Project Work Submitted Toward Partial Fulfillment Of The AISSC Examination 2022 -23 in Computer Science

SENATE ELECTION VOTING SYSTEM

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DEPARTMENT OF COMPUTER SCIENCE

BONAFIDE CERTIFICATE

CERTIFIED TO BE THE BONAFIDE RECORD OF THE WORK DONE
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OF CLASS XII-A, INDIAN COMMUNITY SCHOOL KUWAIT, DURING THE ACADEMIC YEAR 2022-23

DATED

P.G.T IN COMPUTER SCIENCE
INTERNAL EXAMINER
THE INDIAN COMMUNITY SCHOOL, KUWAIT

DATE

EXTERNAL EXAMINER

DECLARATION

I hereby declare that the work presented in this Project is the original work done by me
Mr. Mohamed Fazil
of class XII - A during the academic year 2022- 23

NAME: *Mohamed Fazil*
CLASS: *XII-A*

SIGNATURE

INDEX

INTRODUCTION

Senate Election Voting System (SEVS) is used to make voting easier for schools.

The main advantages of using SEVS are:

- **More students can participate**
- **The election is quicker**
- **Fewer paper works**
- **Fairer elections**
- **It is easier to nominate candidates**

It allows the users the enter candidate details and then takes the votes from each student and increments into each candidate, and the user can get the report printed.

The program requires the security pin (only known to admin) while entering the candidate details and to get the results.

CONCEPT

The program has three subsets:

1. Admin Panel:
In this panel, the admin can enter the number of candidates, and their details accordingly. The admin is asked to enter the student's name, class, and school ID.

2. Voting Panel:
Here the student is asked to log in with their school ID, there are functions to verify the details of the student, to check if the student has voted before or not, if not the vote will be incremented into the respective candidate's votes.

3. Result Panel:
This panel only prints the report with the name and details of the winning candidates.

4. Votes Panel:
Basically, it's a function, that allows the user to get the votes received by each of the candidates

5. Reset Panel:
It allows the admin to reset all the students voting detail's CSV files, and the winners' CSV files to their original state, by deleting all the newly added details.

There are 3 CSV files used in this program, namely:

- Student Details File (studentdetails.csv): This file stores the student's name, school ID, and voting status (whether they have voted or not).

- Results File (votes.csv): This file stores the votes of the winning candidates along with their details.

- Votes File (all votes.csv): This file contains the votes for all the candidates.

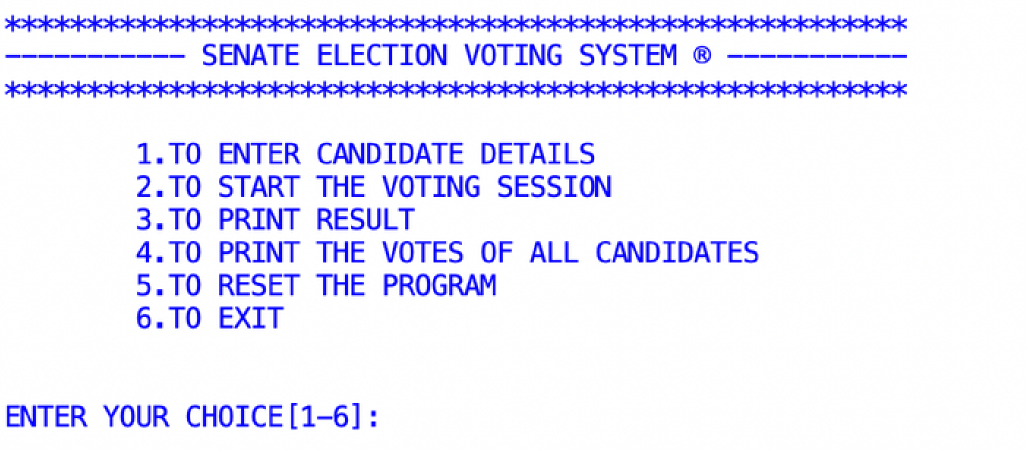
The user will be first entering into the main- menu, where the user is allowed to choose the options from the given on his/her needs. After choosing the option the user will be going into that particular sub-program.

Certain options (like the entry of the candidate's details and printing requires a security pin that is only made available to the developer), then after entering the details the voting session can be started, and the student can mark their vote for the candidate they wish to vote for.

After a student has voted, the next student can start voting in the same way mentioned above. Once all the student has voted the admin can stop the voting session by entering the "no" choice into the program when asked.
Then the admin can easily print the details by opting for the results option in the main program.

If the admin wants to know the votes of each candidate, he can opt for the other option which allows the admin to get the votes of all the candidates.
The admin can reset all the CSV files to the original state by choosing the reset option from the main-menu.

