

School Report Card Management System

Python Project

01 ——— ●●●●



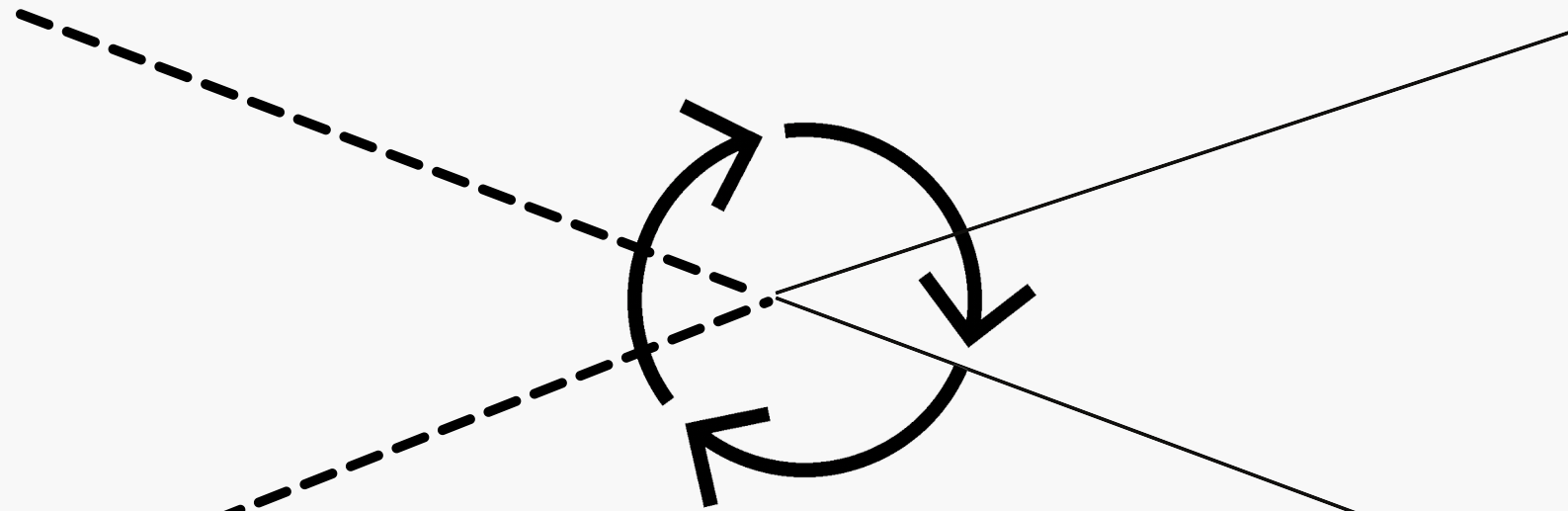
The Crew

Anoushka Gupta

Shreya Shah

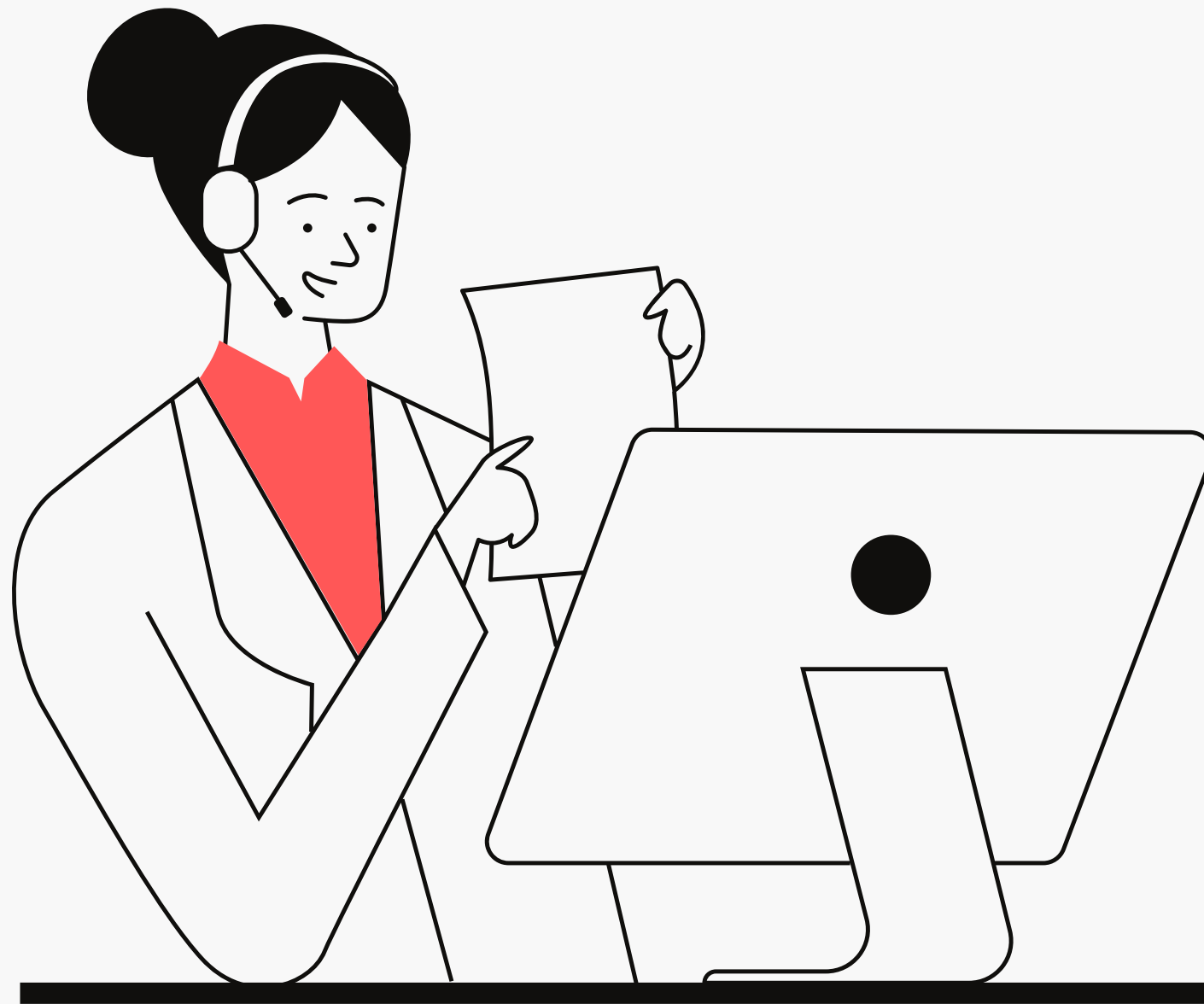
Garvit Choudhary

Gowreddy Madhumita



Abstract

This presentation introduces the functioning of a school report card management system which is a data-driven program that can be used by the school authorities. This program has four major components: grade, marking, storing student records and graphical representation of every student's progress. The implementation uses a few modules. The major part of this presentation will introduce how to use a database table and inner logic to handle user request by going through the implementation process.



Modules Used in the Project

- **mysqlclient**

.It add Python support and merges some pull requests. MySQLdb is an interface to the popular MySQL database server for Python.

- **CSV**

The csv module implements classes to read and write tabular data in CSV format.

- **random**

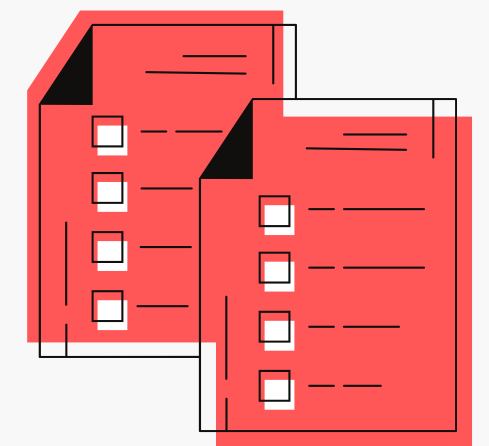
Python Random module is an in-built module of Python which is used to generate random numbers.

- **matplotlib**

Matplotlib is a comprehensive library for creating static, animated, and interactive visualizations in Python.

- **Tkinter**

Tkinter is a pre-built framework in the Python standard library to create Graphical User interfaces (GUIs).



An Overview

01

Create a database.

02

Store new admission
details.

03

Modify existing details.

04

Delete records.

05

Fetch a particular
record.

06

Display the entire
database.

06



An Overview

07

Display student's data
using a pie chart.

08

Marks to grade
conversion.

09

Generate report card.

10

Display individual
