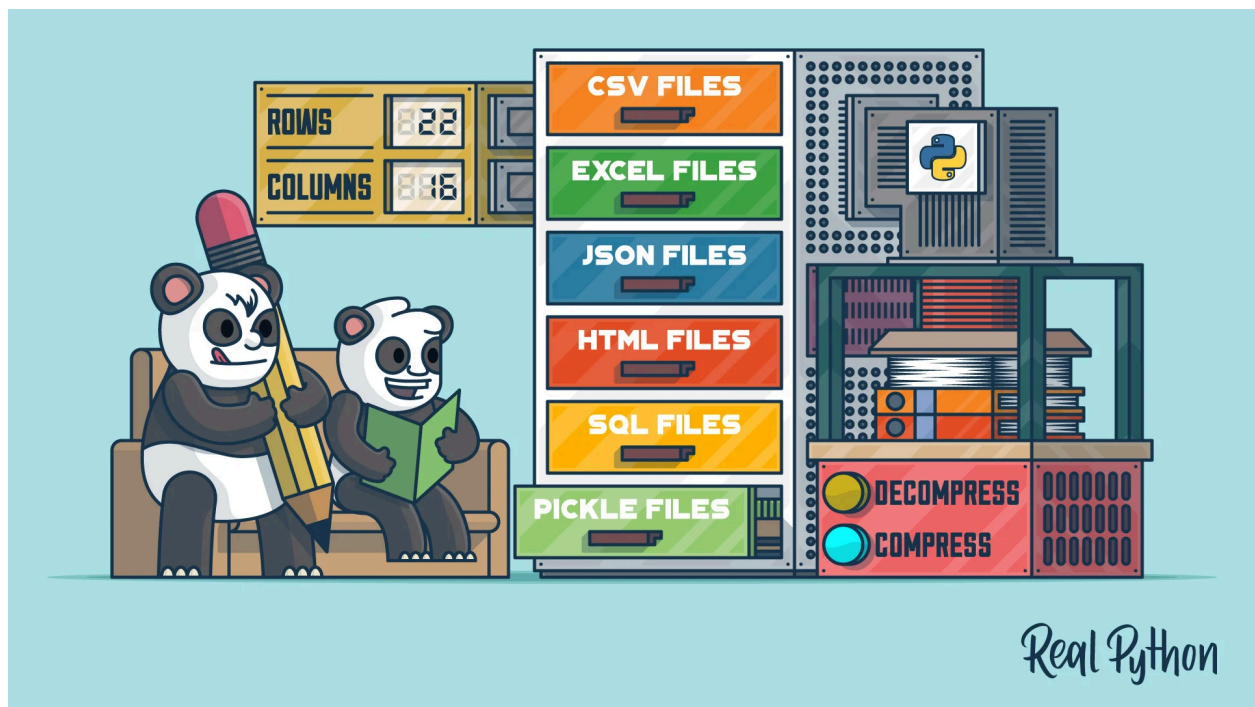


Anthony Thang

CSC 357 Winter 2025

Lab 1



Initial Decisions:

- **Programming Language:** Python
- **Development Environment:** Linux (VSCode originally considered)

Internal Architecture:

- **Data Structures:** Pandas DataFrame
 - Chosen for its ease of use and familiarity from prior experience.
 - Useful for managing the data from the students.txt file, enabling efficient data manipulation for analysis.

Task Log:

1. **Task 1:** Reading from the students.txt file
 - **Student(s):** Anthony
 - **Person-hours:** 2 hours
2. **Task 2:** Implementing commands R4, R6, R7, R8, R10, R11, R12
 - **Student(s):** Anthony
 - **Person-hours:** ~3 hours (about 30 minutes each)
3. **Task 3:** Implementing commands R5, R9
 - **Student(s):** Anthony
 - **Person-hours:** ~2 hours (about an hour each)
4. **Task 4:** Testing
 - **Student(s):** Anthony
 - **Person-hours:** 2 hours

Notes on Testing:

- **Testing Process:**

- Each command and condition was tested individually over the span of about 1 hour per command.
- **Bugs Found:** 4-5 bugs were encountered, including:
 - Errors related to incorrect index usage leading to error codes.
 - Invalid input still producing data when it should not have.
- **Bug Fixing Time:** Approximately 2-3 hours spent resolving bugs.

Final Notes:

- Using Linux for the project allowed me to expand my skillset beyond just the programming tasks, as I had to adjust to working in a new environment.
- The pandas DataFrame made handling and manipulating the data straightforward, and the task completion went relatively smoothly once the basic functionality was established.
- Overall, the project took a bit longer than expected, especially during the testing phase due to bug identification and fixing.