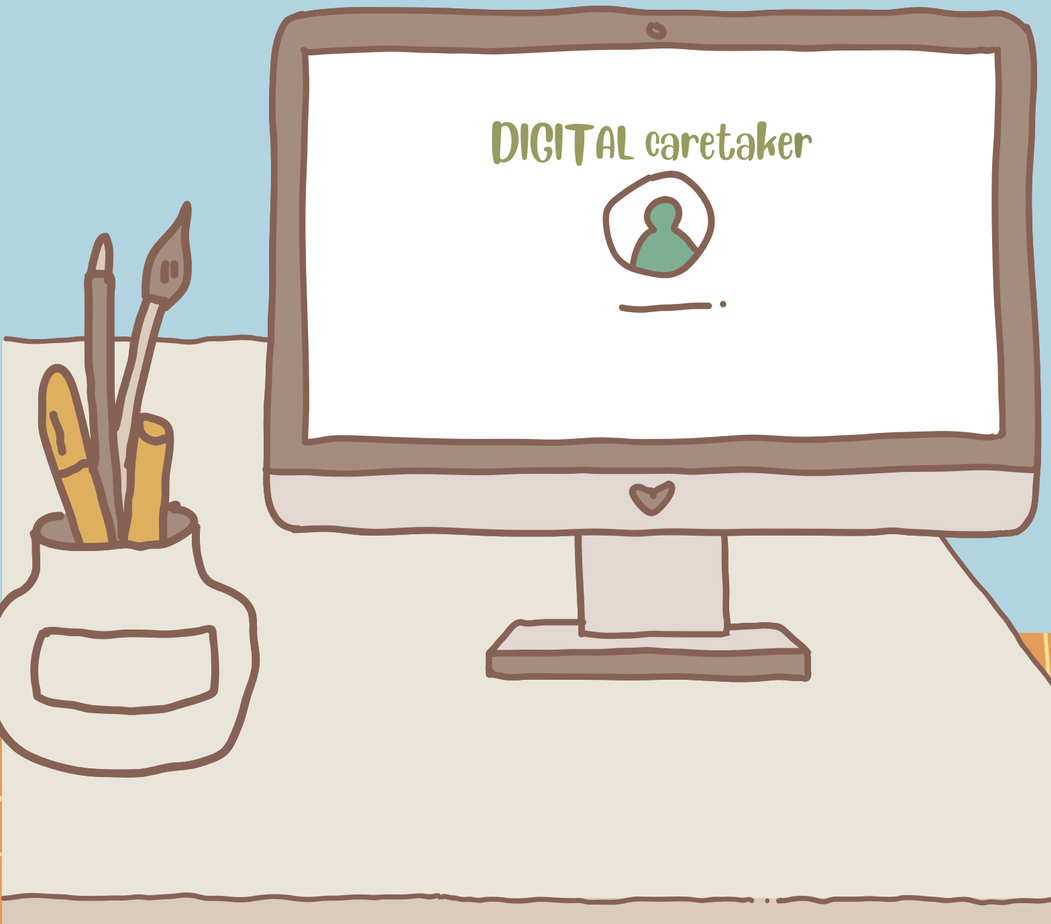
Digital Caretaker

Oops project in c++

Problem statements

1. Can't Search for student’s records in one go.
2. Fees payment is a crucial task, which requires proper management
3. Hostel warden faces a lot of problems in recording the data in registers as there are hundreds of students in a hostel.
4. Every task requires a different register and people.

Introduction

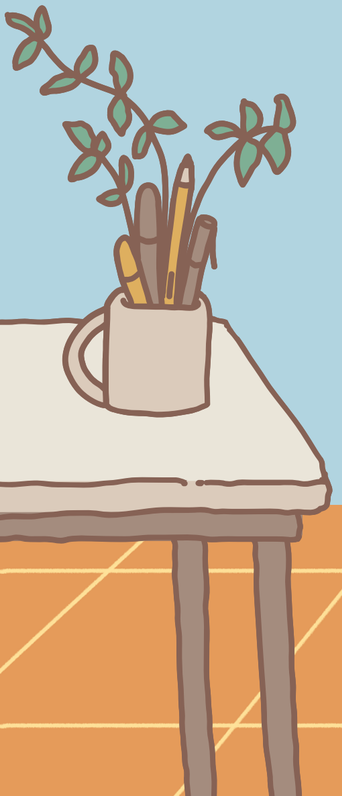


Digital Caretaker is the software that allows Hostel wardens to easily handle the student's data in an efficient manner and let them do their tasks.

