

# 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](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("\nEnter Name: ");
        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