

Freelancer Contractor Payment System

1.RESEARCH

This project is made using the C language. By using the concepts such as Bubble sort,Structures,etc. The purpose is to create an efficient and a different system to let companies check the freelancers / Interns working for them and to let them organize the freelancers/interns by their stipend.

The research on this topic is done through following links

- 1.<https://www.pockethrms.com/blog/why-employee-database-management-is-important/>
- 2.https://www.youtube.com/watch?v=o4bAoo_gFBU

2.ANALYSIS

- To create a database for companies to differentiate between interns and freelancers.
- Use concepts of C such as loops , conditional statements,structure,bubble sort ,etc.
- Improve it continuously through users feedback

3.IDEATE

The idea is to create a database for companies to differentiate INTERNS and FREELANCERS hired by them and if their projects or stipend reach a specific threshold / requirement they are offered a job in the company.

4. BUILD

```
#include <stdio.h>
```

```
struct person {  
    char name[50];  
    int projects;  
    int stipend;  
};
```

```
void bubbleSort(struct person arr[], int n) {  
    int i, j;  
    struct person temp;  
    for (i = 0; i < n - 1; i++) {  
        for (j = 0; j < n - i - 1; j++) {  
            if (arr[j].stipend > arr[j + 1].stipend) {  
                temp = arr[j];  
                arr[j] = arr[j + 1];  
                arr[j + 1] = temp;  
            }  
        }  
    }  
}
```

```
int isEligible(struct person p) {  
    if (p.projects >= 3 && p.stipend >= 5000)  
        return 1;  
    else  
        return 0;  
}
```

```
void inputData(struct person arr[], int n, char typeName[]) {  
    int i;  
    printf("\n--- Enter details for %s ---\n", typeName);  
    for (i = 0; i < n; i++) {  
        printf("\nName: ");  
        scanf("%s", arr[i].name);  
        printf("Projects assigned: ");  
        scanf("%d", &arr[i].projects);  
        printf("Stipend: ");  
        scanf("%d", &arr[i].stipend);  
    }  
}
```

```
void displayData(struct person arr[], int n, char typeName[]) {  
    int i;  
    printf("\n==== Sorted %s (By Stipend - Ascending) =====\n", typeName);
```

```

    for (i = 0; i < n; i++) {
        printf("Name: %s | Projects: %d | Stipend: %d | %s\n",
            arr[i].name,
            arr[i].projects,
            arr[i].stipend,
            isEligible(arr[i]) ? "Eligible " : "Not Eligible ");
    }
}

int main() {
    int nf, ni;

    printf("----- FREELANCER & INTERN DATABASE SYSTEM ----- \n");

    printf("\nEnter number of freelancers: ");
    scanf("%d", &nf);
    struct person freelancers[nf];
    inputData(freelancers, nf, "Freelancers");
    bubbleSort(freelancers, nf);

    printf("\nEnter number of interns: ");
    scanf("%d", &ni);
    struct person interns[ni];
    inputData(interns, ni, "Interns");
    bubbleSort(interns, ni);

    displayData(freelancers, nf, "Freelancers");
    displayData(interns, ni, "Interns");

    return 0;
}

```

5. Testing

CASE 1 :

If a FREELANCER and INTERN is not eligible for job

----- FREELANCER & INTERN DATABASE SYSTEM -----

Enter number of freelancers: 1

--- Enter details for Freelancers ---

Name: Akash

Projects assigned: 1

Stipend: 1780

Enter number of interns: 1

--- Enter details for Interns ---

Name: Pushkar

Projects assigned: 1

Stipend: 3200

===== Sorted Freelancers (By Stipend - Ascending) =====

Name: Akash | Projects: 1 | Stipend: 1780 | Not Eligible

===== Sorted Interns (By Stipend - Ascending) =====

Name: Pushkar | Projects: 1 | Stipend: 3200 | Not Eligible

==== Code Execution Successful ====

If multiple FREELANCERS and interns are not eligible

----- FREELANCER & INTERN DATABASE SYSTEM -----

Enter number of freelancers: 2

--- Enter details for Freelancers ---

Name: Radha

Projects assigned: 2

Stipend: 2500

Name: Krushna

Projects assigned: 1
Stipend: 1570

Enter number of interns: 2

--- Enter details for Interns ---

Name: Krushna
Projects assigned: 1
Stipend: 1450

Name: Sarthak
Projects assigned: 1
Stipend: 1200

===== Sorted Freelancers (By Stipend - Ascending) =====

Name: Krushna | Projects: 1 | Stipend: 1570 | Not Eligible

Name: Radha | Projects: 2 | Stipend: 2500 | Not Eligible

===== Sorted Interns (By Stipend - Ascending) =====

Name: Sarthak | Projects: 1 | Stipend: 1200 | Not Eligible

Name: Krushna | Projects: 1 | Stipend: 1450 | Not Eligible

=== Code Execution Successful ===

CASE 2 :

If A Intern / Freelancer si eligible for job

----- FREELANCER & INTERN DATABASE SYSTEM -----

Enter number of freelancers: 1

--- Enter details for Freelancers ---

Name: Rudraksh
Projects assigned: 5
Stipend: 10000

Enter number of interns: 1

--- Enter details for Interns ---

Name: Pushkar
Projects assigned: 5
Stipend: 6700

===== Sorted Freelancers (By Stipend - Ascending) =====
Name: Rudraksh | Projects: 5 | Stipend: 10000 | Eligible

===== Sorted Interns (By Stipend - Ascending) =====
Name: Pushkar | Projects: 5 | Stipend: 6700 | Eligible

=== Code Execution Successful ===

6. IMPLEMENTATION