OUTPUT



```
*******************************************************
----------- SENATE ELECTION VOTING SYSTEM ® -----------
*******************************************************

        1.TO ENTER CANDIDATE DETAILS
        2.TO START THE VOTING SESSION
        3.TO PRINT RESULT
        4.TO PRINT THE VOTES OF ALL CANDIDATES
        5.TO RESET THE PROGRAM
        6.TO EXIT


ENTER YOUR CHOICE[1-6]:
```

FUNCTION-1 : mainmenu()

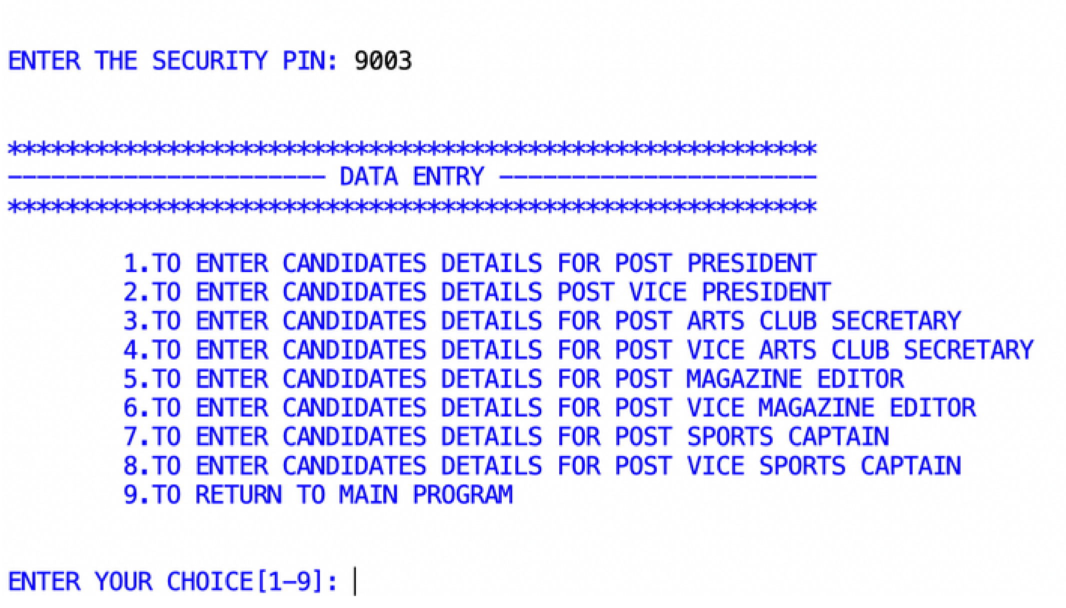
This function is the calling program for the rest of the panels in the program It allows the users to go into the other. This is the first function that runs first e when the program is run.

It can take the users into the respective functions on the basis choices made by the user.

```
def mainmenu():
   while(True):
       print("\n")
       print("*"*55)
       print("----------- SENATE ELECTION VOTING SYSTEM ® -----------")
       print("*"*55)
       print("""
       1.TO ENTER CANDIDATE DETAILS
       2.TO START THE VOTING SESSION
       3.TO PRINT RESULT
       4.TO PRINT THE VOTES OF ALL CANDIDATES
       5.TO RESET THE PROGRAM
       6.TO EXIT """)
       print("\n")
       n=int(input("ENTER YOUR CHOICE[1-6]: "))
       if n==1:
           encad()
       elif n==2:
           login()
           votingsession()
```

```
        elif n==3:
           results()
       elif n==4:
           allvotes()
       elif n==5:
           print ("CHANGING THE VALUES......... ")
           print("\n")
           reset()
       elif n==6:
           print("\n")
           print("_"*85)
           print("---------------------  ⸸☬🆃🅷🅰🅽🅺🆂 🅵🅾🆁
🆄🆂🅸🅽🅶 🆂🅴🆅🆂☬⸸  -------------------")
           print("---------------------------THE PROGRMAM HAS
BEEEN TERMINATED-------------------------")
           reset()
           print("-" * 85)
           exit()
       else:
           print("---- INVALID CHOICE ----")
           pass
```

OUTPUT



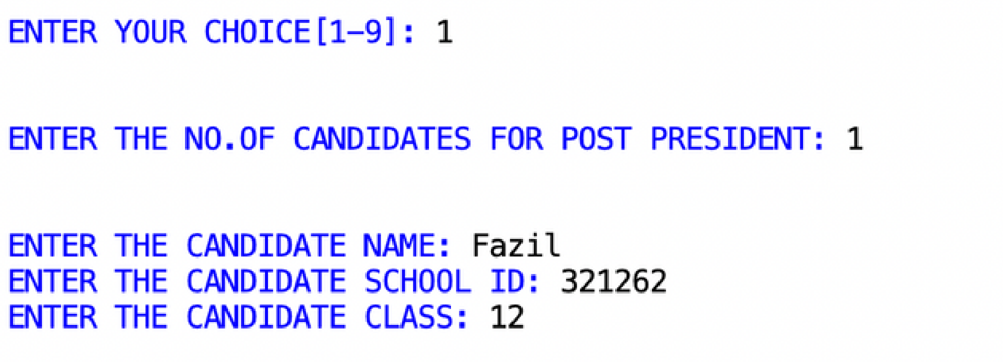
```
ENTER THE SECURITY PIN: 9003

********************************************************
---------------------- DATA ENTRY ----------------------
********************************************************

        1.TO ENTER CANDIDATES DETAILS FOR POST PRESIDENT
        2.TO ENTER CANDIDATES DETAILS POST VICE PRESIDENT
        3.TO ENTER CANDIDATES DETAILS FOR POST ARTS CLUB SECRETARY
        4.TO ENTER CANDIDATES DETAILS FOR POST VICE ARTS CLUB SECRETARY
        5.TO ENTER CANDIDATES DETAILS FOR POST MAGAZINE EDITOR
        6.TO ENTER CANDIDATES DETAILS FOR POST VICE MAGAZINE EDITOR
        7.TO ENTER CANDIDATES DETAILS FOR POST SPORTS CAPTAIN
        8.TO ENTER CANDIDATES DETAILS FOR POST VICE SPORTS CAPTAIN
        9.TO RETURN TO MAIN PROGRAM

ENTER YOUR CHOICE[1-9]: 
```

