



Green University of Bangladesh

Department of Computer Science and Engineering (CSE)

Faculty of Sciences and Engineering
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Course Title: Data structure lab
Course Code: CSE 106 Section: 213DC

Lab Project Name: Online Voting System

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

Lab Project Status

Marks:

Signature:

Comments:

Date:

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Chapter 1 Introduction

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Introduction

Online Voting is a web-based voting system that will help you manage your elections easily and securely. This voting system can be used for casting votes during the elections held in colleges, etc. In this system the voter do not have to go to the polling booth to cast their vote. They can use their personal computer to cast their votes. There is a database which is maintained in which all the name of the voters with their complete information is stored. The System Administrator registers the voters by simply filling a registration form to register the voters. After registration, the voter is assigned a secret voter ID with which he/she can use to login to the system and cast his/her vote. If invalid/wrong details are submitted, then the person is not registered to vote. After the user successfully registers themselves, a link is sent on their respective E-mail IDs. The link is a key for the activation of the account of the user. The account is activated only after the user clicks on that link. The site will be activated only on the day of voting. Once the user logs in, they will be provided with a One Time Password (OTP) which has to be entered by the user before casting his/her vote. The password will be destroyed after casting their respective vote. A receipt of the vote will be sent to the user on their respective Email IDs. The advantage of online voting is that the voters have the choice of voting at their own free time and there is reduced congestion. It also minimizes errors of vote counting. The individual votes are submitted in a database which can be queried to find out who of the aspirants for a given post has the highest number of votes.

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Design Goals/Objective

- a. To build an online system this would enable voters to cast their votes on chosen candidates.
- b. Create a secure authentication facility to check validate users logging into the voting system.
- c. Create a database to be used to stored votes, and user information on the system.
- d. Study and implement a security method to be used to ensure that votes being cast in the system will not be compromised and any outside attack.
- e. Create tools for the administrator to add, delete and update details of voters, candidates and sub administrators on the system.
- f. Enable administrators to generate reports on the vote results.
- g. Prevent voters from voting more than once for their choose candidates.

