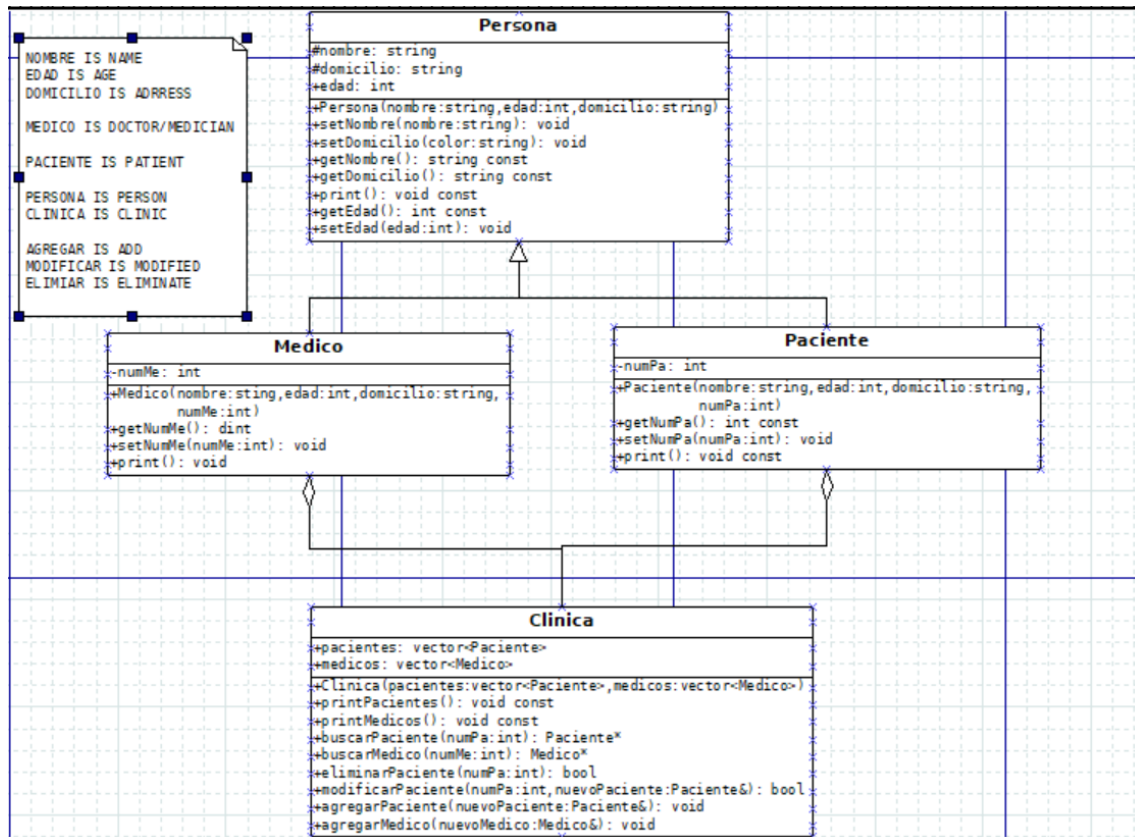


## PROJECT OOP CESAR NIETO GONZALEZ

### DIAGRAM DIA



### PROJECT'S ASSUMPTIONS

This comprehensive main program functions as a command-line interface for the effective administration of a medical clinic. It offers users a diverse set of operations to interact with the clinic's database, facilitating the management of both doctors and patients. The user-friendly menu system includes features such as displaying a complete list of doctors and patients, searching for specific doctors and patients using their unique identification numbers, removing patients from the database, modifying patient information, adding new doctors to the system, and registering new patients.

The program's primary loop ensures continuous user engagement, persistently presenting the menu until the user explicitly opts to exit. Robust input validation mechanisms are integrated to enhance user experience by ensuring that only valid numeric inputs and non-empty strings are accepted. Exception handling is thoughtfully implemented to gracefully manage any unforeseen errors or anomalies that may arise during the execution of the program.

In essence, this program aims to streamline the administrative tasks associated with managing a medical clinic, providing a versatile and user-centric platform for overseeing the intricate details of both medical practitioners and patients within the clinic's database.

## DESCRIPTION OF OPERATION

```
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 0
Lista de Médicos:
DOCTOR: DOCTOR1, AGE: 31, MedicianNumber: 1001
DOCTOR: DOCTOR2, AGE: 32, MedicianNumber: 1002
DOCTOR: DOCTOR3, AGE: 33, MedicianNumber: 1003
DOCTOR: DOCTOR4, AGE: 34, MedicianNumber: 1004
DOCTOR: DOCTOR5, AGE: 35, MedicianNumber: 1005
DOCTOR: DOCTOR6, AGE: 36, MedicianNumber: 1006
DOCTOR: DOCTOR7, AGE: 37, MedicianNumber: 1007
DOCTOR: DOCTOR8, AGE: 38, MedicianNumber: 1008
DOCTOR: DOCTOR9, AGE: 39, MedicianNumber: 1009
DOCTOR: DOCTOR10, AGE: 40, MedicianNumber: 1010
DOCTOR: DOCTOR11, AGE: 41, MedicianNumber: 1011
DOCTOR: DOCTOR12, AGE: 42, MedicianNumber: 1012
DOCTOR: DOCTOR13, AGE: 43, MedicianNumber: 1013
DOCTOR: DOCTOR14, AGE: 44, MedicianNumber: 1014
DOCTOR: DOCTOR15, AGE: 45, MedicianNumber: 1015
DOCTOR: DOCTOR16, AGE: 46, MedicianNumber: 1016
DOCTOR: DOCTOR17, AGE: 47, MedicianNumber: 1017
DOCTOR: DOCTOR18, AGE: 48, MedicianNumber: 1018
DOCTOR: DOCTOR19, AGE: 49, MedicianNumber: 1019
DOCTOR: DOCTOR20, AGE: 50, MedicianNumber: 1020
----- MENU -----
0: List all doctors
1: List all patients
```