FUNCTION-2 : encad( )

This function allows the users to input the candidate details, such as their name, school ID and class. Firstly, the user will be asked to choose the post to enter the candidates for, after that the user should enter the no.of candidates standing for that post, then the user can enter the details of the candidates for the no.of students that the user has entered. After they finish entering the details the user can exit out of the function by choosing the exit option which will break the function, and they can continue into the next functions or they can continue using the program

```
def encad():
    print("\n")
    pin = int(input("ENTER THE SECURITY PIN: "))
    if pin == 9003:
        while (True):
            print("\n")
            print("*" * 56)
            print("--------------------- DATA ENTRY --------
--------------")
            print("*" * 56)
            print("""
        1.TO ENTER CANDIDATES DETAILS FOR POST PRESIDENT
        2.TO ENTER CANDIDATES DETAILS POST VICE PRESIDENT
        3.TO ENTER CANDIDATES DETAILS FOR POST ARTS CLUB
SECRETARY
        4.TO ENTER CANDIDATES DETAILS FOR POST VICE ARTS CLUB
SECRETARY
        5.TO ENTER CANDIDATES DETAILS FOR POST MAGAZINE
EDITOR
        6.TO ENTER CANDIDATES DETAILS FOR POST VICE MAGAZINE
EDITOR
        7.TO ENTER CANDIDATES DETAILS FOR POST SPORTS CAPTAIN
        8.TO ENTER CANDIDATES DETAILS FOR POST VICE SPORTS
CAPTAIN
```