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Chapter 2

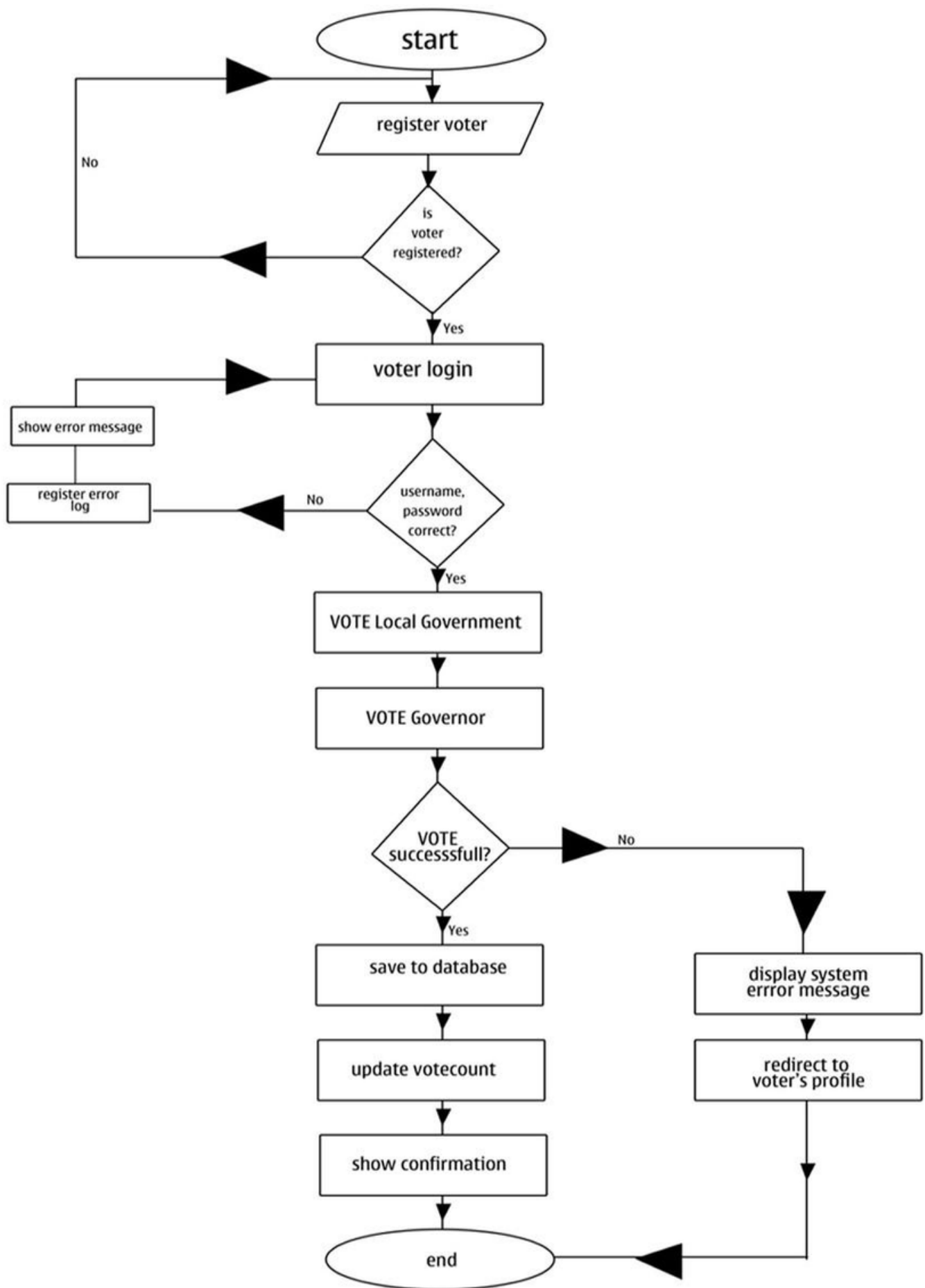
6

Implementation of the Project

7

Implementations

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Project Source Code:

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <string.h>
4  #include <windows.h>
5  #include <conio.h>
6  typedef struct voter_information
7  {
8      char NID[10]; // NID num of size
9      char name[50]; // name size
10     char birth_date[15]; // date of birth size
11     struct voter_information *next; // voter information each voter
12 } node;
13
14 node *head;
15 node *space, *start=NULL;
16 node *search(char x[], char y[], char z[], node *, int *);
17 node *voter_insert(node *);
18 node *main_logs(node *);
19 void admin();
20 void winner();
21 void exi();
22 void voting();
23 void not_again();
24 void stop();
25 void show();
26
27
28 int count=0, R=3, vote=0;
29 int vote1=0, vote2=0, vote3=0, vote4=0, vote5=0;
30 int main()
```

```

31 {
32     while(1){
33
34         system("cls");
35         printf("\n\n\n");
36         printf("\t      ***** WELCOME TO THE ONLINE VOTING PORTAL *****      \n\n");
37
38         printf("\t      ***** \n\n\n\n\n");
39         printf("\t\t *****Please Enter One(1) for logging vote main Logs***** \n\n\n");
40         int BB;
41
42         scanf("%d",&BB);
43         if(BB==1)
44         {
45             start= main_logs(start);
46         }
47
48     }
49     return 0;
50 }
51
52 node *main_logs(node *start)
53 {
54     system("cls");
55     printf("\n\n\n");
56     printf("\t\t\t1. FOR VOTE ENTRY \n");
57     Sleep(300);
58     printf("\t\t\t2. FOR ADMIN PANEL \n");
59     Sleep(300);
60     printf("\t\t\t3. FOR WINNER \n");

```

```

61 printf(" \t IF YOUR CREDENTIALS MATCHES WITH THOSE IN THE VOTER LIST
62 Sleep(500);
63 printf(" \t *****So Plz Enter*****\n\n\n");
64 int T;
65 scanf("%d",&T);
66 if(T==1)
67 {
68     start= voter_insert(start);
69 }
70 if(T==2)
71 {
72     admin();
73 }
74 if(T==3)
75 {
76     winner();
77 }
78 if(T!=1||T!=2||T!=3)
79 {
80     main_logs(start);
81 }
82
83
84 return start;
85 }
86
87
88 node *voter_insert(node *start)
89 {
90     int UNIVERSAL=0;

```



