OBJECT ORIENTED PROGRAMMING

PROJECT REPORT

STUDENT PERFORMANCE TRACKER

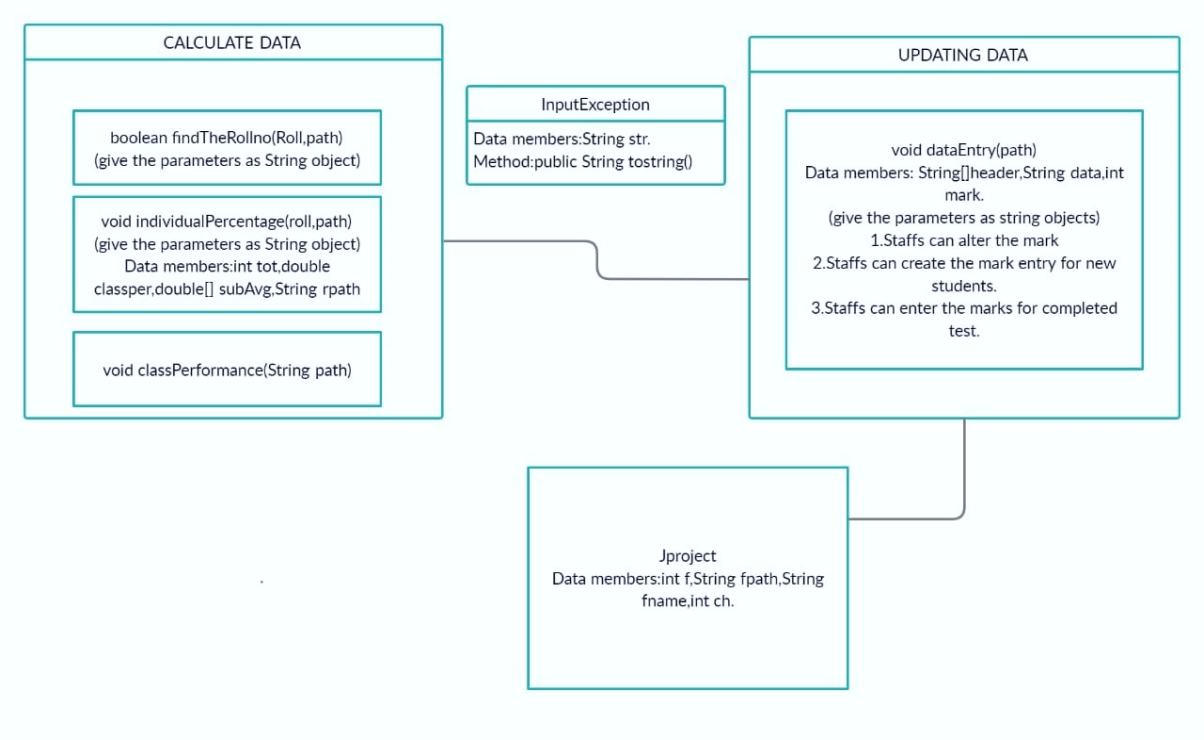
BATCH - 9

19z315-Gowtham S
19z335-Niranjan S
19z347-Shashaank R
19z356-T Naveen Kartik
19z359-Vasanthan M
19z361-Vikram Krishna A

PROBLEM STATEMENT:

STUDENT PERFORMANCE TRACKER: This project is coded using the JAVA language and its Object Oriented features and other features like swing. The main aim of the project is to create a code that helps a Staff to update or view a student's marks and helps a Student to view his performance in each subject and also a separate code that helps the Tutor to maintain and manage their class's performance and individual performance. This project is divided into two codes one for the Tutor (only backend) and one for the Staffs and Student (with front end).

CLASS DIAGRAM:



CHALLENGES FACED:

Understanding the concept of handling csv files completely was challenging , Using Swing GUI for coding the frontend took longer, Integrating the front end and backend and Creating a frontend for the code used by tutor due to two much input choices and operations.