student's progress
graphically.

Significance

Basic limitations that we can overcome by practically applying the project.

- The new management system will integrate all basic functionalities.
- Instead of maintaining two different databases for 11th and 12th standard, you will only need to maintain a single database.
- The scalability of the new system will allow them to add more features to the system in future.
- Teachers only need to log into one system to accomplish the desired task. This will be more convenient and significantly improve their efficiency.

01

**Step 1: Creating a new database
using mysqlclient.**

02

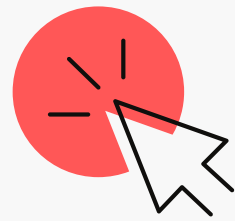
**Step 2: Passing the data to be
stored as input into the SQL
database.**

03

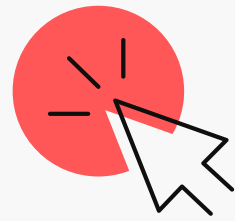
**Step 3: Displaying/storing the
records for future reference.**

METHOD USED.

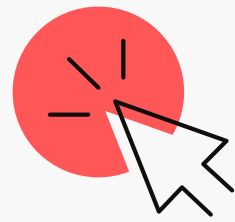
User Defined Functions



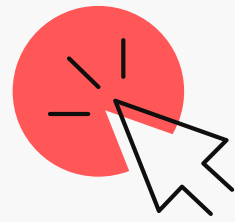
`createdb()`
Creates a new database.



`modif()`
Modifies existing info.



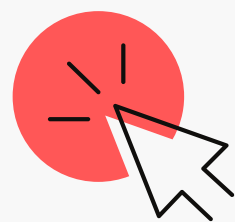
`displ()`
Displays a particular record.



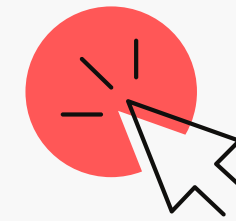
`graph()`
Displays graphical data using matplotlib.



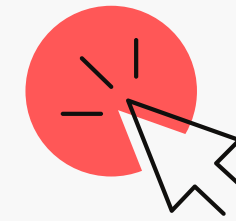
`swrl()`
Displays marksheet for all the students.



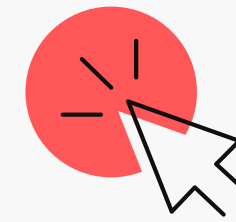
`pag()`
Displays performance analysis graph of a particular student



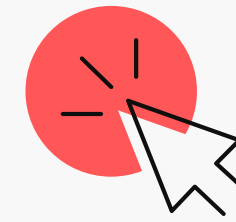
`newadm()`
Adds a new entry into the database.



`delete()`
Deletes an existing record.



`display()`
Displays all the records



`marks_grade_calculation()`
Adds marks record and calculates grades for each subject.



`mos()`
Displays marksheet for a particular student