SRM STUDENT ADMISSION MANAGEMENT SYSTEM

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What is admission management system??

The admission management system is software that enables educational institutions to conduct student admission and enrollment procedures online. The admission management system manages student admission form collection, collects documents, and shortlists candidates to complete the admission process online.

Brief look on library used

The **fstream** term stands for File Stream. Stream refers to a sequence of characters moving from the disk to the C++ program or from the C+ program to the disk. Moving characters from a file in disk to the program is inputting. Moving characters from the program to a file in the disk is outputting

C++ Strings

Strings are used for storing text.

A string variable contains a collection of characters surrounded by double quotes:

Project Details

The admission management system will provide a seamless interaction among the students, guardians and university authorities, it facilitates the smooth onboarding of students

Functionalities:

1. Student End:

a. Entering details of academic qualifications

b. Entering details of personal information

c.Entering details of specific information related to a particular course

d.Respond to the queries raised by university authors

2. University End:

a Verily student detals

b. Putting comments to the students

c. Verity fee information

d. Ask for more information from student (if required)

Code:

Programiz C++ Online Compiler

Interactive C++ Course

main.cpp   Run   Output   Clear

```cpp
1  // Online C++ compiler to run C++ program online
2  #include <iostream>
3  #include <fstream>
4  #include <string>
5
6  using namespace std;
7
8  class student_end
9  {
10     //int fee;
11     public:
12
13     char select;
14     string fileName, temp, name, phn;
15     double feePaid;
16     int q1=0, q2=0, q3=0;
17     char student_data[2000];
18
19     void checkQueries()
20     {
21         if(q1 || q2 || q3)
22         {
23             if(q1)
24                 cout<<"Invalid Phone No.! Redirecting to Editing page..."<<endl;
25             if(q2)
26                 cout<<"Invalid Name! Redirecting to Editing page..."<<endl;
27             if(q3)
28                 cout<<"Invalid Fee Paid! Redirecting to Editing page..."<<endl;
29             q1=0;
30             q2=0;
31             q3=0;
32             personal info(2);
```

main.cpp

Output

Clear

```cpp
33          educational_details(2);
34      }
35      else
36          cout<<"No Queries raised so far..."<<endl;
37  }
38  void student_end1()
39  {
40      cout << "\n\tNew Student?\n\tType '1' to fill Admission Form";
41      cout << "\n\tAlready part of SRMAP? \n\tType '2' to Verify your data";//add query
42      cout<<"\n\tType '3' to edit your data";
43      cout<<"\n\nEnter your choice : ";
44      cin >> select;
45      if (select != '1' && select!='2' && select !='3' && select !='4')
46      {
47          cout<<"Invalid Choice! Please try again.\n";
48          cout << "\n\tNew Student? Type '1' to fill Admission Form";
49          cout << "\n\tAlready part of SRMAP? Type '2' to Display your data";//add query
50          cout<<"\n\tType '3' to edit your data";
51          cout<<"\n\nEnter your choice : ";
52          cin>>select;
53      }
54      if (select == '2')
55      {
56          cout << "\n\tRedirecting to verification page...\n";
57          Get_Student_Data();
58      }
59      else if(select=='1')
60      {
61          cout<<"\n\tRedirecting to Admission page...\n";
62          Input_Data();
63      }
64      else
```

Programiz C++ Online Compiler

Interactive C++ Course

main.cpp

Output

Clear

Run

```cpp
64        else
65        {
66            cout<<"\n\tRedirecting to Editing page...\n";
67            //Input_Data();
68            personal_info(2);
69            educational_details(2);
70        }
71    }
72
73    void Input_Data()
74    {
75        getline(cin, temp);
76        cout << "......................" << endl;
77        cout << "Enter Student Roll : ";
78        getline(cin, fileName);
79        ifstream f1(fileName);
80        if(f1)
81        {
82            cout<<"Error! Student Record already exists\n";
83            f1.close();
84            return;
85        }
86        //cin>>fileName;
87        ofstream wr(fileName);
88        cout << "Roll : " << fileName << endl;
89        wr.close();
90        personal_info(1);
91        educational_details(1);
92    }
93    void personal_info(int i)
94    {
95        if(i==1)
```

