



American International University- Bangladesh

CSC 4162: Programming in Python Mid Project Report Fall 23-24

Supervised By:
Dr. Abdus Salam
Assistant Professor, Computer Science-AIUB

Project Title: High School Management System
Section: B
Group: 2

Submitted By:

Student Name	Student Id
MD. SHAFIUR RAHMAN	20-44191-2
MD. ABDULLA AL MAMUN	20-44192-2

PROJECT: HIGH SCHOOL MANAGEMENT SYSTEM

DESCRIPTION:

The High School Management System is a command-line interface (CLI) program created to improve organization in a school environment and expedite administrative duties like add teachers & students, take attendance, add grades, print grades & attendance reports and results viewing. Using basic programming ideas, the system manages important educational data using Python classes, functions, and data structures like lists. It is a complete tool that teachers, admins, and students may use to manage work effectively.

FEATURES:

1. **User Authentication:** The system ensures secure user (Admin, Teacher & Student) authentication, requiring usernames and passwords for access, safeguarding sensitive data.
2. **Add a Teacher:** Admin can seamlessly add new teachers to the system, providing essential details such as username, password, name, teacher ID, class assignment, section, contact number, and address.
3. **Add a Student:** Admin can efficiently add students to the system, capturing information like username, password, name, roll number, class, section, parents' details, parents' contact number, and address.
4. **Add Grades:** Teachers can input roll numbers and manage student grades for various subjects, providing a comprehensive overview of academic performance.
5. **Take Attendance:** Teachers can efficiently record and manage student attendance, contributing to accurate and up-to-date attendance records.
6. **Print Grades Report:** Teachers can generate detailed grades reports for individual students, offering insights into their academic progress across different subjects having average and total marks.
7. **Print Attendance Report:** Teachers can print attendance reports, providing a summary of students' attendance records.
8. **View Student Result:** Students can access their academic results, offering a clear breakdown of grades and overall performance.
9. **Exit the Application:** Users can easily exit the High School Management System, providing a straightforward and user-friendly experience.



USER INTERFACE (CLI):

The following is an example of how the CLI of the High School Management System could look:

```
-----High School Management System-----
1. Admin
2. Teacher
3. Student
4. Exit
Please Enter Your Choice (1-4): 1
UserName: admin1
Password: password1
Login Successfully!

1. Add Teacher
2. Add Student
3. Exit
Please Enter Your Choice (1-3): 1
Set UserName: teacher1
Set Password: password1
Teacher Name: Tazimur Rahman
Teacher Id: 01
Class: 10
Section: A
Contact Number: 01945845214
Address: Mohakhali,Dhaka.
Teacher Added Successfully!

1. Add Teacher
2. Add Student
3. Exit
Please Enter Your Choice (1-3): 2
Set UserName: student1
Set Password: password1
Student Name: Md. Abdulla Al Mamun
Roll: 01
Class: 10
Section: A
Parents Name: Mastafizur Rahman
Parents Contact Number: 01942003394
Address: Banani, BTCL Colony, Dhaka-1213
Student Added Successfully!

1. Add Teacher
2. Add Student
3. Exit
Please Enter Your Choice (1-3): 3
Exiting...

-----High School Management System-----
1. Admin
2. Teacher
3. Student
4. Exit
Please Enter Your Choice (1-4): 2
UserName: teacher1
Password: password1
```



Login Successfully!

1. Add Grades
2. Take Attendance
3. Print Grades Report
4. Print Attendance
5. Exit

Please Enter Your Choice (1-5): 1

Student Roll: 01

Bangla: 80

English: 85

Math: 80

Science: 85

Islam: 85

Social Science: 80

Art: 80

Grade Added Successfully!

1. Add Grades
2. Take Attendance
3. Print Grades Report
4. Print Attendance
5. Exit

Please Enter Your Choice (1-5): 2

Name - Md. Abdulla Al Mamun

Roll - 01

Enter Attendance (P/A): P

Attendance Taken Successfully!

1. Add Grades
2. Take Attendance
3. Print Grades Report
4. Print Attendance
5. Exit

Please Enter Your Choice (1-5): 3

Enter Student Roll For Report: 01

=====Grades Report=====

Name: Md. Abdulla Al Mamun Roll: 01 Section: A

Contact: 01942003394 Class: 10

=====

Subject	Grade
---------	-------

=====

Bangla	80
--------	----

English	85
---------	----

Math	80
------	----

Science	85
---------	----

Islam	85
-------	----

Social Science	80
----------------	----

Art	80
-----	----

=====

Total Number	575
--------------	-----

Total Grade	82.14
-------------	-------

=====

Grades Report Print Successfully!

1. Add Grades
2. Take Attendance
3. Print Grades Report



4. Print Attendance

5. Exit

Please Enter Your Choice (1-5): 4

Attendance Report

Md. Abdulla Al Mamun 01 P

1. Add Grades

2. Take Attendance

3. Print Grades Report

4. Print Attendance

5. Exit

Please Enter Your Choice (1-5): 5

Exiting...

-----High School Management System-----

1. Admin

2. Teacher

3. Student

4. Exit

Please Enter Your Choice (1-4): 3

UserName: student1

Password: password1

Login Successfully!

1. View Result

2. Exit

Please Enter Your Choice (1-2): 1

Enter Student Roll For Report: 01

Name: Md. Abdulla Al Mamun Roll: 01 Section: A Teacher Name: Tazimur Rahman

=====Grades Report=====

Name: Md. Abdulla Al Mamun Roll: 01 Section: A

Contact: 01942003394 Class: 10

Subject	Grade
Bangla	80
English	85
Math	80
Science	85
Islam	85
Social Science	80
Art	80

Total Number 575

Total Grade 82.14

Grades Report Print Successfully!

1. View Result

2. Exit

Please Enter Your Choice (1-2): 2

Exiting...



```
-----High School Management System-----  
1. Admin  
2. Teacher  
3. Student  
4. Exit  
Please Enter Your Choice (1-4): 4  
Exiting...
```

