Theory Assignment

Only for course Teacher						
		Needs Improvement	Developing	Sufficient	Above Average	Total Mark
Allocate mark & Percentage		25%	50%	75%	100%	5
Clarity	1					
Content Quality	2					
Spelling & Grammar	1					
Organization and Formatting	1					
					Total obtained mark	
Comments						

Semester: Spring ……24….. / Fall ………

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Batch: 39th   **Section: C**

Course Code: SE-221

Course Name: Object Oriented Design

Course Teacher Name: Mr. Akash Ghosh

Designation: Lecturer   **Submission Date:20/05/24**

<u>Project Idea</u>

1. File-Based Database Enhancements:

CSV Format: Store patient records in a CSV format for better readability and easier parsing.

Data Validation: Implement input validation to ensure data consistency checking that total fees and deposit money are positive numbers.

Backup System: Add functionality to back up patient records to another file or directory.

2. Graphical User Interface:

Develop a graphical user interface using swing for a more user-friendly experience. The graphical user interface can have forms for adding, searching, and viewing records, making it more accessible.

3. Advanced Search and Filtering:

Allow searching by additional fields like disease, admission date, or address.

Implement filters to view records within a specific date range or with outstanding fees.

4. Reporting and Analytics:

Generate reports such as total revenue from all patients, number of patients admitted within a specific period, or outstanding fees.

Display simple analytics like the most common diseases or average hospital stay duration.

5. Security Enhancements:

Hashing Passwords: Use hashing to store passwords securely instead of plaintext.

Access Levels: Implement different user roles with different permissions.

6. Networking and Multi-user Access:

Convert the system to a client-server model using sockets to allow multiple users to access and update records concurrently.

7. Automated Notifications:

Implement a notification system to alert patients or doctors of important dates, such as follow-up appointments or outstanding payments.

8. Data Export and Import:

Add functionality to export patient records to different formats like pdf.

Allow importing records from other systems or formats to ease migration.

9. Unit Testing:

Write unit tests for your methods to ensure the functionality is robust and to facilitate future enhancements.

10. Patient Portal:

Develop a simple patient portal where patients can view their own records, make payments, and communicate with hospital staff.