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| **ASSIGNMENT** | |
| **Subject:** | Programming Fundamentals |
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| **Submitted To:** | Dr. Samia Riaz |
| **Project Name:** | Hospital Appointment System |

## Introduction

## Modules

### User Interface Module (Text-Based)

Description: This module provides a simple text-based interface for interacting with the system. Since it's early in the curriculum, you can avoid graphical user interfaces and stick to basic input/output operations.

#### Skills Involved:

* Console I/O using cin and cout.
* Menus using loops and switch statements.

### Patient Management Module

Description: Manage the basic operations for patients such as adding new patients, updating their records, and deleting them if necessary.

#### Key Features:

Create a Patient class with attributes like name, age, ID, and disease. Implement functions to add, delete, and modify patient data. Store data in an array or vector for simplicity.

#### Skills Involved:

* Class creation and object manipulation.
* Basic file handling (if storing patient data persistently).
* Dynamic memory allocation (if using pointers).

### Doctor Management Module

Description: Similar to patient management, this module handles doctor details.

Key Features:

Create a Doctor class with attributes like name, specialization, and ID. Functions to add, view, and update doctor details.

#### Skills Involved:

* Class structures.
* Arrays or vectors to manage lists of doctors.
* Functions and object methods.

### Appointment Scheduling Module

Description: Allows patients to book appointments with doctors based on availability.

Key Features:

A function to schedule appointments and another to view them. Basic date and time management (simple, such as using integers or strings).

#### Skills Involved:

* Structuring conditional logic (checking availability).
* Arrays or lists for managing appointments.

## Purpose

## Advantages

## Conclusion