The software is made using C++ Language with Oops concepts.

Objectives

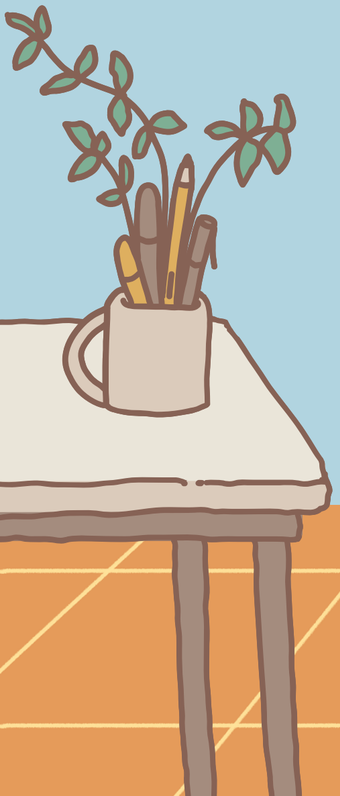
1. Authentication for the hostel warden, so no other person can access the details.
2. Warden can create the hostel according to the number of floors and rooms per floor in the hostel.
3. Warden can see or edit the fee details of any student.
4. Warden can see rooms' vacancies in one go and he can allocate the rooms to students according to the vacancy of rooms.



