**Worksheet for Lab MST**

GROUP - 1

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**Subject Name: Disruptive Technology**

INTRODUCTION:

A Student management system (SMS) is a type of organized collection of data stored

And accessed electronically from computer system, by this way we can analyze any individual student or group of student information. It is an automated version of manual student management system. Student Management system is a management information system for education establishment to manage student data. It provides capabilities for registering students in courses, admitting students, Tracking student details.

Ensure data integrity, Privacy and security in an open access environment.

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Problem Statement:

* Digital version of Traditional student information registers.
* Student management system provides us students data in digital version,
* SMS can provide us data by many ways we can get a particular data just by filtering some points.
* We visualize student information with the help of graphs

Technology Used:-

* **Python**

Python's design philosophy emphasizes code readability with its notable use of significant whitespace. Its language constructs and object-oriented approach aim to help programmers write clear, logical code for small and large-scale project

* **CSV module**

CSV module contains functions for **reading** and **writing** to csv file.

* **Pandas**

Pandas is an open-source python library that is used for data manipulation and analysis. Pandas is used here for manipulating csv file.

* **Matplotlib**

It is used for plotting graphs related to data stored in csv file and it is an open source library.

approach

* We first collected data in csv format.
* Coding and developments
  + - Made function for main menu where user can see the things, he/she can do with our **SMS**.
    - Made functions for searching student information.
    - Made function for displaying pie charts for various columns.
    - Made function for adding new student information to existing database.
* Creating logic and integrating all the functions.
* Implementation the created logic.

Advantages

1. We can easily manage the data of students.

2. We can easily add the data of student anytime.

3. we can easily get the data of particular student.

CONCLUSION

This **Digital** Student Management System is very handy as compared to traditional Student Data registers. It can show all Graphical and Statistical data as it is based on Python which contain rich libraries like Pandas, Matplot, Numpy, and many more.

Credits

* Main idea of project was proposed by **Aditya Barnwal**.
* Presentation was made by **Aditya Ruhela**, **Manas Tiwari** and **Rohan Jaiswal**
* Report(synopsis) was made by **Manas Tiwari** and **Rohan Jaiswal**
* Coding was done by All **of us**