```

91 int *z;
92 z = &UNIVERSAL;
93 node *temp;
94 char name[50], birth_date[15], NID[20];
95 system("cls");
96 printf("\n\n\n\n");
97 printf("\t IF National ID, YOUR NAME AND YOUR DATE OF BIRTH MATCHES THEN YOU CAN GIVE YOUR VOTE OTHERWISE NOT\n\n");
98 Sleep(300);
99 printf("\t\t\t ID YOU DO WRONG %d TIMES, THE PORTAL WILL BE CLOSED AUTOMATICALLY\n\n\n", R);
100 Sleep(300);
101 printf("\t\t\t Please \n");
102 Sleep(300);
103 printf("\t\t\t Enter your National ID number ");
104 gets(NID);
105 gets(NID);
106 printf("\t\t\t Enter Your NAME ");
107 gets(name);
108 printf("\t\t\t Enter Your BIRTH DATE in dd-mm-yyyy format ");
109 gets(birth_date);
110 temp = (node *) malloc(sizeof(node));
111 strcpy(temp->NID, NID);
112 strcpy(temp->name, name);
113 strcpy(temp->birth_date, birth_date);
114 temp->next = NULL;
115 head = temp; #define NULL __null
116 while(temp != NULL)
117 {
118     if((strcmp(temp->NID, "10001") == 0 && strcmp(temp->name, "Sajid hossain") == 0 && strcmp(temp->birth_date, "31-03-1999") == 0) ||
119        (strcmp(temp->NID, "10002") == 0 && strcmp(temp->name, "Joy") == 0 && strcmp(temp->birth_date, "01-01-1999") == 0) ||
120        (strcmp(temp->NID, "10003") == 0 && strcmp(temp->name, "shakil khan") == 0 && strcmp(temp->birth_date, "12-10-1999") == 0) ||

```

```

127     start = search(temp->NID, temp->name, temp->birth_date, start, &UNIVERSAL);
128
129     if(UNIVERSAL == 0)
130     {
131         voting();
132     }
133     else
134     {
135         not_again();
136     }
137 }
138 else
139 {
140     R--;
141     if(R == 0)
142     {
143         stop();
144         break;
145     }
146     printf("\n\n\n\n");
147     printf("\t Your National ID or NAME or DATE OF BIRTH is wrong\n\n");
148     Sleep(300);
149     printf("\t\t\t Plz Re-Enter\n\n");
150     Sleep(300);
151     system("pause");
152     start = main_logs(start);
153 }
154     temp = temp->next;
155 }
156

```

```

157     return start;
158 }
159
160
161 void voting()
162 {
163     system("cls");
164     printf("\n\n\n\n");
165     printf("\t\t\t\t\t ***** LIST OF CANDIDATES ***** \n\n\n");
166     Sleep(300);
167     printf("\t\t\t\t\t NAME    & THEIR RESPECTIVE    SYMBOL\n\n");
168     Sleep(300);
169     printf("\t\t\t\t\t 1SHEIKH HACHINA            1.BOAT\n\n");
170     Sleep(300);
171     printf("\t\t\t\t\t 2.BEGUM KHALEDA JIA            2.PADDY\n\n");
172     Sleep(300);
173     printf("\t\t\t\t\t 3.ARSHAD                3.LANGUL \n\n\n");
174
175
176
177     int B,j;
178     printf("\t\t\t\t\t PLEASE CHOSSE YOUR FAVARIT CANDIDATE \n");
179     for(j=1;j<=1;j++)
180     {
181         scanf("%d",&B);
182
183         if(B==1)
184         {
185             vote1++;
186             printf("\n\n\t\t\t\t\tYOU HAVE SUCCESSFULLY GIVEN YOUR VOTE TO SHEIK HACHINA\n");

```

```

187     break;
188
189 }
190 if(B==2)
191 {
192     vote2++;
193     printf("\n\n\t\t\t\t\tYOU HAVE SUCCESSFULLY GIVEN YOUR VOTE TO BEGUM KHALEDA JIA \n");
194     break;
195
196 }
197 if(B==3)
198 {
199     vote3++;
200     printf("\n\n\t\t\t\t\tYOU HAVE SUCCESSFULLY GIVEN YOUR VOTE TO ARSHAD \n");
201     break;
202
203 }
204
205
206
207 if(B!=1||B!=2||B!=3 )
208 {
209     printf("\n\t\t***** INVALID CHOICE ENTERED*****\n");
210     printf("\n\t\t\t\tENTER AGAIN\n");
211 }
212
213
214 }
215
216 printf("\n\n*****THANK YOU*****\n\n");

```