----- MENU -----

- 0: List all doctors
- 1: List all patients
- 2: Search for a doctor by docNum
- 3: Search for a patient by patNum
- 4: Delete a patient by patNum
- 5: Modify a patient by patNum
- 6: Add a doctor
- 7: Add a patient
- 8: Exit

Enter an option: 1

Lista de Pacientes:

PATIENT:	PATIENT1,	AGE: 21,	NUMBER: 1
PATIENT:	PATIENT2,	AGE: 22,	NUMBER: 2
PATIENT:	PATIENT3,	AGE: 23,	NUMBER: 3
PATIENT:	PATIENT4,	AGE: 24,	NUMBER: 4
PATIENT:	PATIENT5,	AGE: 25,	NUMBER: 5
PATIENT:	PATIENT6,	AGE: 26,	NUMBER: 6
PATIENT:	PATIENT7,	AGE: 27,	NUMBER: 7
PATIENT:	PATIENT8,	AGE: 28,	NUMBER: 8
PATIENT:	PATIENT9,	AGE: 29,	NUMBER: 9
PATIENT:	PATIENT10,	AGE: 30,	NUMBER: 10
PATIENT:	PATIENT11,	AGE: 31,	NUMBER: 11
PATIENT:	PATIENT12,	AGE: 32,	NUMBER: 12
PATIENT:	PATIENT13,	AGE: 33,	NUMBER: 13
PATIENT:	PATIENT14,	AGE: 34,	NUMBER: 14
PATIENT:	PATIENT15,	AGE: 35,	NUMBER: 15
PATIENT:	PATIENT16,	AGE: 36,	NUMBER: 16
PATIENT:	PATIENT17,	AGE: 37,	NUMBER: 17
PATIENT:	PATIENT18,	AGE: 38,	NUMBER: 18
PATIENT:	PATIENT19,	AGE: 39,	NUMBER: 19
PATIENT:	PATIENT20,	AGE: 40,	NUMBER: 20
PATIENT:	PATIENT21,	AGE: 41,	NUMBER: 21
PATIENT:	PATIENT22,	AGE: 42,	NUMBER: 22
PATIENT:	PATIENT23,	AGE: 43,	NUMBER: 23
PATIENT:	PATIENT24,	AGE: 44,	NUMBER: 24
PATIENT:	PATIENT25,	AGE: 45,	NUMBER: 25
PATIENT:	PATIENT26,	AGE: 46,	NUMBER: 26
PATIENT:	PATIENT27,	AGE: 47,	NUMBER: 27

```
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 2
Introduce number of doctor: 1001
DOCTOR: DOCTOR1, AGE: 31, MedicianNumber: 1001
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 2
Introduce number of doctor: 2
Doctor not found.
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option:
```

```
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 3
Introduce number of patient: 1
PATIENT: PATIENT1, AGE: 21, NUMBER: 1
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 3
Introduce number of patient: 222
Patient not found.
----- MENU -----
```

```
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 4
Introduce number of patient to delete: 1
Patient deleted it
```

```
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 1
Lista de Pacientes:
PATIENT: PATIENT2, AGE: 22, NUMBER: 2
PATIENT: PATIENT3, AGE: 23, NUMBER: 3
```

```
Enter an option: 5
Introduce number of patient to search: 2
Name
Cesar
Introduce age
20
Address
Spain
Did it
```

```
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 1
Lista de Pacientes:
PATIENT: PATIENT1, AGE: 21, NUMBER: 1
PATIENT: Cesar, AGE: 20, NUMBER: 2
```

```
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 6
Introduce name
2
Introduce age
2
Introduce adrres
2
Introduce number of medician
2
Operation did it.
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 6
Introduce name
6
Introduce age
6
Introduce adrres
6
Introduce number of medician
1001
This number already exists,please introduce another
```

```
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 7
Number of patient 2323
Introduce name
3
Introduce age
3
  Address
3
Did it
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 7
Number of patient 3
Introduce name
3
Introduce age
3
  Address
3
This number already exists,please introduce another
```



```
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: 9
Exception: Invalid option. Please enter a valid option.
----- MENU -----
0: List all doctors
1: List all patients
2: Search for a doctor by docNum
3: Search for a patient by patNum
4: Delete a patient by patNum
5: Modify a patient by patNum
6: Add a doctor
7: Add a patient
8: Exit
Enter an option: r
Error. Please, introduce a valid number: 8
Exiting the program ...
```

[link to sourcecode in GIT repository](#)

<https://github.com/Kaesaril/OOP-PROJECT-PK>