Green University of Bangladesh
Department of Computer Science and Engineering (CSE)
Faculty of Sciences and Engineering

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Course Code: CSE-104   Section: DB

Lab Project Name: CR VOTING SYSTEM

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[For Teacher's use only: Don't Write Anything inside this box]

Lab Project Status

Marks: …………………………… Signature: .... Comments:

.... Date: ....

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Chapter 1

Introduction

1.1 Introduction

CR Voting System is a software solution for electing the CR and it is specifically designed for CSE B Section, and we tried to add its many features. This system helps the mentor and students for electing CR

1.2 Design Goals/Objective

❖ The main focus of this project is to reduce time and lessen human efforts

. ❖ To provide a user-friendly environment where a user can be serviced better

easily.

Chapter 2

2.1 Student Record System Design

CR Voting System I made using the C program will look like this.

2.1.1 Interface

```
********Welcome to the voting system project*********

                     CR election

****************************************************************
|          1.Shahin          |          2.Lubaba          |
****************************************************************
|          3.Joy             |          4.Johir           |
****************************************************************

Press 1 to vote Shahin
Press 2 to vote Lubaba
Press 3 to vote Joy
Press 4 to vote Johir
Press 5 to show election result
Please choose :
```

2.2 Algorithm

.

Step 1: Start.

Step 2: Declare Two function,CalculateVote() and votingResult()

Step 3: Declare some global variables and assign as a zero

Step 4: Declare an int variable name is choose

Step 5: Run a do-while loop

Step 5.1: Run if-else statement to check the condition

Step 5.2: Use system("CLS") to clear.

Step 5.1: In this loop, We call two functions.

Step 5.2: A student can vote for their favorite candidate or Mentor call a function

Step 5.3: system ("color 07") for a color

Step 5.4: Loop will continue until press 5

Step 5:5: If A students press 1 to 4 then he can vote his favorite candidate

Step 5:5.1: If A students press 1 /2/3/4 then calculateVote function call, and count a code for any Candidate by switch statement and Break statement

Step 5.6: If a someone press any number except 1 to 5 then it gives you a warning message to show the right press number

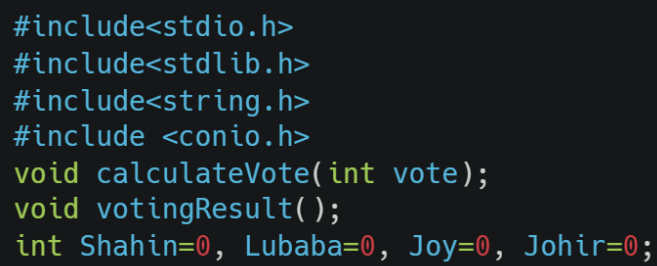**Step 6:** When all students give their vote. CR Press 5

Step 6.1: Mentor has own username and password if password or username if failed then mentor couldn't see the result

Step 6:1: After all the right document Result will be displayed

Step 14: End.

2.3 Implementation of the Project:

➢ **Start of the code:**

```c
#include<stdio.h>
#include<stdlib.h>
#include<string.h>
#include <conio.h>
void calculateVote(int vote);
void votingResult();
int Shahin=0, Lubaba=0, Joy=0, Johir=0;
```

➢ **Main Function**

```c
int main()
{
    int choose;

        printf("*********Welcome to the voting system project*********\n\n");
        printf("                        CR election                          \n\n");
        printf("*************************************************************\n");
        printf("|            1.Shahin              |          2.Lubaba         |\n");
        printf("*************************************************************\n");
        printf("|            3.Joy                 |          4.Johir          |\n");
        printf("*************************************************************\n\n");

    do
    {
        printf("Press 1 to vote Shahin\n");
        printf("Press 2 to vote Lubaba\n");
        printf("Press 3 to vote Joy\n");
        printf("Press 4 to vote Johir\n");
        printf("Press 5 to show election result\n");
        printf("Please choose : ");
        scanf("%d", &choose);
        if(choose==1 || choose==2 || choose==3 || choose==4 ||choose==5 || choose > 5){
            system ("cls");
        }
        if(choose>5){
            system ("color 04");
            printf("Invlid Choose  \nPlease Check valid Input");
        }
        else if (choose==5)
        {
            system ("color 01");
            votingResult();
        }
        else
        {
            system ("color 07");
            calculateVote(choose);
        }
        printf("\n");
    } while (choose != 5);

    return 0;
}
```

➢ **CalculateVote ()**

This function is used for Calculate the Vote

```c
void calculateVote(int vote)
{

    switch (vote)
    {
    case 1:
        Shahin+=1;
        break;
    case 2:
        Lubaba+=1;
        break;
    case 3:
        Joy+=1;
        break;
    case 4:
        Johir+=1;
        break;
    }
}
```