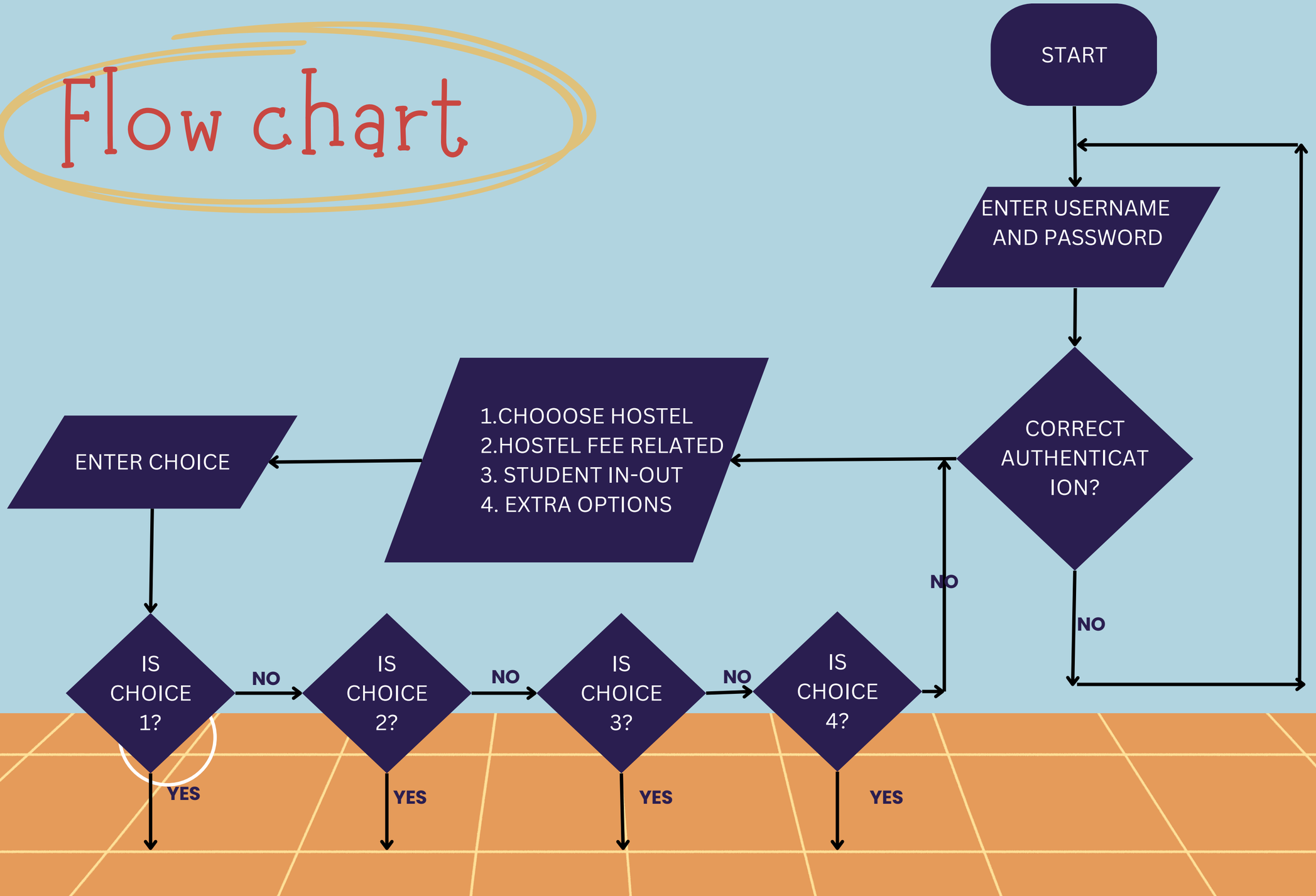
Continue

