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**Department of Computer Science and Engineering (CSE)**  
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**Course Code: CSE-310      Section: 201\_DK**

**Lab Project Name: Student Management System using Shell Script language in Ubuntu**

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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

### 1.1 Introduction

A Student Management System is also known as a Student Information System (SIS). These systems work to coordinate scheduling and communications between faculty regarding students. Student Management System is to manage the details of Profiles, Logins, database. It manages all the information about Profiles, Student database. The Name of Project is Student Management System (GUB Portal). Where there will be a log in system. After successful login the user will get access to Do their task. And all the task will be academic related.

### 1.2 Design Goals/Objective

Student Management System (SMS) is a solution tool that is designed to track, maintain and manage all the data The project aims and objectives that will be achieved after completion of this project is discussed in this subchapter. The aims and objectives are as follow:

- Try to make simple teachers kroner.
- Help teacher to do their academic work easily.
- Try to do all the academic work in one place.

## Chapter 2

# Design/Development/Implementation of the Project

## 2.1 Procedure

We divided our procedure in some subsections. The procedure will be known after reading the subsections.

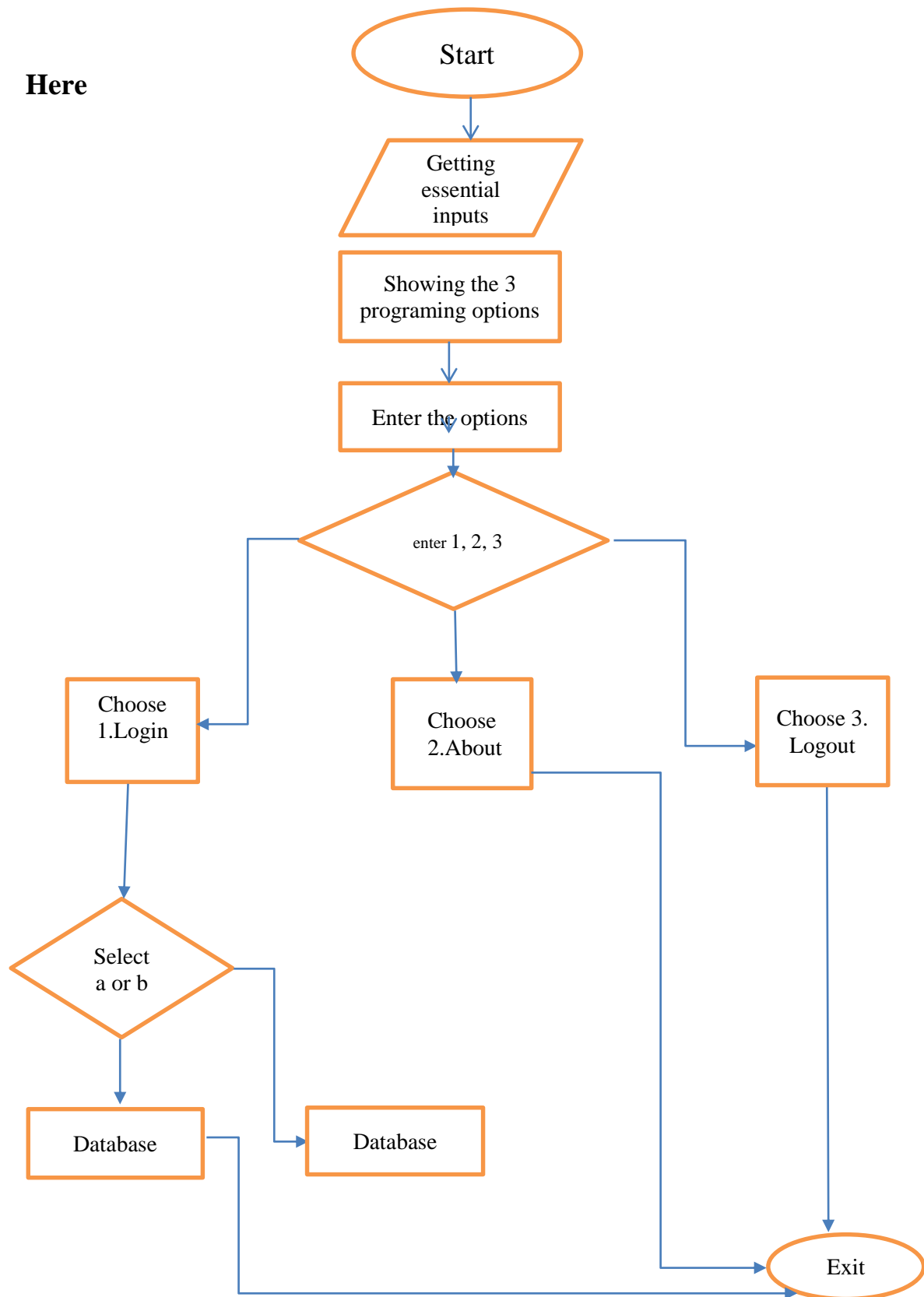
### 2.1.1 Getting Ready

In this phase we collected all the required resource required and set up our environment. We used ubuntu to implement the Student Management System.



### 2.1.2 Flowchart

Here



## 2.2 Implementation

In this following the procedure we had successfully implemented the Student Management

```
1 clear
2 figlet -f digital "Student Management System" -c | lolcat
3 echo "1.Log In"
4 echo "2.About"
5 echo "3.Exit"
6 teacher() {
7 clear
8 echo "1.View the database"
9 echo "2.View Specific Records"
10 echo "3.Add Result "
11 echo "4.Delete Result"
12 echo "5.View Evaluation"
13 echo "6.Log Out"
14 echo "Enter Your Choise:"
15 read choise
16 case $choise in
17
18 1)cat $db
19 echo "Do you want to continue? "
20 read i
21 if [ $i == "yes" ]
22 then
23 clear
24 figlet -f digital "Student Management System" -c | lolcat
25 teacher
26 fi;;
27
28 2)echo "Enter Student Id: "
29 read id
30 grep -i "$id" $db
31 echo "Do you want to continue?"
32 read i
33 if [ $i == "yes" ]
34 then
35 clear
36 figlet -f digital "Student Management System" -c | lolcat
37 teacher
38 fi;;
39
40 3)echo "Enter Student id : "
41 read sid
42 echo "Enter Name : "
43 read snm
44 echo "Enter Semester: "
45 read semester
46 echo "Total number of courses: "
47 read num
48 for ((i=1; i<=num; i++))
49 do
50 read -p "Enter course-$i: " course[i]
51 done
```

```

52
53 for ((j=1; j<=num; j++))
54 do
55 read -p "Enter Result of course-$j: " result[j]
56 done
57 echo -e "Student ID: $sid Student Name: $snm Result of the semester: $semester Total
58 corurse completed: $num Name of the coueses: ${course[@]} Result of the courses:
59 ${result[@]}">>$db
60 echo -e "Student ID: $sid Student Name: $snm Result of the semester: $semester Total
61 corurse completed: $num ${course[@]} ${result[@]}">>$db
62 echo -e "$sid $snm $semester $num ${course[@]} ${result[@]}">>$db
63 echo "Do you want to continue?"
64 read i
65 if [ $i == "yes" ]
66 then
67 clear
68 figlet -f digital "Student Management System" -c | lolcat
69 teacher
70 fi;;
71
72 4)echo "Enter Id: "
73 read id
74 grep -v "$id " $db > tmpfile && mv tmpfile $db
75 echo "Record Deleted. "
76 cat $db
77 echo "Do you want to continue?"
78 read i
79 if [ $i == "yes" ]
80 then
81 clear
82 figlet -f digital "GUB Portal" -c | lolcat
83 teacher
84 fi;;
85
86 5)echo "Enter Teacher Name: "
87 read t_name
88 grep -i "$t_name" $db
89 echo "Do you want to continue?"
90 read i
91 if [ $i == "yes" ]
92 then
93 clear
94 figlet -f digital "GUB Portal" -c | lolcat
95 teacher
96 fi;;
97 esac
98 }
99
100 student(){
101 echo "1.View Result"
102 echo "2.Teacher Evaluation"
103 echo "3.Pre-Resistration"
104 echo "4.View Pre-Resistration"
105 echo "5.Log Out"
106 read choise
107 case $choise in
108

```

```

109 1)echo "Enter Student Id: "
110 read id
111 grep -i "$id" $db
112 echo "Do you want to continue?"
113 read i
114 if [ $i == "yes" ]
115 then
116 clear
117 figlet -f digital "Student Management System" -c | lolcat
118 student
119 fi;;
120
121 2)echo "Enter Teacher Name: "
122 read t_name
123 echo "Enter Section: "
124 read sec
125 echo "Enter Comments: "
126 read comments
127 echo "Enter Institution Name "
128 read sins
129 echo -e "$t_name \t Institution Name: $sins \t Course Section: $sec \t Comments:
130 $comments">>$db
131 echo "Do you want to continue?"
132 read i
133 if [ $i == "yes" ]
134 then
135 clear
136 figlet -f digital "Student Management System" -c | lolcat
137 student
138 fi;;
139
140 3)echo "Enter your student id : "
141 read sid
142 echo "Enter Name : "
143 read snm
144 echo "Enter Section: "
145 read section
146 echo "How many course you want to take: "
147 read num
148 for ((i=1; i<=num; i++))
149 do
150 read -p "Enter course-$i: " course[i]
151 done
152 echo -e "Student Id: $sid \t Total Course Taken: $num \t Selected section: $section \t
153 Selected courses: ${course[@]} ">>$db_student.txt
154 echo "Do you want to continue?"
155 read i
156 if [ $i == "yes" ]
157 then
158 clear
159 figlet -f digital "Student Management System" -c | lolcat
160 student
161 fi;;
162
163 4)echo "Enter Your ID: "
164 read id
165 grep -i "$id" $db_student.txt

```



```

166 echo "Do you want to continue?"
167 read i
168 if [ $i == "yes" ]
169 then
170 clear
171 figlet -f digital "Student Management System" -c | lolcat
172 student
173 fi;;
174 esac
175 }
176
177 echo "Choose the option between 1/2/3"
178 read choose
179 if [ $choose -eq 1 ];
180 then
181 figlet -f slant "Log In" -c | lolcat
182 echo "a.Student Log In"
183 echo "b.Teachers Log In"
184 echo "Your choice between a/b"
185 read cho
186 if [ $cho == "a" ];
187 then
188 echo "Enter Student ID:"
189 read id
190 echo "Enter Password : "
191 read pass
192 if [ $id == "201002468" ] && [ $pass == "jannat" ];
193 then
194 echo "Login Success! "
195 echo "Enter name of database : "
196 read db
197 student
198 else
199 echo "Login Failed! "
200 fi
201 fi
202
203 if [ $cho == "b" ];
204 then
205 echo "Enter username:"
206 read user
207 echo "Enter Password : "
208 read password
209 if [ $user == "Rahman" ] && [ $password == "12345" ];
210 then
211 echo "Login Success! "
212 echo "Enter name of database : "
213 read db
214 teacher
215 else
216 echo "Login Failed! "
217 fi
218 fi
219 elif [ $choose -eq 2 ];
220 then
221 figlet -f digital "Project By Jannatul Ferdeous " -c | lolcat
222 else