main.cpp

Clear

```cpp
95          if(i==1)
96          {
97
98          ofstream wr(fileName, ios::app);
99
100         cout << "Enter Name of the Student : ";
101         //cin.getline(student_data, 2000);
102
103         cin>>name;
104         wr << "Name\t\t\t\t: " <<name << endl;
105         getline(cin, temp);
106         cout << "Enter Father's Name : ";
107         cin.getline(student_data, 2000);
108         wr << "Father Name\t\t\t: " << student_data << endl;
109
110         cout << "Enter Present Adress : ";
111         cin.getline(student_data, 2000);
112         wr << "Adress\t\t\t\t: " << student_data << endl;
113
114         cout << "Enter Aadhar number : ";
115         cin.getline(student_data, 2000);
116         wr << "Adhar number\t\t: " << student_data << endl;
117
118         cout << "Enter Date of Birth : ";
119         cin.getline(student_data, 2000);
120         wr << "Date of birth\t\t: " << student_data << endl;
121
122         cout << "Enter Contact No. : ";
123         //cin.getline(student_data, 2000);
124         cin>>phn;
125         wr << "Phone\t\t\t\t: " << phn << endl;
126         getline(cin, temp);
```

Programiz C++ Online Compiler

main.cpp

Run

Output

Interactive C++ Course

Clear

```cpp
127        cout << "Enter the religion  : ";
128        cin.getline(student_data, 2000);
129        wr << "religion\t\t\t: " << student_data << endl;
130
131        cout << "Enter the blood group  : ";
132        cin.getline(student_data, 2000);
133        wr << "blood group\t\t\t: " << student_data << endl;
134        wr.close();
135        }
136        else
137        {
138            getline(cin, temp);
139            cout << "........................" << endl;
140        cout << "Enter Student Roll : ";
141        getline(cin, fileName);
142
143        ofstream wr(fileName);
144
145        cout << "Enter Name of the Student : ";
146        //cin.getline(student_data, 2000);
147
148        cin>>name;
149        wr << "Name\t\t\t: " <<name << endl;
150        getline(cin, temp);
151        cout << "Enter Father's Name : ";
152        cin.getline(student_data, 2000);
153        wr << "Father Name\t\t\t: " << student_data << endl;
154
155        cout << "Enter Present Adress : ";
156        cin.getline(student_data, 2000);
157        wr << "Adress\t\t\t: " << student_data << endl;
158
```

Programiz C++ Online Compiler

Interactive C++ Course

main.cpp

Output

Clear

Run

```cpp
157         wr << "Adress\t\t\t: " << student_data << endl;
158
159         cout << "Enter Aadhar number : ";
160         cin.getline(student_data, 2000);
161         wr << "Adhar number\t\t: " << student_data << endl;
162
163         cout << "Enter Date of Birth : ";
164         cin.getline(student_data, 2000);
165         wr << "Date of birth\t\t: " << student_data << endl;
166
167         cout << "Enter Contact No. : ";
168         //cin.getline(student_data, 2000);
169         cin>>phn;
170         wr << "Phone\t\t\t: " << phn << endl;
171         getline(cin, temp);
172         cout << "Enter the religion  : ";
173         cin.getline(student_data, 2000);
174         wr << "religion\t\t: " << student_data << endl;
175
176         cout << "Enter the blood group  : ";
177         cin.getline(student_data, 2000);
178         wr << "blood group\t\t: " << student_data << endl;
179         wr.close();
180         }
181     }
182     void educational_details(int i)
183     {
184         if(i==1)
185         {
186         //getline(cin, temp);
187         ofstream wr(fileName, ios::app);
188         cout << "Enter 10th Class Result(GPA / Marks) = ";
```

main.cpp

Output

Clear

Run

```cpp
187        ofstream wr(fileName, ios::app);
188        cout << "Enter 10th Class Result(GPA / Marks) = ";
189        cin.getline(student_data, 2000);
190        wr << "10th Class Result\t: " << student_data << endl;
191
192        cout << "Enter Inter(Class 11 & 12) Marks = ";
193        cin.getline(student_data, 2000);
194        wr << "Class 11 & 12 Result: " << student_data << endl;
195
196        cout << "Enter email address : ";
197        cin.getline(student_data, 2000);
198        wr << "Email address\t\t: " << student_data << endl;
199
200        cout << "Enter the admission date : ";
201        cin.getline(student_data, 2000);
202        wr << "Admission date\t\t: " << student_data << endl;
203
204        cout << "Preferred Department : ";
205        cin.getline(student_data, 2000);
206        wr << "Preferred Department: " << student_data << endl;
207
208        cout << "Enter Fees per year: ";
209        cin.getline(student_data, 2000);
210        wr << "Fees per year\t\t: " << student_data << endl;
211
212        cout<<"Enter fee paid : ";
213        cin>>feePaid;
214        wr<<"Fee paid\t\t\t: "<<feePaid<<endl;
215
216        cout<<"\n\tThank you for registering! Have a great journey at SRMAP...";
217
218        wr.close();
```

main.cpp

Run

Output

Clear

```cpp
219        }
220        else
221        {
222        //getline(cin, temp);
223        ofstream wr(fileName, ios::app);
224
225        cout << "Enter 10th Class Result(GPA / Marks) = ";
226        cin.getline(student_data, 2000);
227        wr << "10th Class Result\t: " << student_data << endl;
228
229        cout << "Enter Inter(Class 11 & 12) Marks = ";
230        cin.getline(student_data, 2000);
231        wr << "Class 11 & 12 Result: " << student_data << endl;
232
233        cout << "Enter email address : ";
234        cin.getline(student_data, 2000);
235        wr << "Email address\t\t: " << student_data << endl;
236
237        cout << "Enter the admission date : ";
238        cin.getline(student_data, 2000);
239        wr << "Admission date\t\t: " << student_data << endl;
240
241        cout << "Preferred Department : ";
242        cin.getline(student_data, 2000);
243        wr << "Preferred Department: " << student_data << endl;
244
245        cout << "Enter Fees per year: ";
246        cin.getline(student_data, 2000);
247        wr << "Fees per year\t\t: " << student_data << endl;
248
249        cout<<"Enter fee paid : ";
250        cin>>feePaid;
```

main.cpp

Run

Output

Clear

```cpp
251        wr<<"Fee paid\t\t\t: "<<feePaid<<endl;
252
253        cout<<"\n\tThank you for registering! Have a great journey at SRMAP...";
254
255        wr.close();
256        }
257    }
258
259    void Get_Student_Data()
260    {
261        string fileName, temp;
262        cout << "......................." << endl;
263        cout << "Enter Student Roll : ";
264        //getline(cin, fileName);
265        cin>>fileName;
266        ifstream f1(fileName);
267        if(!f1)
268        {
269            cout<<"Error! Student Record not exists\n";
270            f1.close();
271            return;
272        }
273
274        ifstream rd;
275        string lines;
276
277        //getline(cin, temp);
278        //getline(cin, fileName);
279
280        rd.open(fileName);
281        if (rd.is_open())
282        {
```

```cpp
282          {
283              while (getline(rd, lines))
284              {
285                  cout << lines << endl;
286              }
287          }
288
289          rd.close();
290      }
291  };
292
293  class university:public student_end
294  {
295      int id;
296
297      public:
298      void univMenu()
299      {
300          cout<<"\n\tWelcome back Mr. Counselor!\n\t";
301          // cout<<"1.To Verify Student Details\n"<<endl;
302          // cout<<"Enter your choice : ";
303              Get_Student_Data();
304
305      }
306
307      void verify_comment()
308      {
309          try
310          {
311              int i;
312              for(i=0 ; i<phn.length() ; i++)
313              {
```

