End-of-Term Project

One independent program. Three achievement levels.

Build a working Python program that you can explain, test, and modify yourself.

Individual work • Submit source code • Live demonstration in Week 16

Three levels, three score ceilings

Choose a target. A higher level must also meet the lower-level requirements.

LEVEL 1

Foundation

MAX 75 / 100

- Variables, input and output
- Conditions and loops
- A list or dictionary
- One reliable, clear purpose

LEVEL 2

Structured

MAX 85 / 100

- Everything in Level 1
- Functions: parameters + return
- Both lists and dictionaries
- At least two user actions*

LEVEL 3

Complete

MAX 100 / 100

- Everything in Levels 1–2
- Class, attributes and methods
- Save + load data (file / JSON)
- Error handling and testing

*Examples: add and search; update and display; choose between two calculations.

The level is a maximum, not an automatic grade. Understanding must be demonstrated.

One project idea, three possible levels

Example: a task tracker. You may propose a completely different Python program.

LEVEL 1

Simple task list

- Enter tasks
- Display saved tasks in a list
- Use a loop and conditions
- One small working program

LEVEL 2

Organized tracker

- Add and search for tasks
- Functions with return values
- Use dictionary data
- Respond to invalid choices

LEVEL 3

Complete tracker

- Task class with methods
- Save and reload tasks (JSON)
- Handle missing-file errors
- Test normal and invalid input

Level 3 means meaningful use of the major course topics—not a GUI, API, or external library.

Assessment

Your work is assessed within its achieved level. The level sets the maximum score.

40%

Functionality

Does the program work correctly and meet its chosen requirements?

30%

Code quality

Are the code and program structure clear, appropriate and reliable?

30%

Live demonstration

Can you run it, explain selected code, and change it without help?

Level 3 is not an automatic high mark. Strong code and independent understanding matter.

Submission and individual demonstration

Week 15: project development • Week 16: final demonstration and submission

SUBMIT

- Your working Python source file(s)
- Any data or files needed to run it
- Include your name and student ID
- Send your project by email
- Be ready to run the submitted code

No AI used during coding.

INDIVIDUAL DEMONSTRATION

- Run your program and show its features
- Explain code selected by the lecturer
- Make a small change independently
- Answer questions about how it works

No AI or outside assistance during the demonstration.

Email: tom.lotz@outlook.com