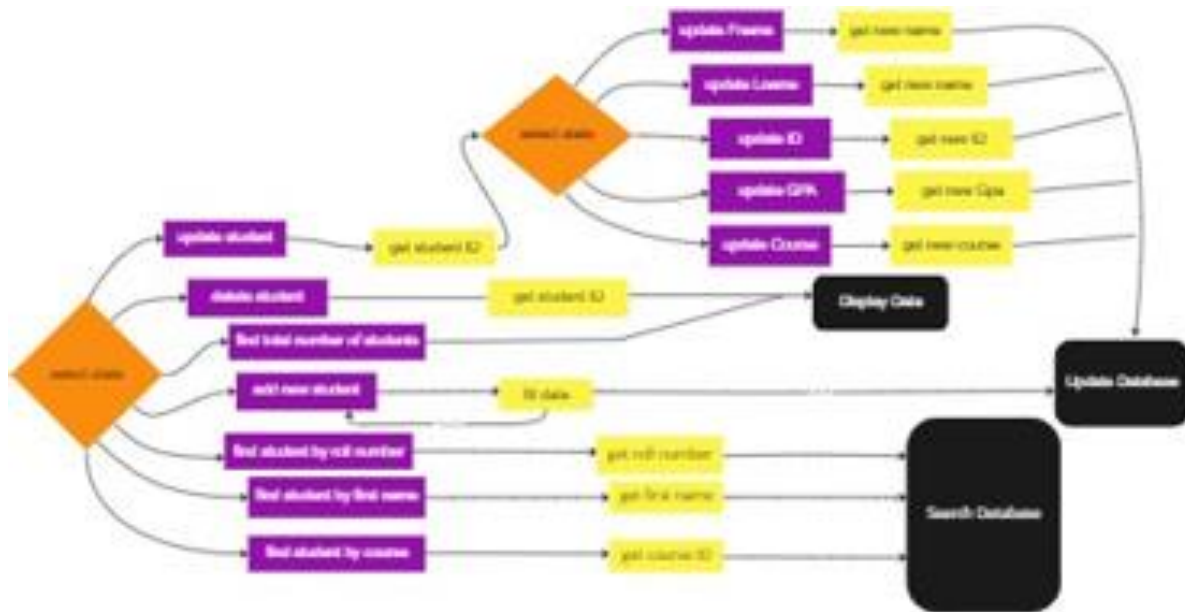
We will create a program that allows the user to:

- 1- Create multiple databases for three different fields (University, Factor and Hotel).
- 2- There will be 6 different operations done on each database such as:
 - Insert/ add new element and data to an existing database.
 - Search for any element using the primary key in the database.
 - Delete element using the primary key in the database.
 - Edit on an existing element after accessing it by its primary key in the database.
 - You can return back to the main menu if he chose one database from the list.
 - Finally, you can exit the program.
- 3- Changes in the database is saves after the program is closed.

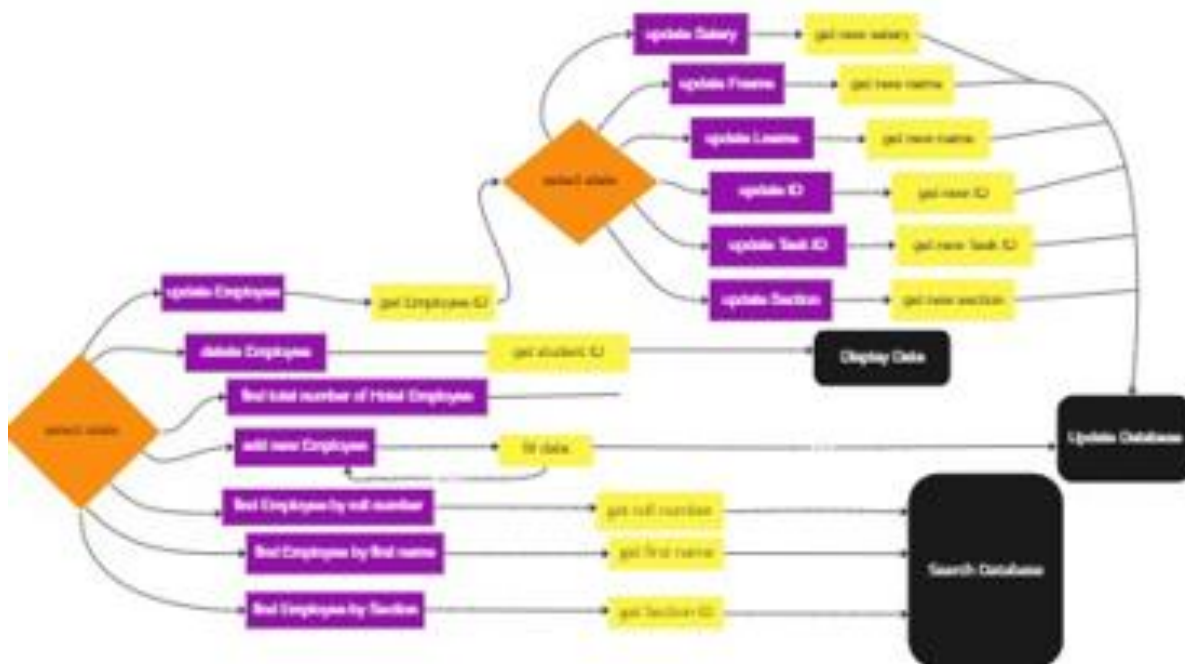
User Requirements presented in table:

User Requirements	How it's implemented
Different databases in one program	Selection menu in the start page of the program to select any of the different databases
Apply any of the different operations in each database	Using the primary key of each element in the database, you can do any of the operations such as: insertion, adding, searching, edit and deletion.
Changes are saved after exiting	Save the data in an external csv file and be able to read and write it within the program.

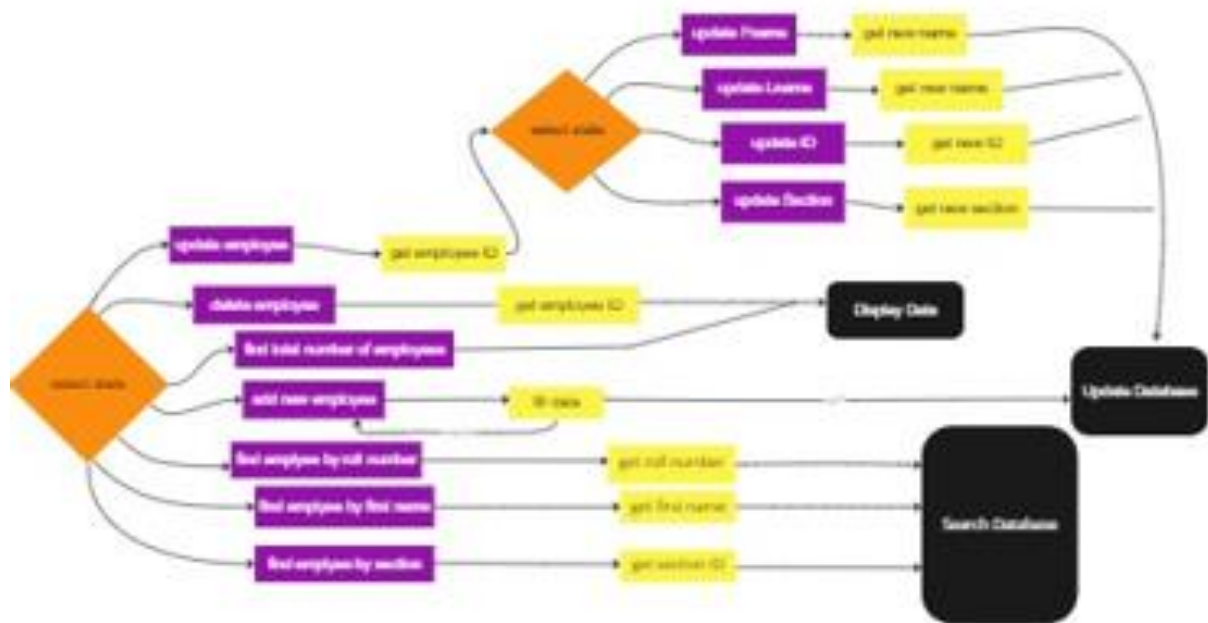
State Diagram for University Database:



State Diagram for Hotel Database:



State Diagram for Factor Database:



If any thing isn't clear please check this link:

https://miro.com/app/board/uXjVPCrY1RE=