CONTRIBUTION OF TEAM MEMBERS:

A Vikram Krishna:

Method : **findTheRollno**(String roll, String path) – used to check whether the entered roll number is present in the file or not ,Creating CSV files and Report (Plagiarism report)

Niranjan S:

Method: **individualPercentage**(String roll,String path) – used to calculate the percentage of all subjects combined for the given roll no and display the marks obtained in the respective CA and Creating CSV files

T Naveen Kartik:

Method: **classPerformance** (String path) – used to find the individual percentage of all the students in a class and write it in a file (CA1Report/CA2Report) along with the contents of the given the existing file (CA1/CA2) and also calculates the class average percentage and subject average of each subjects and writes it in the report file ,Creating CSV files ,Report (Problem statement, Challenges Faced and Contribution by team members) and Update operation (30%) in staff login

Shashaank R:

Class **InputException** – used to handle user defined exception, Method: Void **dataEntry** (String path) – used to enter a new student record into an existing file(CA1/CA2) or create a new file and write new student records into the file .Update operation (70%) in staff login and Creating text files (usernames and passwords used for login)

Gowtham S:

Method: **Driver Code** – used to get inputs from the user like choice of file and choices for operations to be performed on the chosen file and calling the function for performing, Creating CSV files and Report (Class Diagram)

Vasanthan M:

Front end code for student and staff login, **Back end code** for view individual performance in student login, Creating CSV files and Report(output Snapshots)

ANNEXURE I : CODE

https://github.com/shashaank13/students-performance-tracker

ANNEXURE II : Snapshots of output

Tutor Code:

```
"C:\Program Files\Java\jdk-14.0.2\bin\java.exe" "-javaagent:D:\IntelliJ IDEA Community Edition 2020.2.1\li
---------------STUDENT PERFORMANCE TRACKER---------------
MARK LIST
1.CA1
2.CA2
3.Create a new file
Enter your choice-->
1
--------------------------------------------------------------------------------
ENTER THE CHOICE
1.View Individual Performance
2.View Class Performance And Get Report
3.Add New Record
4.Exit
-->
1
PLEASE ENTER YOUR ROLL NUMBER:
19z356

INDIVIDUAL PERFORMANCE
Name :NAVEEN KARTIK T
OOPS:26 DATA STRUCTURES:30 COMPUTER ARCHITECTURE:28 LINEAR ALGEBRA:29 DISCRETE STRUCTURES:20 ECONOMICS:24
PERCENTAGE :87.22
Enter any value from 1- 10 to proceed
```

```
ENTER THE CHOICE
1.View Individual Performance
2.View Class Performance And Get Report
3.Add New Record
4.Exit
-->
2
ROLL.NO--OOPS--DATA STRUCTURES----COMPUTER ARCHITECTURE--LINEAR ALGEBRA--DISCRETE STRUCTURES----ECONOMICS--------PERCENTAGE-----------NAME
19z301---30---------------29---------------30---------------27---------------25---------------27---------------93.33----------A KIRTHIC VISHNU
19z302---29---------------30---------------29---------------27---------------26---------------28---------------93.89----------ADHARSH S
19z303---28---------------27---------------30---------------24---------------27---------------28---------------91.11----------ADITYA SHARMA
19z304---27---------------28---------------27---------------26---------------28---------------29---------------91.67----------ADITYA SRIRAM
19z305---26---------------24---------------30---------------24---------------29---------------30---------------90.56----------AKSHARA P
19z306---25---------------26---------------30---------------28---------------30---------------30---------------93.89----------ARAVIND M
19z307---26---------------30---------------26---------------28---------------29---------------30---------------93.89----------BARATH KUMAR G
19z308---27---------------28---------------25---------------29---------------28---------------27---------------91.11----------S BHARATH
19z309---28---------------26---------------23---------------30---------------27---------------27---------------89.44----------BHOOSHAN A
19z310---29---------------27---------------24---------------30---------------26---------------28---------------91.11----------BHOOVIKA V
```

```
Class average percentage :89.65
Subjects average :-
OOPS:26.53
DATA STRUCTURES:26.24
COMPUTER ARCHITECTURE:27.03
LINEAR ALGEBRA:27.31
DISCRETE STRUCTURES:26.95
ECONOMICS:27.31
Class report is generated and stored in C:\Users\navee\Documents\SEM 3\OOP\CA1report.csv
Enter any value from 1- 10 to proceed
```

