

CSA4001-MANAGEMENT INFORMATION SYSTEM FOR DATA OPTIMIZATION

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9) A college has more than thousand security persons, who are instructed to give duties at different places within the campus. Additionally, they also maintain a routine, which contains all information, such as Date, Duty Start Time, Duty End Time, and Place. Most importantly, all the places are covered by at least one security person. If a security person takes leave, manual entry is done against that person. Finally, at the end of a month, the security persons get paid for their duties, while considering the number of leaves as well. You can see that the manual calculation/operation is a heavy task for the security manager. Therefore, the objective is to build an Online security management system using class diagram through which entire security system within the campus can be controlled in an efficient manner.

AIM

To design a UML Class Diagram for an Online Security Management System, where security personnel duties, schedules, leaves, and payments are efficiently managed within a college campus.

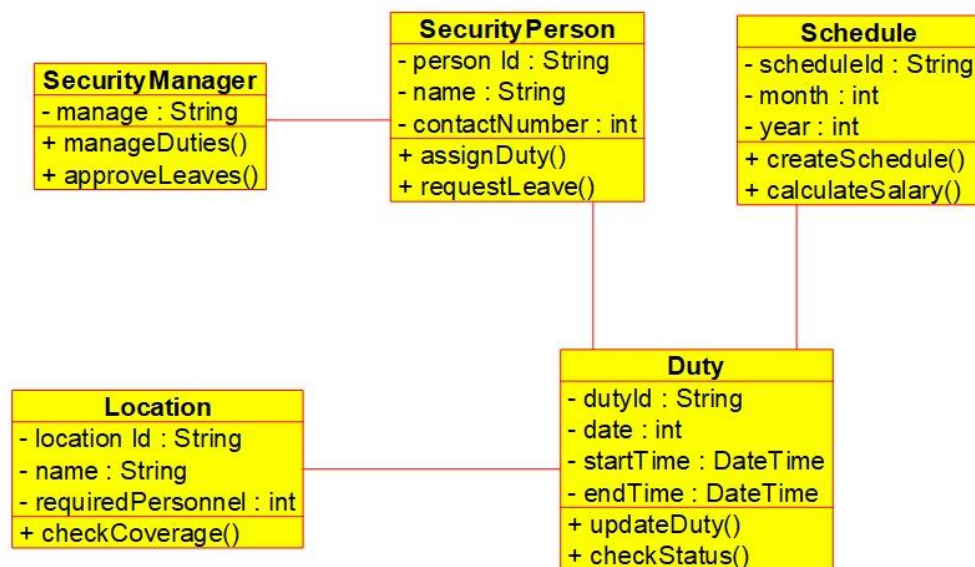
PROCEDURE

1. Identify system actors such as Security Personnel and Security Manager.
2. Define key activities like Duty Assignment, Schedule Management, Leave Recording, and Payment Processing.
3. Determine essential system classes such as SecurityPerson, Schedule, Duty, Leave, Payment, and SecurityManager.

4. Establish relationships between classes, including associations, generalizations, and dependencies.
5. Define attributes and methods for each class to represent their functionalities.
6. Draw the Class Diagram to visualize system structure and relationships.
7. Ensure proper use of UML notations for clarity and completeness.

OUTPUT:

CLASS DIAGRAM:



RESULT

The Class Diagram for the Online Security Management System was successfully designed, covering all necessary entities, attributes, and relationships. This provides a structured representation of the system for implementation.