

Optional Challenge Task – Classes, Inheritance, File Handling, and Error Management

Goal:

Create a simple Python program that demonstrates the use of classes, inheritance, file saving, and exception handling.

This task is optional – it's meant for those who want to go one step further and practice what we've learned.

Task Description

1. Create a base class called `Person` with attributes `name` and `age`.
 - Add a method `info()` that returns a string describing the person.
2. Create a subclass `Student` that inherits from `Person` and adds an attribute `grade`.
 - Override the `info()` method to include the grade in the output.
3. In the main part of your program, create several `Student` objects and store them in a list.
4. Write a function `save_to_file(students)` that saves all students to a text file (one line per student).
 - Use the format: `Name | Age | Grade`
5. Add exception handling:
 - Handle cases where the file cannot be opened or written to (`IOError`).
 - Handle invalid data (e.g., non-numeric age or grade) using `ValueError`.
6. Add a simple message at the end of the program using `finally`:
 - Example: `print('End of program – file operation completed.')`