## **Group Members:**

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## Object-Oriented Programming Project

## **HOSPITAL Management System**

Aim	The main objective of this hospital management system is to manage the details of the hospital employees and patients while keeping it secure through encryption.
Background	Most HMS software typically consist of a relational database which causes significant Overhead. Also, the tracking lists are usually unencrypted and insecure.
Project Specification	Our hospital management system allows the user to access information according to one's security clearance and manage it accordingly. It also keeps the user information secure through encryption and not let everyone have access to everything.
Problem Analysis	We analyzed that Most management software employee relational database on the backend, which causes wastage of computing power/cycles. And the employee and patient details are not secure and can be leaked which can cause problems for them.
Class Herarchy	Person -> Personnel -> Doctor Patient (has-a Bill)
Solution Design	<ul> <li>Security</li> <li>Admitting and discharging patients</li> <li>Hiring and firing employees</li> <li>Displaying data of employees and patients</li> <li>Scheduling and cancelling appointments</li> </ul>

Implementation/Testing	The implementation and testing was successfully carried out by the team and all the errors were amended.
Project Breakdown	Owais: classes Appointment, Patient and main() Fahad: classes Doctor and Bill
Conclusion	We were able to successfully build a program to handle operations required to function an office with ease. Our program offers a lightweight alternative in the form of static filing, which greatly reduces overhead and simplifies data feeding, and retrieval.

## Results:

```
The details of all admitted patients are as follows.

Name: Owais Ali Khan
Ward number: 69
Disease: Unknown
Phone number: 83223921437
Date of Birth: 15/5/2003
Age: 19
Bill: 10000

Name: John Doe
Ward number: 111
Disease: angioplasty
Phone number: 03114567891
Date of Birth: 1/1/1
Age: 23
Bill: 750000

Press any key to continue...
```



