

PROJECT REPORT

Topic: Student Attendance Tracker System

By: Group-08

Members who worked on the project:

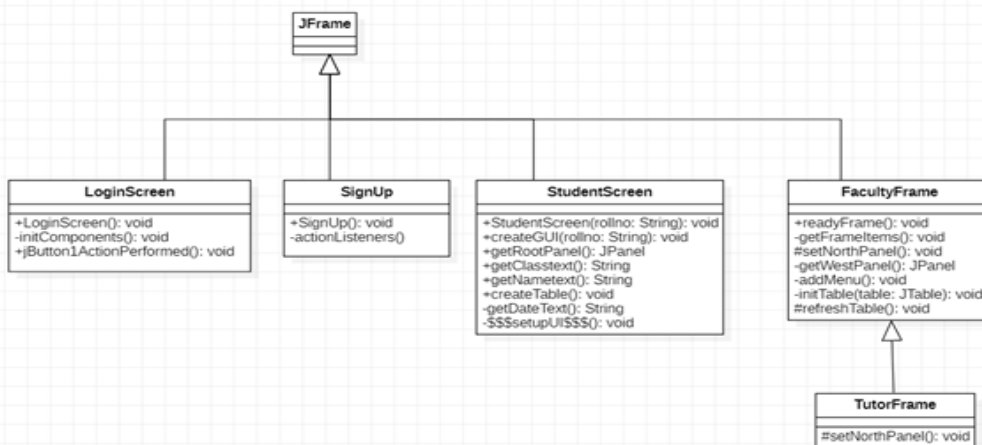
1. 19Z324 – Kamalraj D
2. 19Z358 –Tarun Visva R
3. 19Z312 – Dharma Dhurai V
4. 19Z318 – Harish J
5. 19Z329 – Pawan Kumar Babu M G
6. 19Z334 – Nikhil Dhaka

Problem Statement:

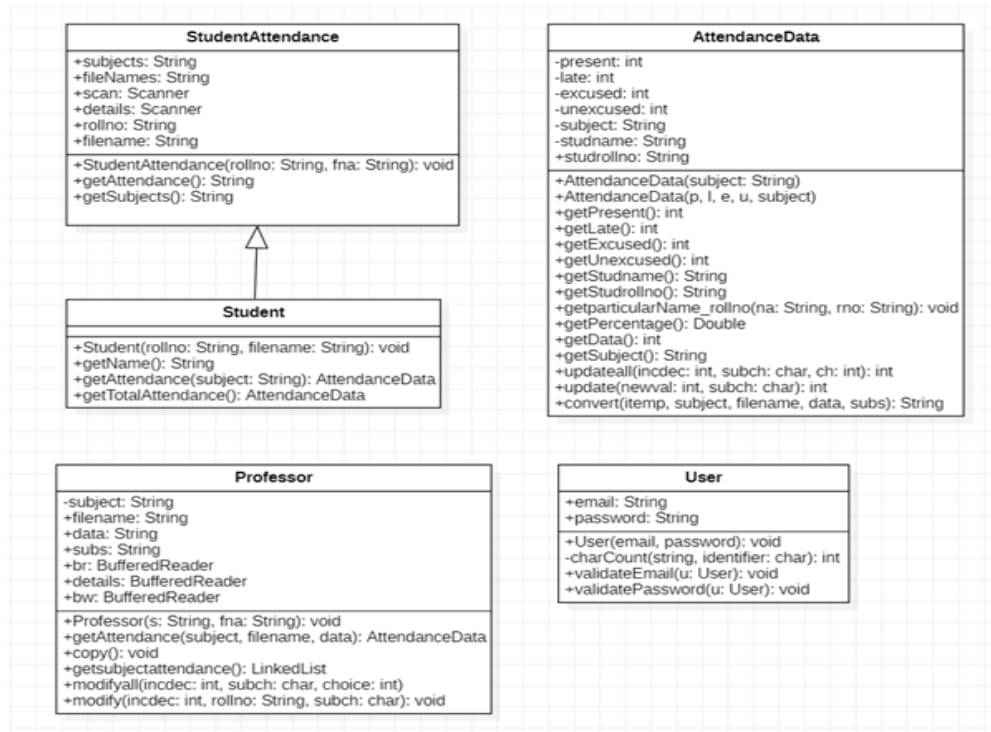
Student Attendance Tracker is a project developed for the maintenance of students' daily attendance in colleges and schools. This project is done for automating the processing of attendance. It will be able to produce/update students' attendance report reducing the manual labor which consumes time and effort. By this project, faculties can decide which student is eligible to take exams based on his attendance percentage.