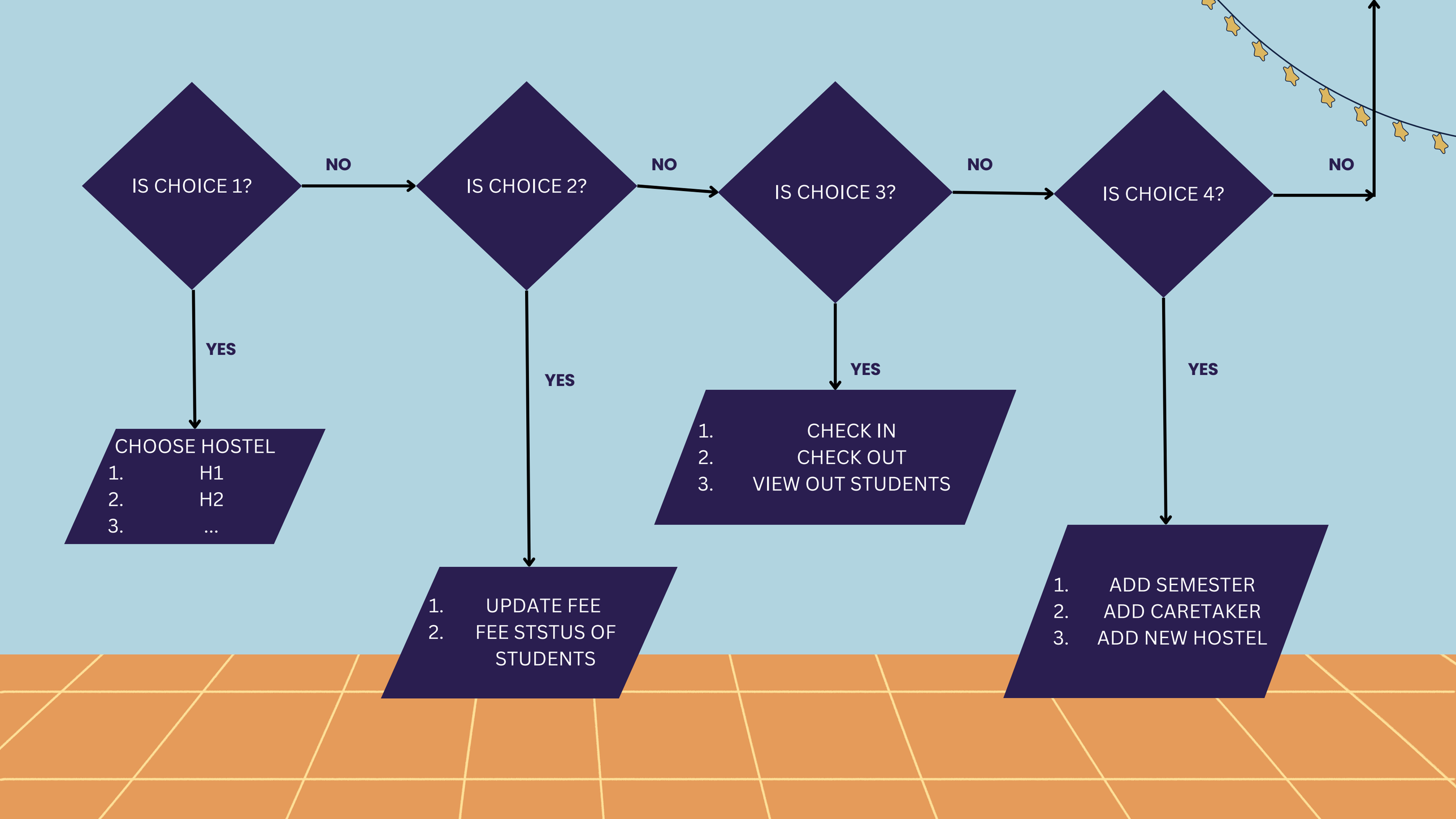
5 Warden can deallocate the room as well.

