

Introduction

The GPA Tracker is designed to help you manage your courses, assign grades, and calculate your GPA. This guide will help you navigate and use the application effectively.

System Requirements

- Python 3.10 or later.
- Libraries: `tkinter`.
- An `.ico` file for the application icon (optional but recommended).

Setup Instructions

1. Ensure Python is installed on your computer.
2. Download the GPA Tracker files (`main.py`, `gui_utils.py`, `functions.py`) and place them in the same directory.
3. Ensure the `icon.ico` file is in the `assets` folder within the same directory.
4. Open the terminal, navigate to the project directory, and run: `python main.py`

Using the GPA Tracker

Main Menu

- **Manage Courses:**
 - Opens a new window for course management.
 - Features:
 - Add Course: Enter the course name and credit hours, then click "Add Course."
 - Assign Grade: Select a course from the dropdown menu, enter the grade, and click "Assign Grade."
 - View All Courses: A table displays all courses with their grades and credit hours.
- **View GPA:**
 - Opens a new window showing your current GPA.
 - Features:
 - Displays the GPA calculated based on all graded courses.
 - Lists all courses with grades and credit values in a table.

Exiting the Application

- To exit, click the "Exit" button on the main menu.

Features in Detail

1. Add a Course

- Enter the course name (e.g., "Math 101").
- Enter the credit hours (e.g., 3).
- Click "Add Course."
- A success message confirms the course was added.

2. Assign a Grade

- Select a course from the dropdown menu.
- Enter a grade (e.g., "A").
- Click "Assign Grade."
- A success message confirms the grade was assigned.

3. View GPA

- Click "View GPA" on the main menu.
- The GPA window shows:
 - Your GPA rounded to two decimal places.
 - A table listing all courses with their grades and credits.

Error Handling

- **Invalid Course Name or Credits:** Prompts an error if the course name is empty or credits are not numeric.
- **Invalid Grade:** Prompts an error if the grade does not match a predefined scale.
- **Course Not Found:** Prompts an error if you try to assign a grade to a non-existent course.

FAQs**1. Why is my GPA showing 0.00?**

- Ensure you have assigned grades to your courses.

2. Can I edit a course or grade?

- No, but you can reassign a grade or delete and re-add a course in future versions.

3. Why does the program not open?

- Verify that all files are in the same directory and that `icon.ico` is correctly placed in the `assets` folder.