Class Diagram:

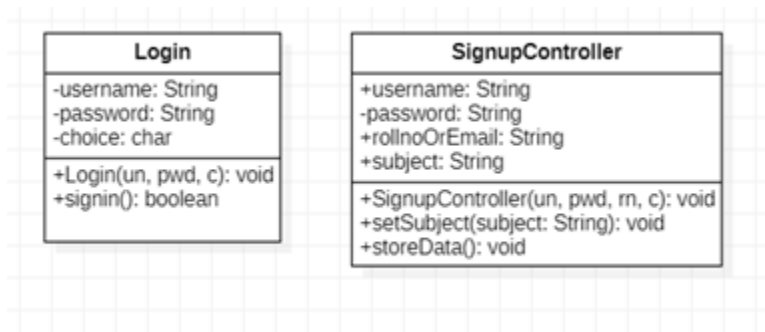
1. GUI Pages



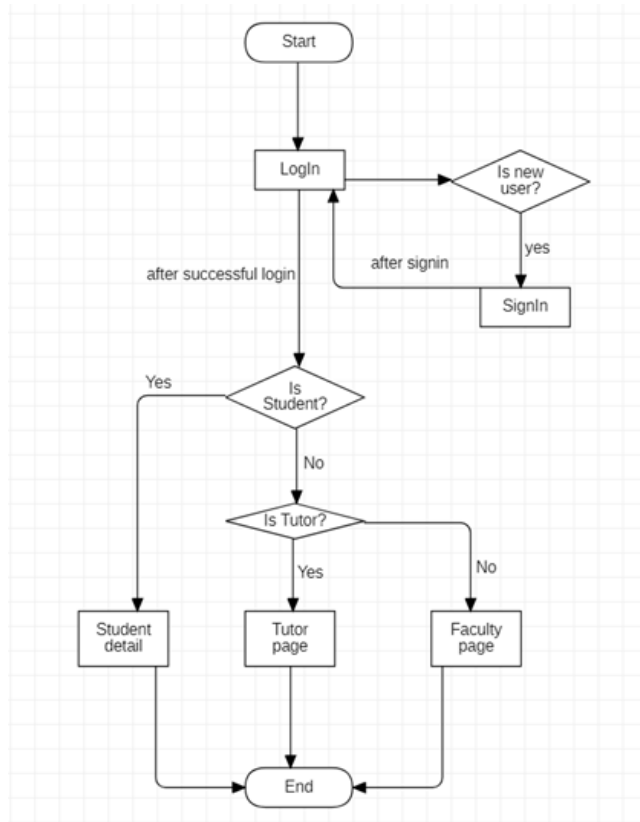
2. Data Management Backend & User validation



3. Login and Sign up Control



FLOWCHART



Users and the Features available to them in the Application:

Users: Students, faculties, tutors

Features available:

This project uses a GUI tool known as Swing for better look and performance.

Student – They can view their details of attendance of recent month after logging in with valid credentials. The Report consists of three columns for a subject namely-Present, Absent and Percentage. The percentage will be highlighted red if the student has his attendance less than 75.0%.

Faculty – They can view the attendance detail of their students after logging in and edit the attendance data for their particular subject. They have four columns namely-Present, Late, Excused Absence and Unexcused Absence. The latter three columns combined make the Absent column in student's report.

Tutor – They can view the attendance detail of their class and edit the data related to all the subjects only after logging in with valid credentials

If the users are new then they have to sign up and give their details before logging in.