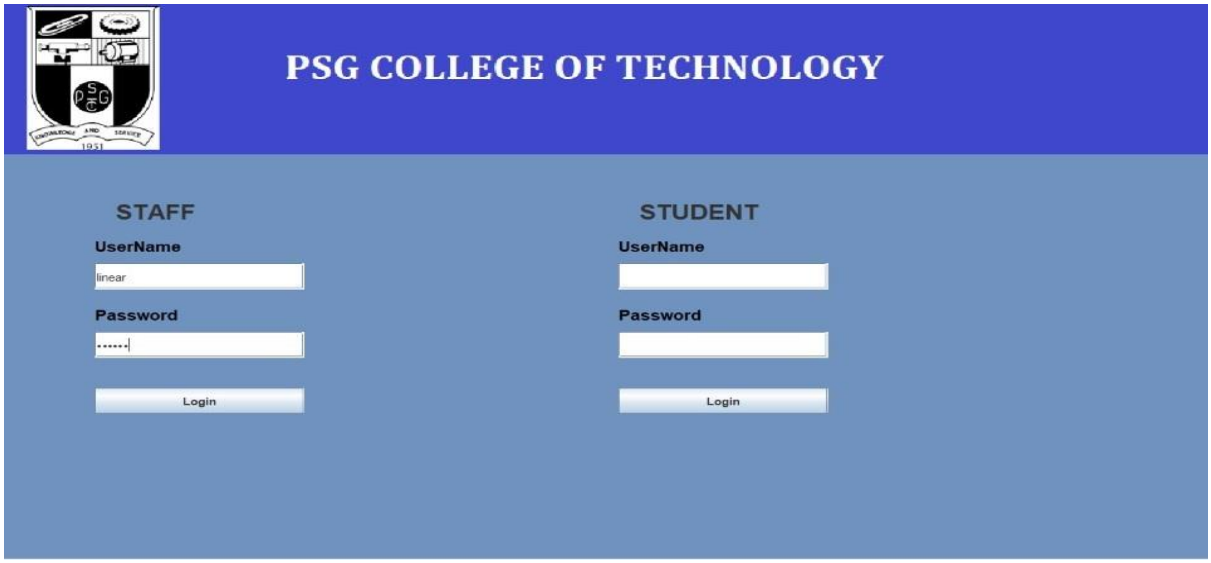
```
ENTER THE CHOICE
1.View Individual Performance
2.View Class Performance And Get Report
3.Add New Record
4.Exit
-->
3
ENTER THE DATA FOR STUDENT ENTRY
Rollno:
19z365
Name:
Lionel Messi
OOPS:
29
DATA STRUCTURES:
28
COMPUTER ARCHITECTURE:
25
LINEAR ALGEBRA:
28
DISCRETE STRUCTURES:
27
ECONOMICS:
30
Type 'next' to enter a new student record or Type 'stop' to terminate :
next
```