main.cpp

```cpp
312         for(i=0 ; i<phn.length() ; i++)
313         {
314             if(isdigit(phn[i])==0)
315                 throw 0;
316         }
317         for(i=0 ; i<name.length() ; i++)
318         {
319             if(name[i]<'A' || name[i]>'z')
320                 throw 'b';
321             if(name[i]>'Z' && name[i]<'a')
322                 throw 'b';
323         }
324         if(feePaid<0)
325             throw 1.2;
326         cout<<"Verification Successful..."<<endl;
327         checkQueries();
328         return;
329     }
330     catch(int x)
331     {
332         q1=1;
333         cout<<"Invalid Phone No.!"<<endl;
334     }
335     catch(char x)
336     {
337         q2=1;
338         cout<<"Invalid Name!"<<endl;
339     }
340     catch(double x)
341     {
342         q3=1;
343         cout<<"Invalid Fee Paid!"<<endl;
```

main.cpp

Run

Output

Clear

```cpp
343            cout<<"Invalid Fee Paid!"<<endl;
344        }
345        cout<<"Verification Incomplete..."<<endl;
346        checkQueries();
347    }
348
349 };
350
351 int main()
352 {
353    int ch;
354    char opt;
355    do
356    {
357        cout<<"\t=====WELCOME TO SRMAP STUDENT ADMISSION MANAGEMENT SYSTEM=====\n\n";
358        cout<<"Are you a Student or Admission Counselor?\n\t1.For Students\n\t2.For University End"
                <<endl;
359        cout<<"Enter your choice : ";
360        cin>>ch;
361        if(ch!=1 && ch!=2)
362        {
363            cout<<"Invalid Choice! Please try again.\n";
364            cout<<"Are you a Student or Admission Counselor?\n\t1.For Students\n\t2.For University
                    End"<<endl;
365            cout<<"\nEnter your choice : ";
366            cin>>ch;
367        }
368        if(ch==1)
369        {
370            //student_end a1;
371            university st1;
372            st1.student end1();
```

```cpp
369         {
370             //student_end a1;
371             university st1;
372             st1.student_end1();
373             st1.verify_comment();
374         }
375         if(ch==2)
376         {
377             university b1;
378             b1.univMenu();
379         }
380         cout<<"Type 'y' or 'Y' to continue and any other key to exit\n";
381         cout<<"Enter your option : ";
382         cin>>opt;
383     }while(opt=='y' || opt=='Y');
384
385     return 0;
386 }
```

Output
1.Student end


```
=====WELCOME TO SRMAP STUDENT ADMISSION MANAGEMENT SYSTEM=====

Are you a Student or Admission Counselor?
        1.For Students
        2.For University End
Enter your choice : 1

        New Student?
        Type '1' to fill Admission Form
        Already part of SRMAP?
        Type '2' to Verify your data
        Type '3' to edit your data

Enter your choice : 1

        Redirecting to Admission page...
......................
Enter Student Roll : 12345
Roll : 12345
Enter Name of the Student : jones
Enter Father's Name : john
Enter Present Adress : london
Enter Aadhar number : 0000111122223333
Enter Date of Birth : 01012003
Enter Contact No. : 9876543210
Enter the religion  : christian
Enter the blood group  : AB Negative
Enter 10th Class Result(GPA / Marks) = 460
Enter Inter(Class 11 & 12) Marks = 920
Enter email address : john@srmap.edu.in
Enter the admission date : 08082022
```

If you want, we can edit the details by entering type 3

2.For university end:


```
=====WELCOME TO SRMAP STUDENT ADMISSION MANAGEMENT SYSTEM=====

Are you a Student or Admission Counselor?
        1.For Students
        2.For University End
Enter your choice : 2

        Welcome back Mr. Counselor!
        ......................
Enter Student Roll : 12345
Name                            : jones
Father Name                     : john
Adress                          : london
Adhar number          : 0000111122223333
Date of birth         : 01012003
Phone                           : 9876543210
religion                        : christian
blood group                     : AB Negative
10th Class Result     : 460
Class 11 & 12 Result: 920
Email address         : john@srmap.edu.in
Admission date        : 08082022
Preferred Department: cse
Fees per year         : 300000
Fee paid                        : 300000
Type 'y' or 'Y' to continue and any other key to exit
Enter your option : █
```

Conclusion:

The prototype which was developed that is very helpful to the admission department as well as the perspective students.

This Online Admission System will bring the enhanced interaction between them.

References:

[1]W3 school s

[2]Greeks for Greeks

[3] Course leactures by Elakkiya Mam