Assignment 12

Mayur Zope SE Comp A 75

A company maintains employee information such as employee ID, name, designation, and salary. Allow the user to add or delete employee information. Display the information of a particular employee. If the employee does not exist, display an appropriate message. If the employee exists, display the employee details. Use an index sequential file to maintain the data.

```cpp
#include<iostream>

#include<iomanip>

using namespace std;


#define max 10


// Structure of Employee
struct employee {

    string name;

    long int employee_id;

    string designation;

    int salary;
};


int num = -1;


// Array of Employees to store the
// data in the form of the Structure
// of the Array
employee emp[max];


// Function to insert the data into
// given data type
void insert()
{
    if (num < max) {
```

```cpp
        num++;

        cout << "Enter the information of the Employee\n";

        cout << "Employee ID: ";
        cin >> emp[num].employee_id;

        cout << "Name: ";
        cin >> emp[num].name;

        cout << "Designation: ";
        cin >> emp[num].designation;

        cout<<"Salary: ";
        cin>>emp[num].salary;
    }
    else {
        cout << "Employee Table Full\n";
    }
}


// Function to delete record at index i
void deleteIndex(int i)
{
    for (int j = i; j < num; j++) {
        emp[j].name = emp[j + 1].name;
        emp[j].employee_id = emp[j + 1].employee_id;
        emp[j].designation = emp[j + 1].designation;
        emp[j].salary = emp[j +1].salary;
    }
    return;
```

```cpp
}

void displayAllRecords(){
    if(num == -1){
        cout<<"No records present!\n";
        return;
    }
    else{

cout<<endl<<setw(5)<<"ID"<<setw(10)<<"NAME"<<setw(18)<<"DESIGNATION"<<setw(10)<<"SALARY\n";
        for(int i=0; i<num+1; i++){

cout<<setw(5)<<emp[i].employee_id<<setw(10)<<emp[i].name<<setw(18)<<emp[i].designation<<setw(10)<<emp[i].salary<<endl;

        }
    }
}
// Function to delete record
void deleteRecord()
{
    int employee_id;
    cout << "Enter the Employee ID to Delete Record: ";
    cin >> employee_id;

    for (int i = 0; i < num+1; i++) {
        if (emp[i].employee_id == employee_id) {
            deleteIndex(i);
            num--;
            break;
        }
```

```cpp
    }
}
void searchRecord()
{
    int employee_id;
    cout << "Enter the Employee ID to Search Record: ";
    cin >> employee_id;

    for (int i = 0; i < num+1; i++) {

        // If the data is found
        if (emp[i].employee_id == employee_id) {


cout<<endl<<setw(5)<<"ID"<<setw(10)<<"NAME"<<setw(18)<<"DESIGNATION"<<setw(10)<<"SALARY\n";


cout<<setw(5)<<emp[i].employee_id<<setw(10)<<emp[i].name<<setw(18)<<emp[i].designation<<setw(10)<<emp[i].salary<<endl;


            return;
        }
    }
    cout<<"Employee record not found.\n";
}
int main()
{
    int option = 0;
    while(option != 5){
        cout << "\n----- Employee Management System -----\n";
        //cout << "Available Options:\n";
        cout << "1. Insert New Record\n";
```

```cpp
        cout << "2. Display all Records\n";

        cout << "3. Delete Record\n";

        cout << "4. Search Record by Employee ID\n";

        cout << "5. Exit\n";

        cout<<"Enter your choice: ";

        cin >> option;

        switch(option){

            case 1:

                insert();

                break;


            case 2:

                displayAllRecords();

                break;


            case 3:

                deleteRecord();

                break;


            case 4:

                searchRecord();

                break;


            case 5:

                cout<<"\n***** You have exited *****\n";

                break;


            default:

                cout<<"Enter valid option!\n";

                break;

        }
```

```
    }

    return 0;

}
```

// OUTPUT

```
pllab0112@pllab0112-ThinkCentre-M70s:~/Documents/nmiet/12$ g++ DSL12.cpp
pllab0112@pllab0112-ThinkCentre-M70s:~/Documents/nmiet/12$ ./a.out

----- Employee Management System -----
1. Insert New Record
2. Display all Records
3. Delete Record
4. Search Record by Employee ID
5. Exit
Enter your choice: 1
Enter the information of the Employee
Employee ID: 123
Name: John
Designation: HR
Salary: 900000

----- Employee Management System -----
1. Insert New Record
2. Display all Records
3. Delete Record
4. Search Record by Employee ID
5. Exit
Enter your choice: 2

    ID       NAME       DESIGNATION    SALARY
   123       John               HR    900000

----- Employee Management System -----
1. Insert New Record
2. Display all Records
3. Delete Record
4. Search Record by Employee ID
5. Exit
Enter your choice: 5

***** You have exited *****
pllab0112@pllab0112-ThinkCentre-M70s:~/Documents/nmiet/12$
```