

OOP Assignment - 03

Employee Information System

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PROBLEM STATEMENT:

Design an educational Institution that maintains a database of all staff members where the database is segregated into a number of classes having hierarchical relationships. Define all classes with suitable data members and required member functions to build the database and fetch individual details .

CODE

```
#include<iostream>
#include<string>
using namespace std;

class staff {
protected:
    string name, department;
    int staffID;

public:
    void accept() {
        cout << "Enter the name: ";
        cin >> name;

        cout << "Department: ";
        cin >> department;

        cout << "Staff ID: ";
        cin >> staffID;
```

```

    }

    void display() {
        cout << "\nName: " << name;
        cout << "\nDepartment: " << department;
        cout << "\nStaff ID: " << staffID;
    }
};

class teacher : public staff {
    string role, section;

public:
    void accept2() {
        cout << "\n--- Enter Teaching Staff Details ---\n";
        staff::accept();
        cout << "Enter their role: ";
        cin >> role;

        cout << "Enter their section: ";
        cin >> section;
    }

    void display2() {
        cout << "\n--- Teaching Staff Details ---\n";
        staff::display();
        cout << "\nRole: " << role;
        cout << "\nSection: " << section;
    }
};

class supportstaff : public staff {
    string area_of_support;

public:
    void accept3() {
        cout << "\n--- Enter Support Staff Details ---\n";

```

```

        accept();
        cout << "Enter the area of support: ";
        cin >> area_of_support;
    }

    void display3() {
        cout << "\n--- Support Staff Details ---\n";
        display();
        cout << "\nArea of Support: " << area_of_support;
    }
};

int main() {
    int tCount, sCount;

    // For Teachers
    cout << "Enter number of teachers: ";
    cin >> tCount;
    teacher tArr[tCount]; // Array of teacher objects

    for(int i = 0; i < tCount; i++) {
        cout << "\nTeacher " << i + 1 << ":\n";
        tArr[i].accept2();
    }

    cout << "\n--- All Teaching Staff Details ---";
    for(int i = 0; i < tCount; i++) {
        tArr[i].display2();
    }

    // For Support Staff
    cout << "\n\nEnter number of support staff: ";
    cin >> sCount;
    supportstaff sArr[sCount]; // Array of supportstaff objects

    for(int i = 0; i < sCount; i++) {
        cout << "\nSupport Staff " << i + 1 << ":\n";
    }
}

```

```
        sArr[i].accept3();
    }

    cout << "\n--- All Support Staff Details ---";
    for(int i = 0; i < sCount; i++) {
        sArr[i].display3();
    }

    return 0;
}
```

OUTPUT

Enter number of teachers: 2

Teacher 1:

--- Enter Teaching Staff Details ---

Enter the name: Aagam

Department: Comp

Staff ID: 834756

Enter their role: DS

Enter their section: SE2

Teacher 2:

--- Enter Teaching Staff Details ---

Enter the name: OM

Department: Comp

Staff ID: 834765

Enter their role: OOPS

Enter their section: SE2

--- All Teaching Staff Details ---

--- Teaching Staff Details ---

Name: Aagam

Department: Comp

Staff ID: 834756

Role: DS

Section: SE2

--- Teaching Staff Details ---

Name: OM

Department: Comp

Staff ID: 834765

Role: OOPS

Section: SE2

Enter number of support staff: 2

Support Staff 1:

--- Enter Support Staff Details ---

Enter the name: Kaivalya

Department: Comp

Staff ID: 349578

Enter the area of support: Technical

Support Staff 2:

--- Enter Support Staff Details ---

Enter the name: Yash

Department: Comp

Staff ID: 378465

Enter the area of support: Supervisor

--- All Support Staff Details ---

--- Support Staff Details ---

Name: Kaivalya

Department: Comp

Staff ID: 349578

Area of Support: Technical

--- Support Staff Details ---

Name: Yash

Department: Comp

Staff ID: 378465

Area of Support: Supervisor

(program exited with code: 0)

Press return to continue