➢ **VotingResult( )**

this function is used to Show the output who is the winner

```c
char username[30];
    char password[12];
    printf("Enter your surname:\n");
    scanf("%s",&username);
    printf("Enter your password:\n");
    scanf("%s",&password);
    if(strcmp(username,"Mentor")==0 &&
 strcmp(password,"123")==0){
        printf("\nWelcome.Login Success!");
```

```c
int wonByVote;
    if(Shahin == Lubaba && Shahin == Joy && Shahin == Johir)
    {
        printf("\nNo one won the election\n\n");
        printf("            Shahin---Lubaba---Joy---Johir\n");
        printf("Total Vote   %d       %d          %d      %d\n",Shahin,Lubaba,Joy,Johir);
    }
    else if (Shahin > Lubaba && Shahin > Joy && Shahin > Johir)
    {
        printf("\n***Shahin won the election***\n\n");
        printf("Total vote of Shahin : %d\n",Shahin);
        wonByVote=Shahin-Lubaba;
        printf("Shahin won by %d votes to Lubaba\n",wonByVote);
        wonByVote=Shahin-Joy;
        printf("Shahin won by %d votes to Joy\n",wonByVote);
        wonByVote=Shahin-Johir;
        printf("Shahin won by %d votes to Johir\n",wonByVote);
    }
    else if (Lubaba > Joy && Lubaba > Johir)
    {
        printf("\n***Lubaba won the election***\n\n");
        printf("Total vote of Lubaba : %d\n",Lubaba);
        wonByVote=Lubaba-Shahin;
        printf("Lubaba won by %d votes to Shahin\n",wonByVote);
        wonByVote=Lubaba-Joy;
        printf("Lubaba won by %d votes to Joy\n",wonByVote);
        wonByVote=Lubaba-Johir;
        printf("Lubaba won by %d votes to Johir\n",wonByVote);
    }
    else if (Joy > Johir)
    {
        printf("\n***Joy won the election***\n\n");
        printf("Total vote of Joy : %d\n",Joy);
        wonByVote=Joy-Lubaba;
        printf("Joy won by %d votes to Lubaba\n",wonByVote);
        wonByVote=Joy-Shahin;
        printf("Joy won by %d votes to Shahin\n",wonByVote);
        wonByVote=Joy-Johir;
        printf("Joy won by %d votes to Johir\n",wonByVote);
    }
    else
    {
        printf("\n***Johir won the election***\n\n");
        printf("Total vote of Johir : %d\n",Johir);
        wonByVote=Johir-Lubaba;
        printf("Johir won by %d votes to Lubaba\n",wonByVote);
        wonByVote=Johir-Joy;
        printf("Johir won by %d votes to Joy\n",wonByVote);
        wonByVote=Johir-Shahin;
        printf("Johir won by %d votes to Shahin\n",wonByVote);
    }
}
else{
printf("\nInvalid User Login");
}
```

Chapter 3

Performance Evaluation

3.1 Results and Discussions

3.1.1 Output

❖ This is the main panel of the system. From there can do any of the following options.

```
*********Welcome to the voting system project*********

                    CR election

**************************************************************
|         1.Shahin             |         2.Lubaba          |
**************************************************************
|         3.Joy                |         4.Johir           |
**************************************************************

Press 1 to vote Shahin
Press 2 to vote Lubaba
Press 3 to vote Joy
Press 4 to vote Johir
Press 5 to show election result
Please choose :
```

❖ Any user enters a number for their valuable candidate

```
    Press 1 to vote Shahin
    Press 2 to vote Lubaba
    Press 3 to vote Joy
    Press 4 to vote Johir
    Press 5 to show election result
    Please choose : []
```

13 ❖If any user presses any wrong option

```
Invlid Choose
Please Check valid Input
Press 1 to vote Shahin
Press 2 to vote Lubaba
Press 3 to vote Joy
Press 4 to vote Johir
Press 5 to show election result
Please choose : []
```

❖If mentor press 5 then output will be like this

```
Enter your surname:
Mentor
Enter your password:
123

Welcome.Login Success!
***Shahin won the election***

Total vote of Shahin : 5
Shahin won by 4 votes to Lubaba
Shahin won by 5 votes to Joy
Shahin won by 5 votes to Johir

PS G:\Programming Lab(jabed)\Project> []
```

3.1.2 Analysis and Outcome
The project is built using a C programming language. We do the coding on Visual Studio Code using GCC compiler. This project is mainly built to reduce the pressure and do the work efficiently. We will update this project and add more features. It will be helpful for all the students and the teachers. So fer we do the project using the course knowledge of structured programming.

Chapter 4

Conclusion

4.1 Introduction

The CR Voting System needs to be computerized to reduce human errors and increase efficiency. By computerizing the system we can do the work lesser errors. This project is built for electing CR.

4.1 Practical Implications

The CR Voting system helps the user to easily know who is the winner

4.2 Scope of Future Work

In the future, this can be the most useful product in school, college, and university. In the future, we can add more features to this. Like, add student ID, Section, etc,. This system can reduce mistakes and work more efficiently. In this way, it can be helpful for our work.