OUTPUT



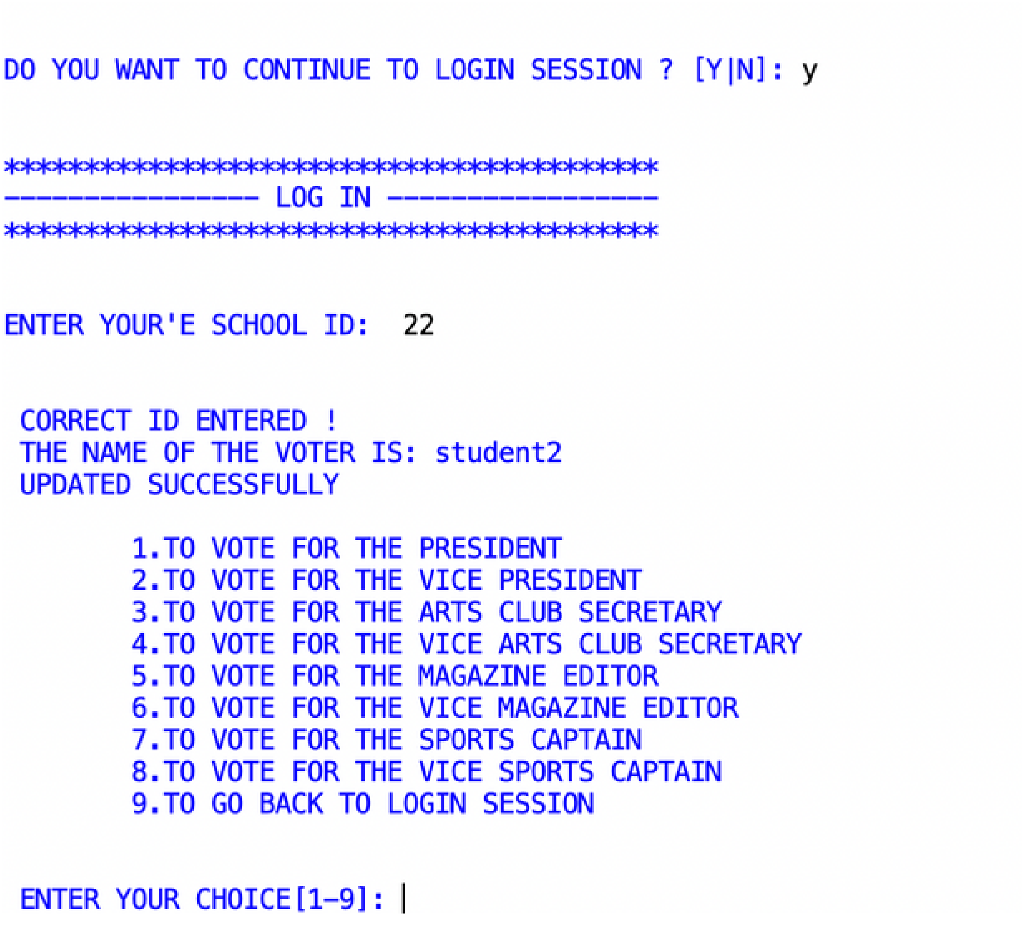
```
ENTER YOUR CHOICE[1-9]: 1


ENTER THE NO.OF CANDIDATES FOR POST PRESIDENT: 1


ENTER THE CANDIDATE NAME: Fazil
ENTER THE CANDIDATE SCHOOL ID: 321262
ENTER THE CANDIDATE CLASS: 12
```

```
        9.TO RETURN TO MAIN PROGRAM """)
            print("\n")
            c = int(input("ENTER YOUR CHOICE[1-9]: "))
            print("\n")
            if c == 1:
                n = int(input("ENTER THE NO.OF CANDIDATES 
FOR POST PRESIDENT: "))
                print("\n")
                for i in range(n):
                    a = input("ENTER THE CANDIDATE NAME: ")
                    b = int(input("ENTER THE CANDIDATE 
SCHOOL ID: "))
                    c = int(input("ENTER THE CANDIDATE 
CLASS: "))
                    print("\n")
                    l = [a, b, c, 0, 'PRESIDENT']
                    presidents.append(l)
            elif c == 2:
                    n = int(input("ENTER THE NO.OF 
CANDIDATES FOR POST VICE PRESIDENT: "))
                    print("\n")
                    for i in range(n):
                        a=input("ENTER THE CANDIDATE NAME: 
")

                        b=int(input("ENTER THE CANDIDATE 
SCHOOL ID: "))
                        c = int(input("ENTER THE CANDIDATE 
CLASS: "))
                        print("\n")
                        l = [a, b, c, 0, 'VICE PRESIDENT']
                        vpresidents.append(l)
```

```
            elif c == 3:
                n = int(input("ENTER THE NO.OF CANDIDATES FOR
POST ARTS CLUB SECRETARY: "))
                print("\n")
                for i in range(n):
                    a = input("ENTER THE CANDIDATE NAME: ")
                    b = int(input("ENTER THE CANDIDATE SCHOOL
ID: "))
                    c = int(input("ENTER THE CANDIDATE CLASS:
"))
                    print("\n")
                    l = [a, b, c, 0, 'ARTS CLUB SECRETARY']
                    artsclubsecs.append(l)
            elif c == 4:
                n = int(input("ENTER THE NO.OF CANDIDATES FOR
POST VICE ARTS CLUB SECRETARY: "))
                print("\n")
                for i in range(n):
                    a = input("ENTER THE CANDIDATE NAME: ")
                    b = int(input("ENTER THE CANDIDATE SCHOOL
ID: "))
                    c = int(input("ENTER THE CANDIDATE CLASS:
"))
                    print("\n")
                    l = [a, b, c, 0, 'VICE ARTS CLUB
SECRETARY']
                    vartsclubsecs.append(l)
            elif c == 5:
                n = int(input("ENTER THE NO.OF CANDIDATES FOR
POST MAGAZINE EDITOR: "))
                print("\n")
                for i in range(n):
                    a = input("ENTER THE CANDIDATE NAME: ")
                    b = int(input("ENTER THE CANDIDATE SCHOOL
ID: "))
                    c = int(input("ENTER THE CANDIDATE CLASS:
"))
                    print("\n")
                    l = [a, b, c, 0, 'MAGAZINE EDITOR']
                    mgznedi.append(l)
```

```
             elif c == 6:
                  n = int(input("ENTER THE NO.OF CANDIDATES FOR
VICE POST MAGAZINE EDITOR: "))
                  print("\n")
                  for i in range(n):
                  a = input("ENTER THE CANDIDATE NAME: ")
                  b = int(input("ENTER THE CANDIDATE SCHOOL ID:
"))
                  c = int(input("ENTER THE CANDIDATE CLASS: "))
                  print("\n")
                  l = [a, b, c, 0, 'VICE MAGAZINE EDITOR']
                  vmgznedi.append(l)
             elif c == 7:
                  n = int(input("ENTER THE NO.OF CANDIDATES FOR
POST SPORTS CAPTAIN: "))
                  print("\n")
                  for i in range(n):
                      a = input("ENTER THE CANDIDATE NAME: ")
                      b = int(input("ENTER THE CANDIDATE SCHOOL
ID: "))
                      c = int(input("ENTER THE CANDIDATE CLASS:
"))
                      print("\n")
                      l = [a, b, c, 0, 'SPORTS CAPTAIN']
                      sprtscap.append(l)
             elif c == 8:
                  n = int(input("ENTER THE NO.OF CANDIDATES FOR
POST VICE SPORTS CAPTAIN: "))
                  print("\n")
                  for i in range(n):
                      a=input("ENTER THE CANDIDATE NAME: ")
                      b=int(input("ENTER THE CANDIDATE SCHOOL ID:
"))
                      c=int(input("ENTER THE CANDIDATE CLASS: "))
                      print("\n")
                      l = [a, b, c, 0, 'VICE SPORTS CAPTAIN']
                      vsprtscap.append(l)
             elif c == 9:
                  print("GOING BACK TO THE MAIN-MENU...........")
                  break
     else:
         print(" WRONG PIN ENTERED ! ")
         print(" TRY AGAIN.................")
         pass
```

OUTPUT



```
DO YOU WANT TO CONTINUE TO LOGIN SESSION ? [Y|N]: y


*****************************************
---------------- LOG IN -----------------
*****************************************


ENTER YOUR'E SCHOOL ID:  22

 CORRECT ID ENTERED !
 THE NAME OF THE VOTER IS: student2
 UPDATED SUCCESSFULLY

        1.TO VOTE FOR THE PRESIDENT
        2.TO VOTE FOR THE VICE PRESIDENT
        3.TO VOTE FOR THE ARTS CLUB SECRETARY
        4.TO VOTE FOR THE VICE ARTS CLUB SECRETARY
        5.TO VOTE FOR THE MAGAZINE EDITOR
        6.TO VOTE FOR THE VICE MAGAZINE EDITOR
        7.TO VOTE FOR THE SPORTS CAPTAIN
        8.TO VOTE FOR THE VICE SPORTS CAPTAIN
        9.TO GO BACK TO LOGIN SESSION


 ENTER YOUR CHOICE[1-9]: |
```

FUNCTION-3 : login( )

This function takes the user into the login session where the students will be logging in with their school IDs. While logging in the sub functions check and verify the students and their voting status .