```

exit  
fi

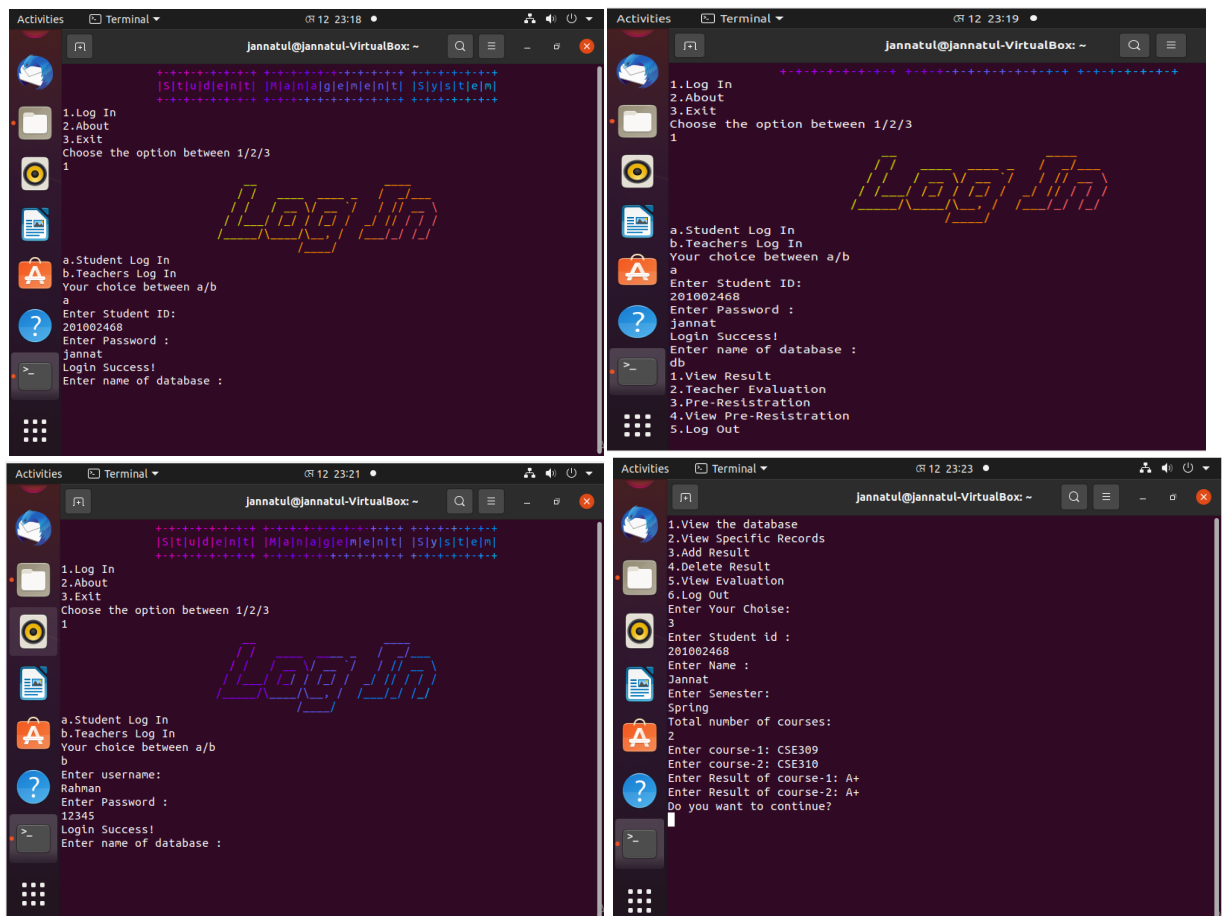
## Chapter 3

# Performance Evaluation

### 3.1 Results and Discussions

#### 3.1.1 Results

After completing all steps and objects we got the desired and satisfied result. We were able to grasp the core requirement of our project and able to Implement our project which is Student management system.



### **3.1.2 Analysis and Outcome**

Although we finished our project as we desired but there were a lot of obstacles that we had to overcome during making the project. Some of the main obstacles were:

- a) We faced some problem in implementing part.
- b) Also faced some problem when we run our code because lagging.
- c) When user put some value the program work very slowly.

# Chapter 4

## Conclusion

### 4.1 Introduction

We basically decided to make Student management System project because it helps both Students and Teachers. This project also helps the institutional workload. In this project we have tried to add more features. But there is a problem because as we implemented this project using shell script so we did not add any Database system which is a little bit critical for us. Mainly we focus that we can make a portal system where Student and teacher both can login in this portal system.

### 4.1 Practical Implications

Student management System is basically used for institutional workload. We can also call it as portal System. Here,

- Can be used in any Educational Institute.
- Both Student and Teacher can use.
- All options are in one place.
- Updatable according to our need.
- Simple & easy to use.

## 4.2 Scope of Future Work

This project has a lot of potentiality.

1. By using this project an institution can have better utilization of time & resources.
  2. This project certainly will enhance productivity.
  3. This project will improve inter-relations between Departments.
  4. So given the facts, if the logic behind this project is on point then this project will run perfectly and as a result any institution would definitely want to buy this project.
- So, it is clear that this project will help us personally and professionally.

## References

- [1] <https://tuiopay.com/blog/what-is-a-student-management-system/>.
- [2] <https://www.jotform.com/blog/student-management-systems/>