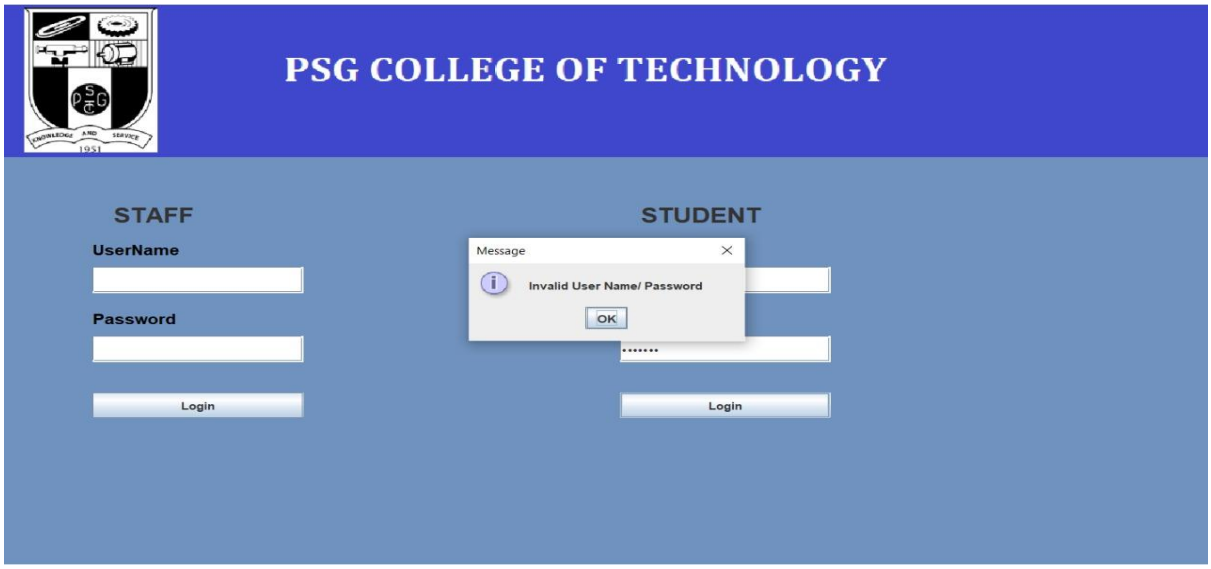
```
PLEASE ENTER YOUR ROLL NUMBER:
19z366
ROLL NUMBER NOT FOUND
Enter any value from 1- 10 to proceed
```

```
ROLL.NO--OOPS--DATA STRUCTURES----COMPUTER ARCHITECTURE--LINEAR ALGEBRA--DISCRETE STRUCTURES----ECONOMICS--------PERCENTAGE-----------NAME
19z301---29---------------27---------------28---------------29---------------27---------------26---------------92.22----------A Kirthic Vishnu
19z302---26---------------27---------------28---------------29---------------30---------------29---------------93.89----------Aharsh
Class average percentage :93.06
Subjects average :-
OOPS:27.50
DATA STRUCTURES:27.00
COMPUTER ARCHITECTURE:28.00
LINEAR ALGEBRA:29.00
DISCRETE STRUCTURES:28.50
ECONOMICS:27.50
Class report is generated and stored in CA3report.csv
Enter any value from 1- 10 to proceed
```

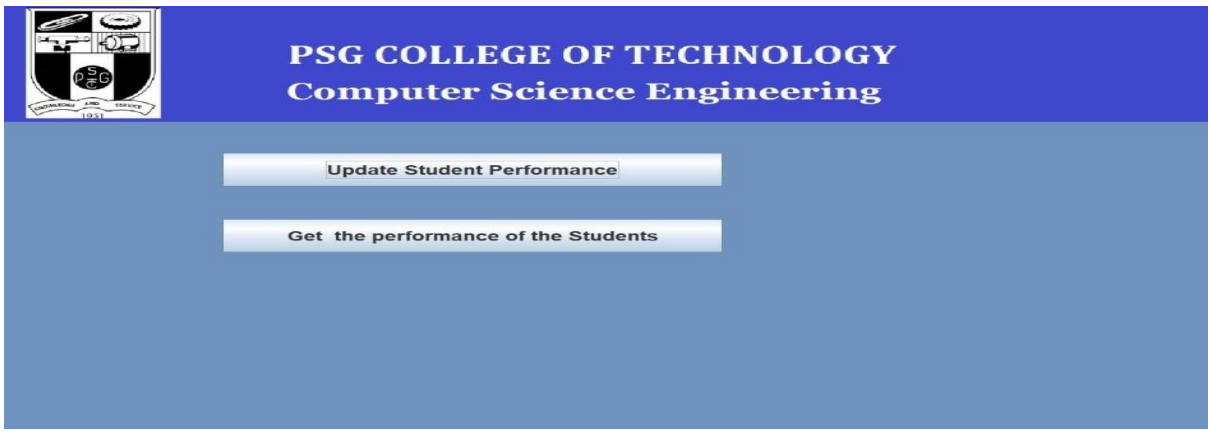
```
Rollno:
19zz321
Enter a valid roll number of format ie:'19z301'
Please Enter Again
Rollno:
18x234
Enter a valid roll number of format ie:'19z301'
Please Enter Again
Rollno:
19z370
Name:
```

