

Project Review: CGPA Calculator System

Overview

The CGPA Calculator System is designed to help students calculate and store their Cumulative Grade Point Average (CGPA), with specific support for the Physics Department and a general module for other departments. The project spans six files: a main control script for user interaction, two departmental modules for CGPA calculations (dphysics.py and others.py), and three files to export results in PDF, PNG, and JPG formats and also XLSX (Excel).

Objectives and Structure

The system aims to:

- ✓ Provide accurate CGPA calculations for specific and general departmental needs.
- ✓ Allow users to export results in multiple formats for easy sharing.
- ✓ Ensure ease of use and flexibility for future expansion.
- ✓ Each file serves a distinct function
- ✓ dphysics.py is created to target students at Physics Dept, BSMRSTU, and this file also includes the Syllabus of the department.

Main Script: Provides an interactive menu for choosing departmental calculations or export options.

Department Modules: dphysics.py handle Physics-specific and others.py handle general CGPA calculations.

Export Modules: pdf_maker.py, png_maker.py, and jpg_maker.py offer flexible ways to save results as PDFs or images and under others.py export as XLSX (Excel) is available.

Key Features and Challenges:

The system is user-friendly, with error handling for incorrect inputs. It also ensures accurate calculations and flexible file exports. Key challenges included ensuring precise CGPA calculations for different departments and handling multiple formats, addressed by separating functionality into specific modules.

Outcomes and Future Improvements:

The project successfully meets its goals, offering a reliable, versatile tool for CGPA calculations and data export. Future enhancements could include adding more departmental modules, a graphical interface, and database integration for long-term data storage.

This CGPA Calculator System is a valuable academic tool that balances functionality, ease of use, and extensibility. Its modular design makes it adaptable for future needs, providing a solid foundation for an educational resource that can serve a wide range of students and departments.