```

217     printf("press any key");
218     getch();
219 }
220
221 void admin()
222 {
223     int B;
224     printf("\n\n\n\n");
225     printf("\t\t\t\t\tEnter Your Password To Unlock The Admin Panel\n\n");
226     scanf("%d",&B);
227     if(B==1111)
228     {
229         show();
230
231     }
232     else
233     {
234         printf("Wrong Password\n");
235     }
236 }
237
238 void show()
239 {
240     int G;
241     system("cls");
242
243     printf("\n\n\n\n");
244     printf("\t\t\t\t\tPresent Vote Count :\n\n");
245     Sleep(500);
246     printf("\t\t\t\t\tSHEIKH HACHINA is on   %d Votes\n",vote1);

```

```

247 Sleep(500);
248 printf("\n\nBEGUM KHALEDA JIA is on   %d Votes\n",vote2);
249 Sleep(500);
250 printf("\n\nARSHARD is on   %d Votes\n",vote3);
251 Sleep(500);
252
253
254
255 printf("\n\nEnter Any Key For Main Logs\n\n\n\nOR\n\n\n\nENTER THE SPECIAL PASSWORD TO CLOSING VOTING PORTAL\n ");
256 scanf("%d",&G);
257 if(G==1234)
258     exit();
259 else
260     main_logs(start);
261
262 }
263
264 void winner()
265 {
266     system("cls");
267     printf("\n\n\n\n");
268     if(vote2<vote1 && vote3< vote1 )
269         printf("\n\nThe present Winner Is SHEIKH HACHINA and she has got %d votes\n\n\n\n",vote1);
270
271     if(vote1<vote2 && vote3< vote2 )
272         printf("\n\nThe present Winner is BEGUM KHALEDA JIA  and she has got %d votes\n\n\n\n",vote2);
273
274     if(vote1<vote3 && vote2< vote3 )
275         printf("\n\nThe present Winner is ARSHARD  and she has got %d votes\n\n\n\n",vote3);
276

```

```

277     printf("\n\nEnter Any Key For Main Log\n\n");
278     getch();
279     main_logs(start);
280
281 }
282
283 void stop()
284 {
285     system("cls");
286
287     printf("\n\n\n\n");
288     printf("\n\n\n\n(-.-SORRY YOU ENTERED WRONG CREDENTIALS FOR THREE(3) TIMES IN A ROW -.-) \n\n\n\n");
289     Sleep(500);
290     printf("\n\n\n\nPlz try again After A few Moment\n\n\n\n");
291     Sleep(500);
292     printf("\n\n\n\n* * *Thank You* * * \n\n\n\n");
293     Sleep(500);
294     printf("press any key");
295     getch();
296
297 }
298
299 void not_again()
300 {
301     int A;
302     system("cls");
303     printf("\n\n\n\n");
304     printf("\n\n\n\n***YOU HAVE GIVEN YOUR VOTE SUCCESSFULLY*** \n\n\n\n");
305     Sleep(300);
306     printf("\n\n\n\n***YOU CANNOT GIVE YOUR VOTE MORE THAN ONCE*** \n\n\n\n");

```

```

307 Sleep(300);
308 printf("\t\t\t If You want to see present winner Enter One(1) or Enter Any Other Key for Main Logs\n\n");
309 Sleep(300);
310
311 scanf("%d",&A);
312 if(A==1)
313 {
314     winner();
315 }
316 else
317 {
318     main_logs(start);
319 }
320
321 }
322
323 void exi()
324 {
325     system("cls");
326
327     printf("\n\n\n\n\n");
328     Sleep(500);
329     printf("\t\t\t ***YOU ARE NOW EXITING THE PORTAL*** \n\n\n");
330     Sleep(1000);
331     printf("\t\t\t * * *THANK YOU FOR USING This ONLINE PLATFORM For VOTING* * * \n\n\n");
332     Sleep(1000);
333     exit(0);
334 }
335 node *search(char x[],char y[],char z[],node *start,int *Y)
336 {

```

```

337     *Y=0;
338     node *t,*space;
339     if(start==NULL)
340     {
341         space=(node*)malloc(sizeof(node));
342         strcpy(space->NID,x);
343         strcpy(space->name,y);
344         strcpy(space->birth_date,z);
345
346         start=space;
347         space->next=NULL;
348
349     }
350     else
351     {
352         t=start;
353         while(t!=NULL)
354         {
355             if((strcmp(t->NID,x)==0&& strcmp(t->name,y)==0 &&strcmp(t->birth_date,z)==0))
356             {
357                 *Y=1;
358
359                 break;
360             }
361             t=t->next;
362         }
363
364         if(*Y==0)
365         {
366

```

```

367             space=(node*)malloc(sizeof(node));
368
369             strcpy(space->NID,x);
370
371             strcpy(space->name,y);
372
373             strcpy(space->birth_date,z);
374             t=space;
375             space->next=NULL;
376
377         }
378     }
379     return start;
380 }
381

```

Output

***** WELCOME TO THE ONLINE VOTING PORTAL *****

*****Please Enter One(1) for logging vote main Logs*****

1. FOR VOTE ENTRY
2. FOR ADMIN PANEL
3. FOR WINNER

IF YOUR CREDENTIALS MATCHES WITH THOSE IN THE VOTER LIST THEN ONLY YOU CAN GIVE YOUR VOTE

*****So Plz Enter*****

IF National ID, YOUR NAME AND YOUR DATE OF BIRTH MATCHES THEN YOU CAN GIVE YOUR VOTE OTHERWISE NOT

ID YOU DO WRONG 3 TIMES, THE PORTAL WILL BE CLOSED AUTOMATICALLY

Please

Enter your National ID number 10001
Enter Your NAME Sajid hassain
Enter Your BIRTH DATE in dd-mm-yyyy format

Your National ID or NAME or DATE OF BIRTH is wrong

Plz Re-Enter

Press any key to continue . . . █

* * * * * LIST OF CANDIDATES * * * * *

NAME	& THEIR RESPECTIVE	SYMBOL
1.SHEIKH HACHINA		1.BOAT
2.BEGUM KHALEDA JIA		2.PADDY
3.ARSHARD		3.LANGUL

PLEASE CHOSSE YOUR FAVARIT CANDIDATE

* * * * * LIST OF CANDIDATES * * * * *

NAME	& THEIR RESPECTIVE	SYMBOL
1.SHEIKH HACHINA		1.BOAT
2.BEGUM KHALEDA JIA		2.PADDY
3.ARSHARD		3.LANGUL

PLEASE CHOSSE YOUR FAVARIT CANDIDATE

YOU HAVE SUCCESSFULLY GIVEN YOUR VOTE TO BEGUM KHALEDA JIA

*****THANK YOU*****

press any key_

Present Vote Count :

SHEIKH HACHINA is on 0 Votes
BEGUM KHALEDA JIA is on 1 Votes
ARSHARD is on 0 Votes
Enter Any Key For Main Logs

OR

ENTER THE SPECIAL PASSWORD TO CLOSING VOTING PORTAL

The present Winner is BEGUM KHALEDA JIA and she has got 1 votes

Enter Any Key for Main Log

Chapter 3 Conclusion

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3.1 Learning Outcome

Online voting system project allows people in today's mobile and digitally advanced society to participate in the democratic process over the internet. The POLYA'S online voting system offers the highest levels of transparency, control, security and efficiency of election processes. Online votings provide voters with a comfortable and secure voting experience and allow election organizers to save resources in planning their next election.

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Future Scope

The scope of this project will be the guidelines throughout this project to ensure project will conducted itâ€™s intend objectives. At the end of this project, it should be eventually achieved. The MPP Online Voting System will be developed in order to make an election process more flexible and easy to use for students, MPP candidates and management staffs in JMTi. From a technical viewpoint the elections are made up of the following components:

- a. Calling of elections
- b. Registration of candidates
- c. Preparation of polling list
- d. Voting

References

REFERENCES

- Anderson C. (2006). How to Rig a Democracy: A Timeline of Electronic Voting in the United States. *The Independent*. Retrieved November 28, 2006 from: <http://www.indypendent.org/?p=608>
- Bellis, M. (2007). The *History of Voting Machines*. Retrieved November 9, 2006 from: <http://inventors.about.com/library/weekly/aa111300b.htm>
- Cranor, L.F., & Cytron, R.K. (1996). Design and Implementation of a Security-Conscious Electronic Polling System. *Washington University Computer Science Technical Report (WUCS)*. Retrieved October 9, 2006 from: <http://www.acm.org/crossroads/ords2-4/voting.html>
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