Login screen staff and student

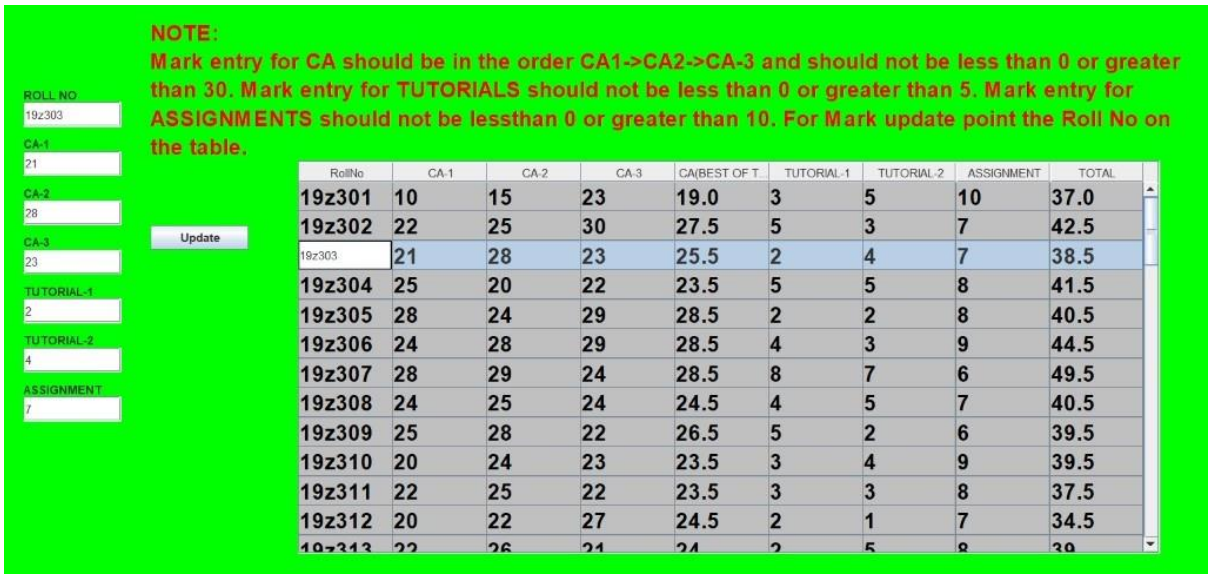




Staff options:



Staff update screen:

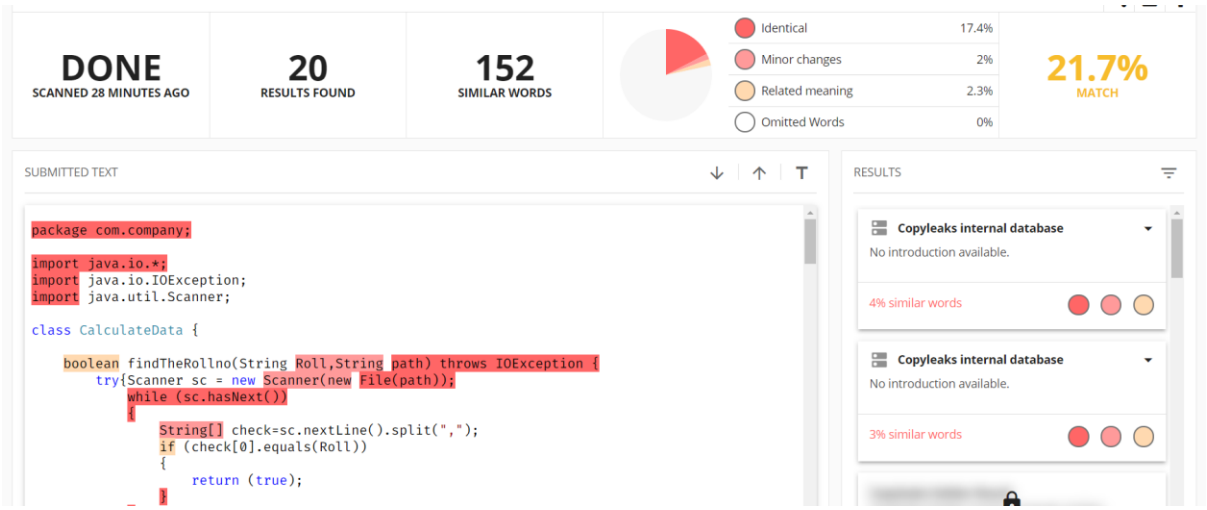


RollNo	CA-1	CA-2	CA-3	CA(BEST OF T	TUTORIAL-1	TUTORIAL-2	ASSIGNMENT	TOTAL
19z301	10	15	23	19.0	3	5	10	37.0
19z302	22	25	30	27.5	5	3	7	42.5
19z303	21	28	23	25.5	2	4	7	38.5
19z304	25	20	22	23.5	5	5	8	41.5
19z305	28	24	29	28.5	2	2	8	40.5
19z306	24	28	29	28.5	4	3	9	44.5
19z307	28	29	24	28.5	8	7	6	49.5
19z308	24	25	24	24.5	4	5	7	40.5
19z309	25	28	22	26.5	5	2	6	39.5
19z310	20	24	23	23.5	3	4	9	39.5
19z311	22	25	22	23.5	3	3	8	37.5
19z312	20	22	27	24.5	2	1	7	34.5
19z313	22	26	21	24	2	5	8	39

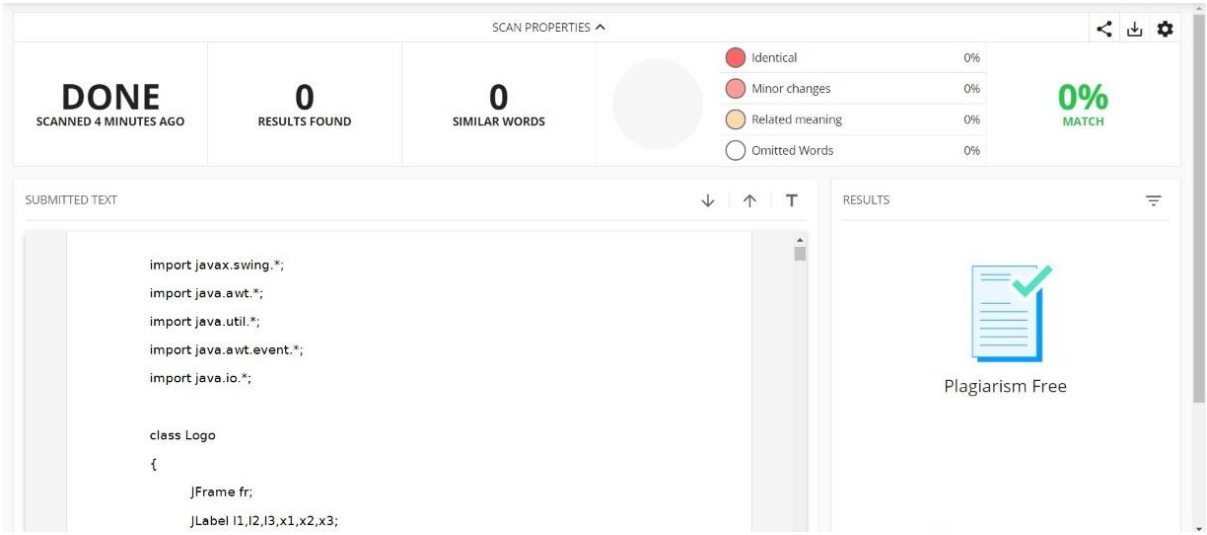
Viewing interface - Students

Subject	CA-1	CA-2	CA-3	TOTAL (Best of 2)	TUTORIAL 1	TUTORIAL 2	ASSIGNMENT	TOTAL
	30	30	30	30	5	5	10	50
LINEAR ALGEBRA	20	23	26	24.5	3	2	6	35.5
COMPUTER ARCHITECTURE	20	23	26	24.5	3	2	6	35.5
DISCRETE STRUCTURES	20	23	26	24.5	3	2	6	35.5
DATA STRUCTURES	20	23	26	24.5	3	2	6	35.5
OBJECT ORIENTED PROGRAMMING	20	23	26	24.5	3	2	6	35.5
ECONOMICS	20	23	26	24.5	3	2	6	35.5

PLAGIARISM REPORT FOR CODE: [Tutor code (Main.java)]



PLAGIARISM REPORT FOR CODE: [staff and student (logo.java)]



THANK YOU