Challenges Faced:

The biggest challenge faced by the team is efficient communication. Due to this pandemic, team members weren't able to explain their work on code to other members effectively on voice call/video call. Other challenges were the individual difficulties faced by team members. Due to the use of new concepts like Swing and CSV files, it took more time to understand them and work on the project.

Contributions of Team Members:

KAMALRAJ D:

Role: *Front-end*

Faculty Attendance Page:

-A GUI that will help faculty edit attendance details of their students for their subject

Tutor attendance page:

-A GUI that will help the tutor of the class to edit attendance detail of all the students in the class in all subjects

HARISH J:

Role: *Front-end*

Student Attendance Page:

-A GUI to provide students their attendance details in all their courses currently enrolled

PAWAN KUMAR BABU M G:

Role: *Front-end*

Signup page:

-A GUI to register the details such as username, password, roll number, category (student or teacher or faculty) of the user.

NIKHIL DHAKA:

Role: *Front-end*

Login page:

-A GUI to log the users in to their corresponding portals, based on their details registered during sign up.

TARUN VISVA R:

Role: *Back-end*

Backend code for Student portal:

-The StudentAttendance superclass that contains methods to retrieve the attendance and subjects from the csv file

-The AttendanceData class that is used as an object by the Student class to store the attendance details.

-The Student class that contains methods to get the attendance details of the student for a given subject and the total attendance of the student for all the subjects

Backend code for login and sign up:

-The SignupController class to register the details of the user in a csv file

-The LoginControl class to log the user in (when the username is found and password matches) or to throw exceptions when the credentials mismatch.

DHARMA DHURAI V:

Role: *Back-end*

Backend code for Faculty portal:

-The Professor class that contains methods using which a Faculty handling a particular subject can view and modify the attendance of that subject for all the students at a time or for a specified student at a time.

-The faculty can access the attendance report of any month according to his/her choice to view or modify.

-All the modifications and updates are done in the csv file

Note: Faculty's subject would be registered in the file when signing up.