6 Warden can see the IN/OUT state of every student at any time he/she wishes.

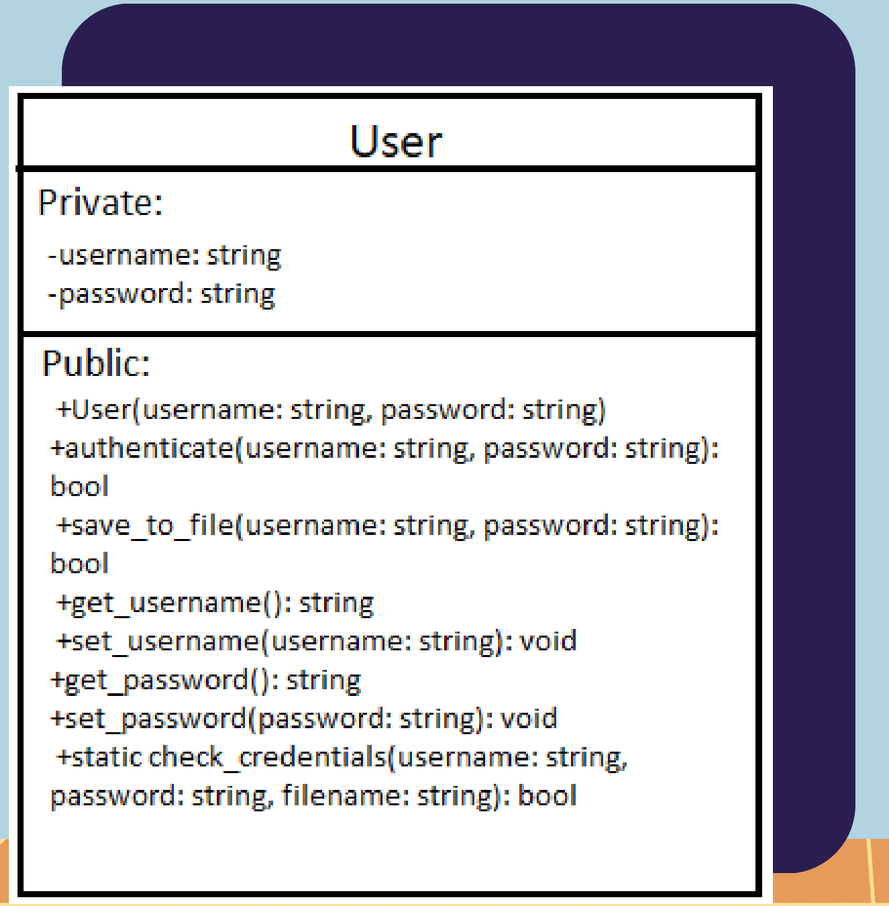


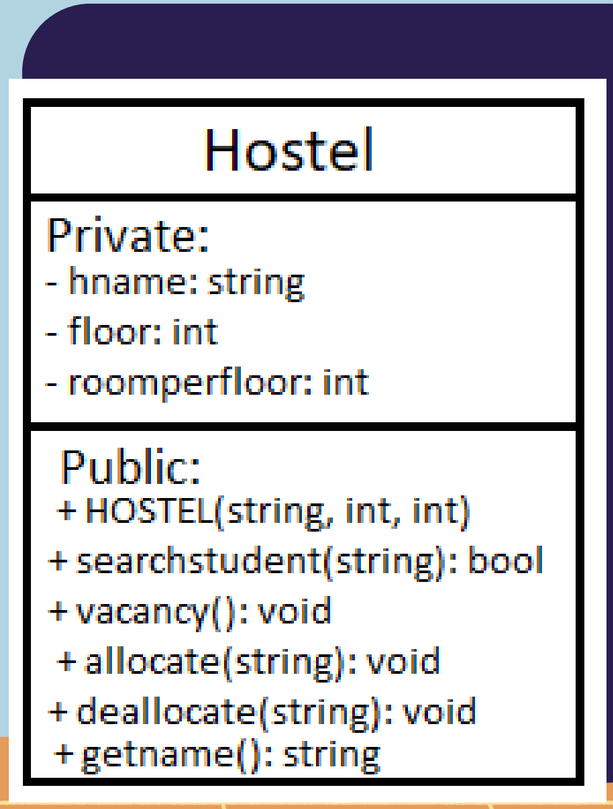
Flow chart

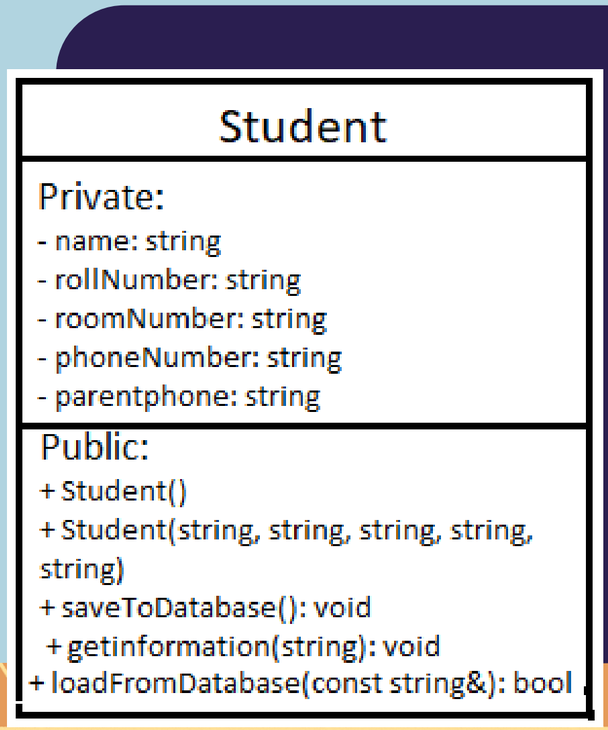

START
ENTER USERNAME AND PASSWORD
CORRECT AUTHENTICATION?
NO
1.CHOOOSE HOSTEL
2.HOSTEL FEE RELATED
3. STUDENT IN-OUT
4. EXTRA OPTIONS
ENTER CHOICE
IS CHOICE 1?
NO
IS CHOICE 2?
NO
IS CHOICE 3?
NO
IS CHOICE 4?
NO
YES
YES
YES
YES


IS CHOICE 1?
NO
IS CHOICE 2?
NO
IS CHOICE 3?
NO
IS CHOICE 4?
NO
YES
CHOOSE HOSTEL
1. H1
2. H2
3. ...
YES
1. UPDATE FEE
2. FEE STSTUS OF STUDENTS
YES
1. CHECK IN
2. CHECK OUT
3. VIEW OUT STUDENTS
YES
1. ADD SEMESTER
2. ADD CARETAKER
3. ADD NEW HOSTEL

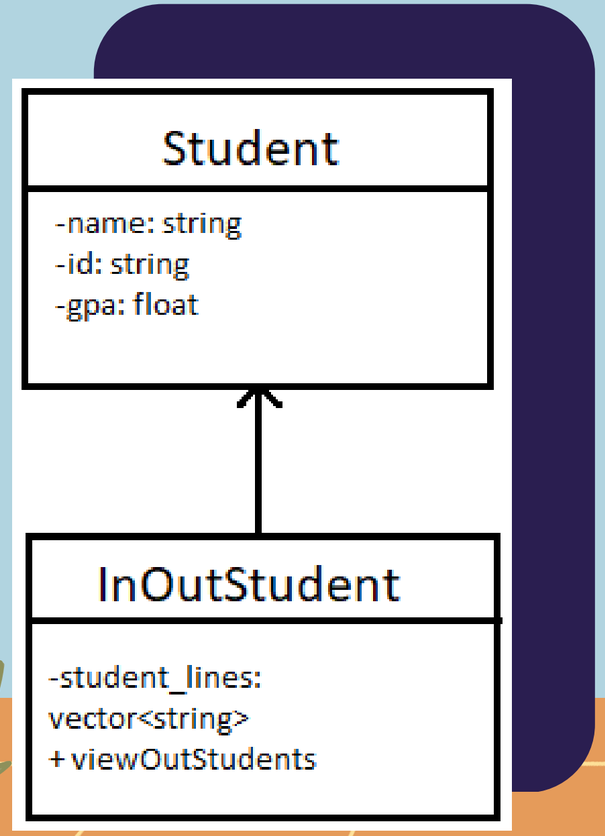
Class Diagrams

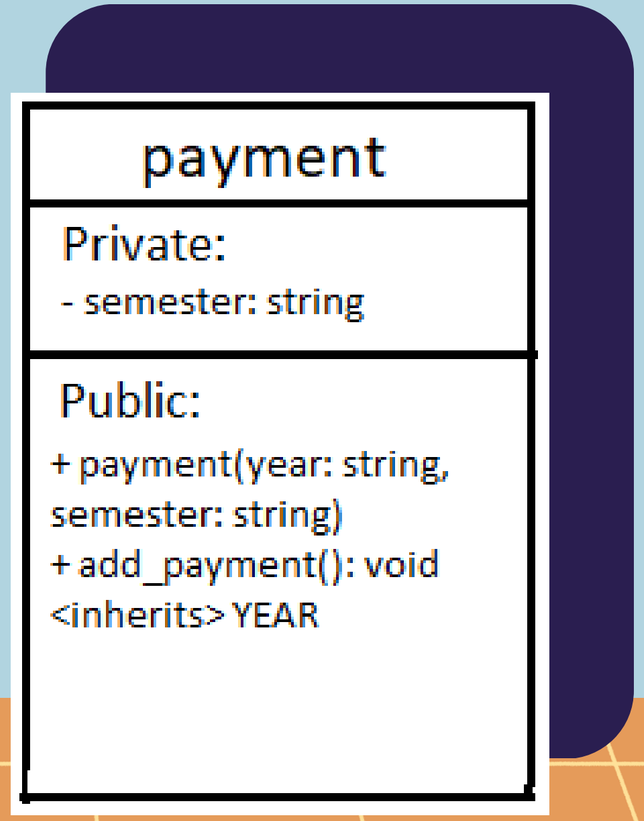


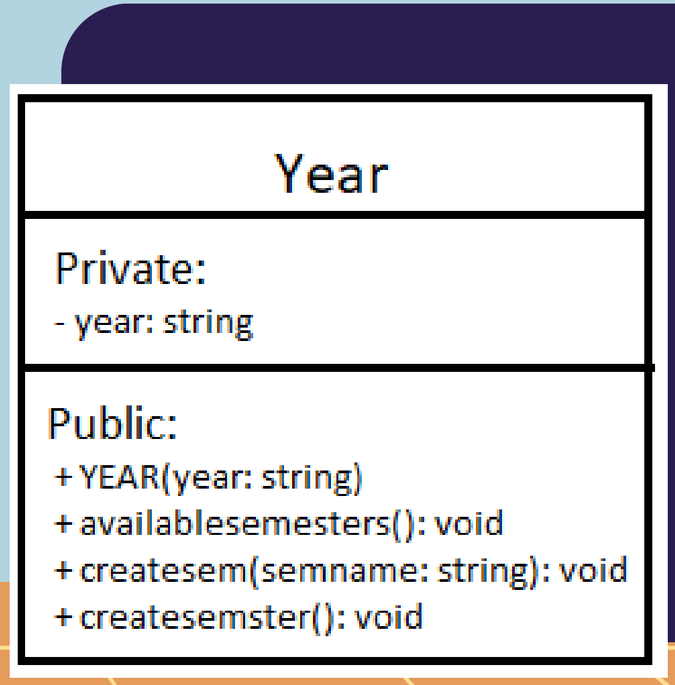




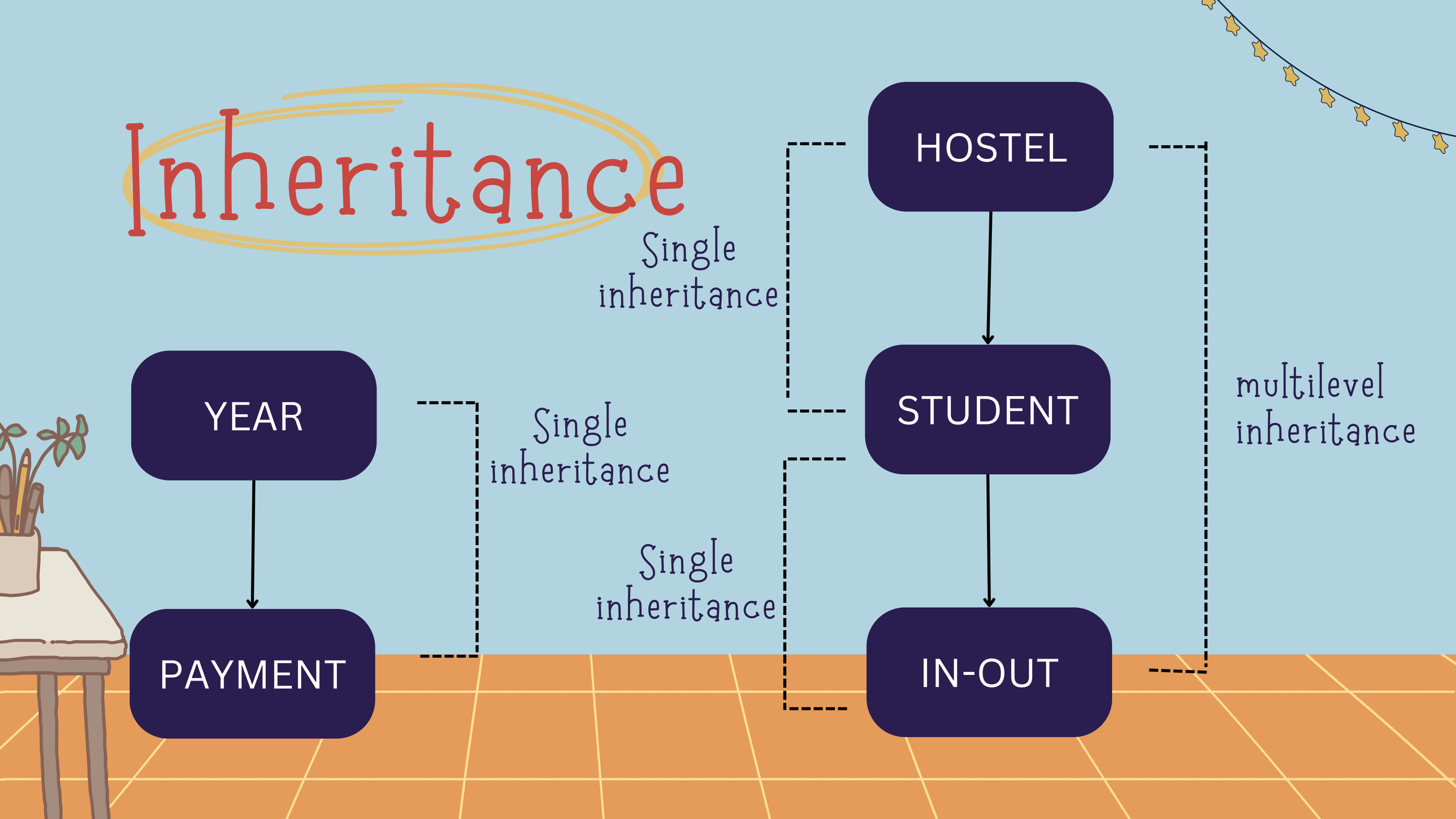
Class Diagrams







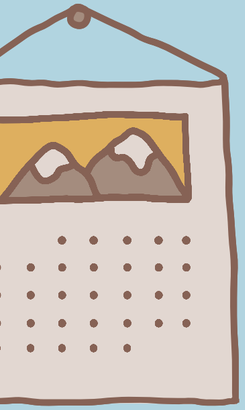
Inheritance



CONCLUSION

- In most aspects, our software will be able to reduce the problems to a minimal extent.
- In the later stages of the project we would be applying the UI/UX to make it more user-friendly.
- We will also link the cloud-based database to the back-end data handling so that from any device the data would be accessible.

Thank You



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