The entered IDs will be checked if its valid or not, if the ID is wrong or the student has voted then the student won't be able to vote again.

```
def login():
    print("\n")
    d = input("DO YOU WANT TO CONTINUE TO LOGIN SESSION ?
[Y|N]: ")
    if d in "yY":
        while (True):
            print("\n")
            print("*" * 41)
            print("--------------- LOG IN ----------------
")  # loggin in starts
            print("*" * 41)
            print("\n")
            # TO CHECK ID AND TO VERIFY IT IN CSV FILE
            id = input("ENTER YOUR'E SCHOOL ID:  ")
            with open('studentdetails.csv', 'r') as fi:
                r = csv.reader(fi)
                l = []
                for i in r:
                    if (i != []):
                        l.append(i)
                for lst in l:
                    if (lst[1] == id):
                        ex = True
                        break
                    else:
                        ex = False
```

```
    if (ex == True):
        print("\n")
        var = lst[0]
        print(" CORRECT ID ENTERED ! ")
        fou = 0
    else:
        print("\n")
        print("ID NOT FOUND /n TRY AGAIN")
        fou = 1
if fou == 1:
    id = input(" ENTER YOUR'E SCHOOL ID:  ")
    with open('studentdetails.csv', 'r') as fi:
        r = csv.reader(fi)
        l = []
        for i in r:
            if (i != []):
                l.append(i)
        for lst in l:
            if (lst[1] == id):
                ex = True
                break
            else:
                ex = False
        if (ex):
            var = lst[0]
            print("CORRECT ID ENTERED ! ")
            fou = 0
        else:
            print(" WRONG INPUTS SURGE | KINDLY
RESTART PROGRAM ")
            login()
            fou = 0
```

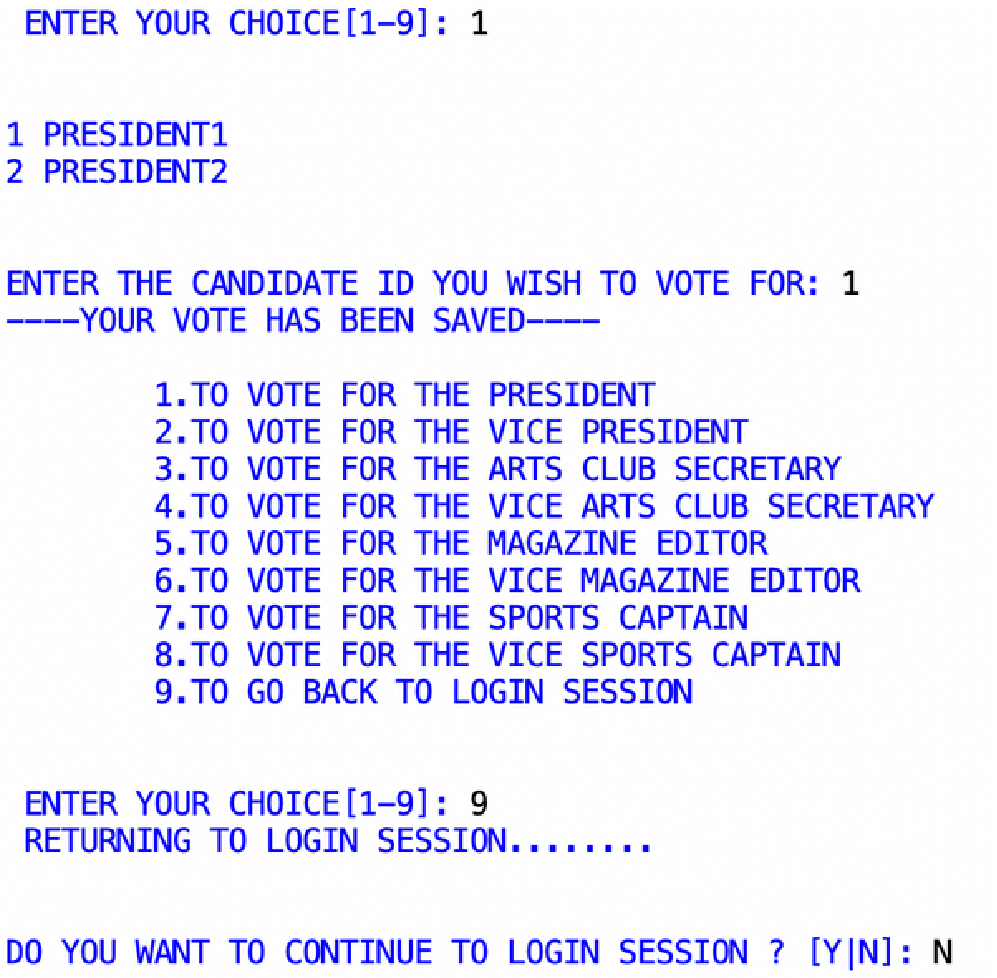
```
        with open('studentdetails.csv', 'r') as fo:
            c = csv.reader(fo)
            for i in c:
                if (i != []):
                    if (i[1] == id):
                        if (i[2] == str(True)):
                            cf = True

                        else:
                            cf = False
                        break
                    else:
                        cf = True

        if (cf):
            print(" YOU ALREADY HAVE VOTED ! ")
            print("\n")
            login()
        else:
            print(' THE NAME OF THE VOTER IS:', var)
            details(id)
            votingsession()
else:
    print("\n")
    mainmenu()
```

FUNCTION-4 : details()

This function is a sub function in the login function, when the the students vote their voting status should be change in order to stop voting twice. So for that voting status will be changed to 'True' which was initially 'False' in the CSV file.

```
def details(stu_id):
    l = []
    # READING ALL DATA TO A NESTED LIST
    # EXAMPLE :[['student0', '00', 'False'], ['student1', '11',
'False'],...]
    with open('studentdetails.csv', 'r') as fo:
        reader = csv.reader(fo)
        for i in reader:
            if (i != []):
                l.append(i)
    # MODIFYING THE NESTED LIST, AND CHANGING FALSE TO TRUE
    for ls in l:
        if (ls[1] == stu_id):
            ls[2] = True
    # WRITING THE MODIFIED LIST INTO THE FILE
    with open('studentdetails.csv', 'w') as fo:
        w = csv.writer(fo)
        w.writerows(l)
        print(" UPDATED SUCCESSFULLY ")
```

OUTPUT



```
 ENTER YOUR CHOICE[1-9]: 1


1 PRESIDENT1
2 PRESIDENT2


ENTER THE CANDIDATE ID YOU WISH TO VOTE FOR: 1
----YOUR VOTE HAS BEEN SAVED----

        1.TO VOTE FOR THE PRESIDENT
        2.TO VOTE FOR THE VICE PRESIDENT
        3.TO VOTE FOR THE ARTS CLUB SECRETARY
        4.TO VOTE FOR THE VICE ARTS CLUB SECRETARY
        5.TO VOTE FOR THE MAGAZINE EDITOR
        6.TO VOTE FOR THE VICE MAGAZINE EDITOR
        7.TO VOTE FOR THE SPORTS CAPTAIN
        8.TO VOTE FOR THE VICE SPORTS CAPTAIN
        9.TO GO BACK TO LOGIN SESSION


 ENTER YOUR CHOICE[1-9]: 9
 RETURNING TO LOGIN SESSION........


DO YOU WANT TO CONTINUE TO LOGIN SESSION ? [Y|N]: N
```

FUNCTION-5 : votingsession( )

Once the students has finished logging in they will going into this function i.e votingsession( ), which allows them to to choose the post to vote for, once a post is chosen they will be shown the candidates available in that particular post they chose, then the students can mark their vote by entering the candidate ID into the allowed option. After they can vote for the other posts in the similar way as mentioned above.

```
def votingsession():
    while (True):
        print("""
        1.TO VOTE FOR THE PRESIDENT
        2.TO VOTE FOR THE VICE PRESIDENT
        3.TO VOTE FOR THE ARTS CLUB SECRETARY
        4.TO VOTE FOR THE VICE ARTS CLUB SECRETARY
        5.TO VOTE FOR THE MAGAZINE EDITOR
        6.TO VOTE FOR THE VICE MAGAZINE EDITOR
        7.TO VOTE FOR THE SPORTS CAPTAIN
        8.TO VOTE FOR THE VICE SPORTS CAPTAIN
        9.TO GO BACK TO LOGIN SESSION""")
        print("\n")
        ch = int(input(" ENTER YOUR CHOICE[1-9]: "))

        if ch == 1:
            votechoice(presidents)
        elif ch == 2:
            votechoice(vpresidents)
        elif ch == 3:
            votechoice(artsclubsecs)
        elif ch == 4:
            votechoice(vartsclubsecs)
        elif ch == 5:
            votechoice(mgznedi)
        elif ch == 6:
            votechoice(vmgznedi)
```

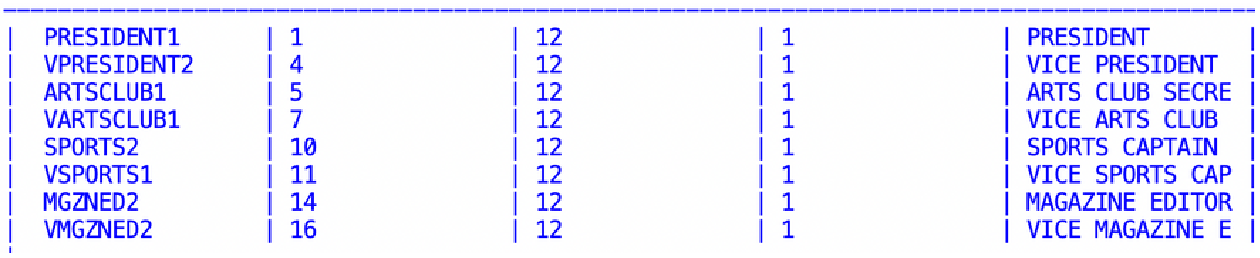
```
elif ch == 7:
    votechoice(sprtscap)
elif ch == 8:
    votechoice(vsprtscap)
elif ch == 9:
    print(" RETURNING TO LOGIN SESSION........")
    login()
else:
    print(" INVALID CHOICE - TRY AGAIN ")
```

FUNCTION-6 : votechoice( )

This is a Sub-Function that takes the votes marked by the students and appends into the respective candidate's list. Which then is used to find the winners.

```
def votechoice(m):
    q = []
    print("\n")
    for i in m:
        print("\n")
        print(i[1], i[0])
        q.append(i[1])
    print("\n")
    o = int(input("ENTER THE CANDIDATE'S ID YOU WISH TO VOTE FOR:
"))
    if o in q:
        for i in m:
            if i[1] == o:
                i[3] += 1
        print("----YOUR VOTE HAS BEEN SAVED----")
    else:
        print(" INVALID CHOICE ! ")
```

OUTPUT



```
-----------------------------------------------------------------------------------------------
|  PRESIDENT1       | 1                | 12               | 1                | PRESIDENT      |
|  VPRESIDENT2      | 4                | 12               | 1                | VICE PRESIDENT |
|  ARTSCLUB1        | 5                | 12               | 1                | ARTS CLUB SECRE |
|  VARTSCLUB1       | 7                | 12               | 1                | VICE ARTS CLUB |
|  SPORTS2          | 10               | 12               | 1                | SPORTS CAPTAIN |
|  VSPORTS1         | 11               | 12               | 1                | VICE SPORTS CAP |
|  MGZNED2          | 14               | 12               | 1                | MAGAZINE EDITOR |
|  VMGZNED2         | 16               | 12               | 1                | VICE MAGAZINE E |
```

FUNCTION-7 : results( )

This function takes the candidate who has the maximum votes from all the list of the various posts where all the votes are stored in the list. Then they get appended into another list with help of a variable in between the process. If the appending values are equal to empty list or to none , then the for loop breaks. Then it enters the winners names and details of them, into the CSV files, using appending mode, then at the end with help of a function, the file is displayed.

```
print("\n")
pin = int(input("ENTER THE SECURITY PIN: "))
if pin == 9003:
    v1 = maxvotes(presidents)
    v2 = maxvotes(vpresidents)
    v3 = maxvotes(artsclubsecs)
    v4 = maxvotes(vartsclubsecs)
    v5 = maxvotes(mgznedi)
    v6 = maxvotes(vmgznedi)
    v7 = maxvotes(sprtscap)
    v8 = maxvotes(vsprtscap)
    a1 = []
    a2 = []
    a3 = []
    a4 = []
    a5 = []
    a6 = []
    a7 = []
    a8 = []
    for i in range(5):
        if v1 != None and v1 != []:
            a1.append(v1[0][i])
        else:
            break
    for i in range(5):
        if v2 != None and v2 != []:
            a2.append(v2[0][i])
        else:
            break
```

```
for i in range(5):
    if v3 != None and v3 != []:
        a3.append(v3[0][i])
    else:
        break
for i in range(5):
    if v4 != None and v4 != []:
        a4.append(v4[0][i])
    else:
        break
for i in range(5):
    if v5 != None and v5 != []:
        a5.append(v5[0][i])
    else:
        break
for i in range(5):
    if v6 != None and v6 != []:
        a6.append(v6[0][i])
    else:
        break
for i in range(5):
    if v7 != None and v7 != []:
        a7.append(v7[0][i])
    else:
        break
for i in range(5):
    if v8 != None and v8 != []:
        a8.append(v8[0][i])
    else:
        break
vote_list = open('votes.csv', 'a', newline='')
p = csv.writer(vote_list)
if [a1] != [] and [a1] != None:
    p.writerows([a1])
vote_list = open('votes.csv', 'a', newline='')
p = csv.writer(vote_list)
if [a2] != [] and [a2] != None:
    p.writerows([a2])
vote_list = open('votes.csv', 'a', newline='')
p = csv.writer(vote_list)
if [a3] != [] and [a3] != None:
    p.writerows([a3])
```

```
    vote_list = open('votes.csv', 'a', newline='')
    p = csv.writer(vote_list)
    if [a4] != [] and [a4] != None:
        p.writerows([a4])
    vote_list = open('votes.csv', 'a', newline='')
    p = csv.writer(vote_list)
    if [a5] != [] and [a5] != None:
        p.writerows([a5])
    vote_list = open('votes.csv', 'a', newline='')
    p = csv.writer(vote_list)
    if [a6] != [] and [a6] != None:
        p.writerows([a6])
    vote_list = open('votes.csv', 'a', newline='')
    p = csv.writer(vote_list)
    if [a7] != [] and [a7] != None:
        p.writerows([a7])
    vote_list = open('votes.csv', 'a', newline='')
    p = csv.writer(vote_list)
    if [a8] != [] and [a8] != None:
        p.writerows([a8])
    vote_list = open('votes.csv', 'a', newline='')
    p = csv.writer(vote_list)
    display('votes.csv')
else:
    print(" WRONG PIN ENTERED ! ")
    print(" TRY AGAIN................")
    pass
```

FUNCTION-8 : display( )

This is a Sub-Function that takes the CSV file name where the results are stored. And it displays it by, first reading the file by opening it in read mode and storing it into the reader variable then creating an empty list, and using for loop appending it into the empty list, then using the inner function i.e fixed_length it returns the value text. After using the function draw_table(data) the hyphen and stopper are printed to make the tabular column with help of the returned text file using the previous function, Then using the for loop the data is printed with correct indentation with " | ". At the end draw_table(mock_data) is returned which is printed when the results( ) function is called.

```
def display(file):
    import csv
    reader = csv.reader(open(file, 'r'))
    mock_data = []
    for row in reader:
        mock_data.append(row)

    header = mock_data.pop(0)

    def fixed_length(text, length):
        if len(text) > length:
            text = text[:length]
        elif len(text) < length:
            text = (text + " " * length)[:length]
        return text

    def draw_table(data):
        print('-' * 92)
        print('| ', end=" ")
        for column in header:
            print(fixed_length(column, 15), end=" | ")
        print()
        print("-" * 92)
```

```
    for row in data:
        print("| ", end=" ")
        for column in row:
            print(fixed_length(column, 15), end=" | ")
        print()
    print("-" * 92)

draw_table(mock_data)
```

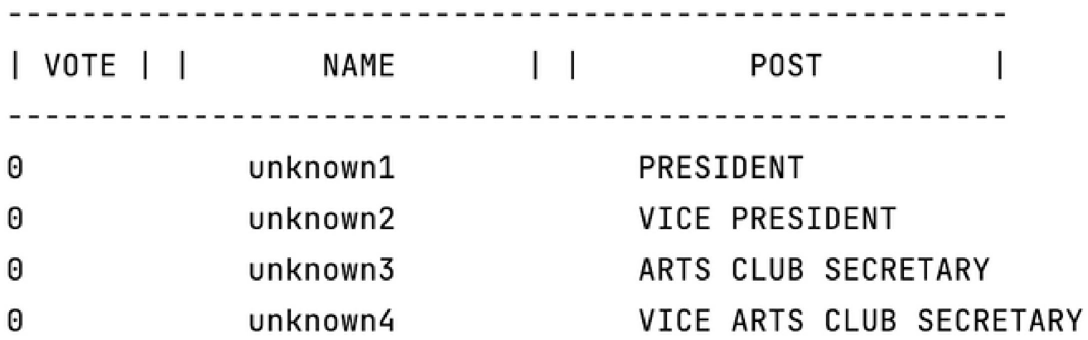
FUNCTION-9 : maxvotes( )

This is a Sub-Function that finds the candidate with the maximum votes in every post and returns the list containing the winning candidates.

It compares the votes stored in the candidate details using for loop and sets the max to -1, then all the values in the list is compared to -1, so if any value is more than -1 then that value gets appended into the maximum votes list. Which is returned at the end.

```
def maxvotes(n):
    maxe = -1
    maxele = []
    l = len(n)
    for i in range(l):
        if n[i][3] > maxe:
            maxe = n[i][3]
            maxele = [n[i]]
        elif n[i][3] == maxe:
            if n[i][3] != None and n[i][3] != []:
                maxele = maxele.append([n[i][3]])
    return maxele
```

OUTPUT



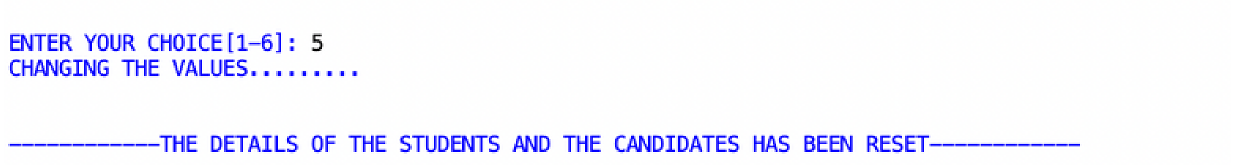
```
--------------------------------------------------------
| VOTE | |        NAME        | |         POST         |
--------------------------------------------------------
0             unknown1             PRESIDENT
0             unknown2             VICE PRESIDENT
0             unknown3             ARTS CLUB SECRETARY
0             unknown4             VICE ARTS CLUB SECRETARY
```

FUNCTION-10 : allvotes( )

This function allows the user to know the votes received by each of the student, separately.

```
def allvotes():
    p=9003
    pin=int(input('ENTER THE SECURITY PIN: '))

    if pin==p
        print("\n")
        print("-" * 54)
        print('| VOTE |', "|       NAME       |", '|          POST
|')
        print("-" * 54)
        for q in presidents:
            print(q[3]," "*10, q[0]," "*11,q[4])
        for w in vpresidents:
            print(w[3]," "*10, w[0]," "*11, w[4])
        for e in artsclubsecs:
            print(e[3]," "*10, e[0]," "*11, e[4])
        for r in vartsclubsecs:
            print(r[3]," "*10, r[0]," "*11, r[4])
        for t in mgznedi:
            print(t[3]," "*10, t[0]," "*11, t[4])
        for y in vmgznedi:
            print(y[3]," "*10, y[0]," "*11, y[4])
        for u in sprtscap:
            print(u[3]," "*10, u[0]," "*11, u[4])
        for i in vsprtscap:
            print(i[3]," "*10, i[0]," "*11, i[4])
    else:
        print(" WRONG PIN ENTERED ")
        break
```

OUTPUT



```
ENTER YOUR CHOICE[1-6]: 5
CHANGING THE VALUES.........


------------THE DETAILS OF THE STUDENTS AND THE CANDIDATES HAS BEEN RESET------------
```

FUNCTION-11 : reset( )

This functions reset values in the two files studentdetails.csv and votes.csv to the original values.

```
def reset():
    with open('studentdetails.csv', 'r') as fo:
        csv_reader = csv.reader(fo)
        list_of_csv = list(csv_reader)
        M = list_of_csv
        for i in M:
            if i[2] == str(True):
                i[2] = str(False)
    with open('studentdetails.csv', 'w') as fo2:
        N = csv.writer(fo2)
        N.writerows(M)

    with open("votes.csv", "w") as fo4:
        J = csv.writer(fo4)
        heading = ["CANDIDATES", "ID", "CLASS", "VOTES", "POST"]
        J.writerow(heading)
    print("------------THE DETAILS OF THE STUDENTS AND THE 
CANDIDATES HAS BEEN RESET------------")
```

CONCLUSION

SEVS is a very useful tool or a program that can save time and paperwork .
As it makes the result very quick and anyone can see the results once its is printed in the program, so in that case there is no need for printing and waiting period to get the results.

This is a game changing software for the schools in many places, as it can be used very easily and can run on any os easily with python installed

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