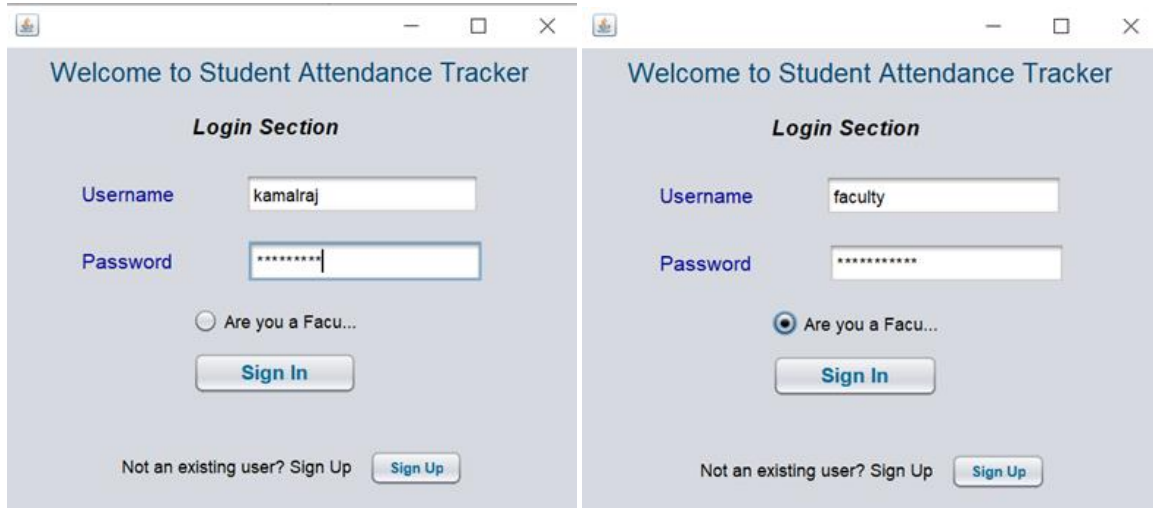
Annexure I: Code

The GitHub link for our code is provided below: -

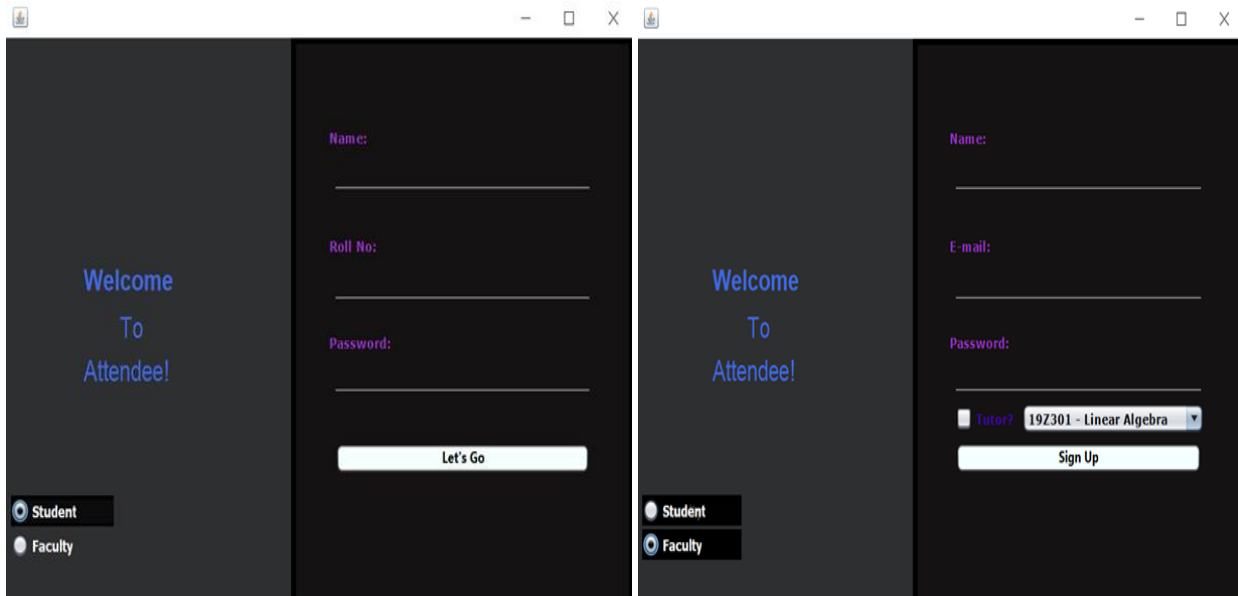
<https://www.github.com/kamalraj-ten/StudentAttendanceTracker>

Annexure II: Snapshots of Output

1. Welcome Page/Student and Faculty Login page



2. Student and Faculty Sign Up



3.Attendance Modification by Faculty

details

profile attendance

Attendance - September

RollNo	Name	Present	Late	Excused	Unexcused	Attendance percent...
192301	A.KIRTHIC VISHNU	16	1	0	0	94.11764705882354
192302	ADHARSH S	16	0	0	1	94.11764705882354
192303	ADITYA SHARMA	16	0	0	0	100.0
192304	ADITYA SRIRAM	16	0	0	0	100.0
192305	AKSHARA P	16	0	0	0	100.0
192306	ARAVIND M	16	0	0	0	100.0
192307	BARATH KUMAR G	14	0	0	0	100.0
192308	S BHARATH	16	0	0	0	100.0
192309	BHOOSHAN A	16	0	0	0	100.0
192310	BHOOVKA V	16	0	0	0	100.0
192311	DHANAVANDHANA K	16	0	0	0	100.0
192312	DHARMA DHURAI V	16	0	0	0	100.0
192313	DHARUN BHARAT...	16	0	0	0	100.0
192314	GOKUL R	15	10	0	0	60.0
192315	GOWTHAM. S	15	0	0	1	93.75
192316	GOWTHAM. S	10	0	0	2	83.33333333333333
192317	HARINI. S	15	0	0	0	100.0
192318	HARISH J	8	2	0	0	80.0
192320	HARSHITHA PRAB...	15	0	0	0	100.0
192321	HRITHIK	14	0	0	2	87.5
192322	JAYASREE B.S	16	0	0	0	100.0
192323	K SANDEEP KUMAR	15	0	0	1	93.75
192324	KAMALRAJ D	15	9	1	0	60.0
192326	KRISHNA TEJA B	16	0	0	0	100.0
192327	KUMARESH S	16	0	0	0	100.0
192328	RA. LAVANYA	16	0	0	0	100.0
192329	M G PAWAN KUMA...	16	0	0	0	100.0
192330	MAHESH BOOPAT...	16	0	0	0	100.0
192331	M.S AJITH NARAYA...	16	0	0	0	100.0
192332	MRIDULA M	16	0	0	0	100.0
192333	DHANUSH REDDY N	14	0	0	1	93.33333333333333
192334	NIKHIL DHAKA	16	0	0	0	100.0
192335	NIRANJAN S	16	0	0	0	100.0

Name : faculty

Class : BE CSE G2

present :

Late :

Excused :

Unexcused :

update

increase attendance

4.Particular Student's Attendance Report

ATTENDANCE TRACKER

Name : HARISH.J

Class : BE.CSE-G2

Subject	Present	Absent	Percentage
192301 - Linear Algebra	11	2	84.61538461538461
192302 - Data Structures	6	0	100.0
192303 - Computer Architecture	6	2	75.0
192304 - Discrete Structures	9	0	100.0
192305 - Object Oriented Programming	5	1	83.33333333333333
192306 - Economics for Engineers	6	0	100.0
192310 - Data Structures Laboratory	6	0	100.0
192311 - Object Oriented Programming La...	4	0	100.0

Date : 20/11/20

References:

Book:- Java-The Complete Reference by Herbert Schildt

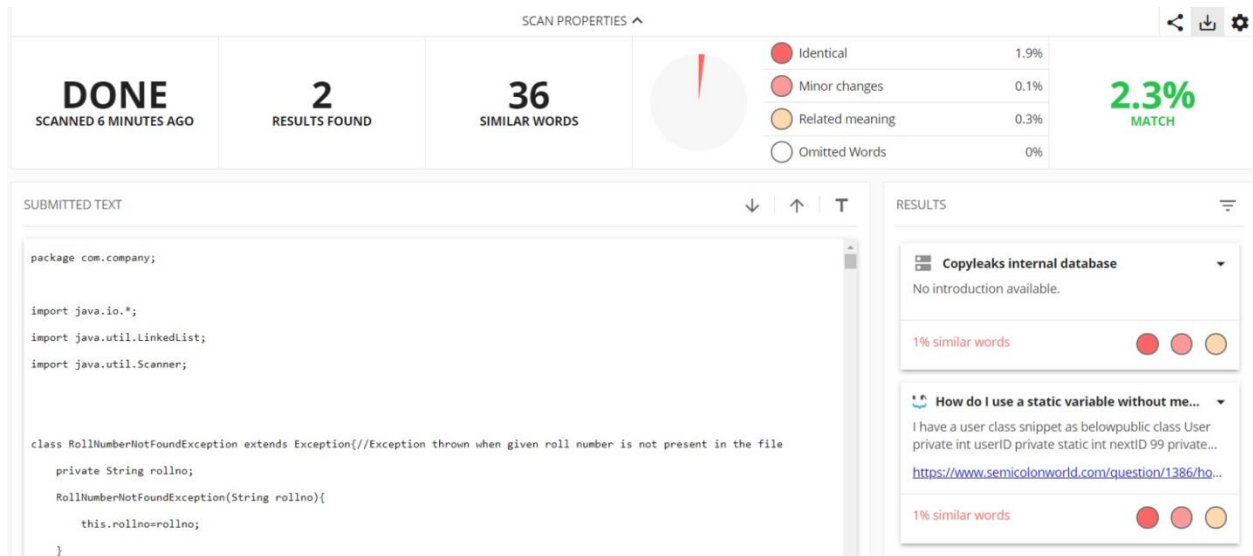
<https://www.geeksforgeeks.org/>

<https://www.javatpoint.com/how-to-read-csv-file-in-java>

<https://www.javatpoint.com/java-swing>

Plagiarism report:

Backend:



Frontend:

