

# Recitation 1

Please use [compsci\\_cs250@colostate.edu](mailto:compsci_cs250@colostate.edu) for communications instead of using Canvas messaging.

Check MS Teams

Check course website:

<https://www.cs.colostate.edu/~cs250/>

# Recitation Structure

- Attendance is required
- Activity
  - Optional Recitation Worksheet

# Good Coding Practice

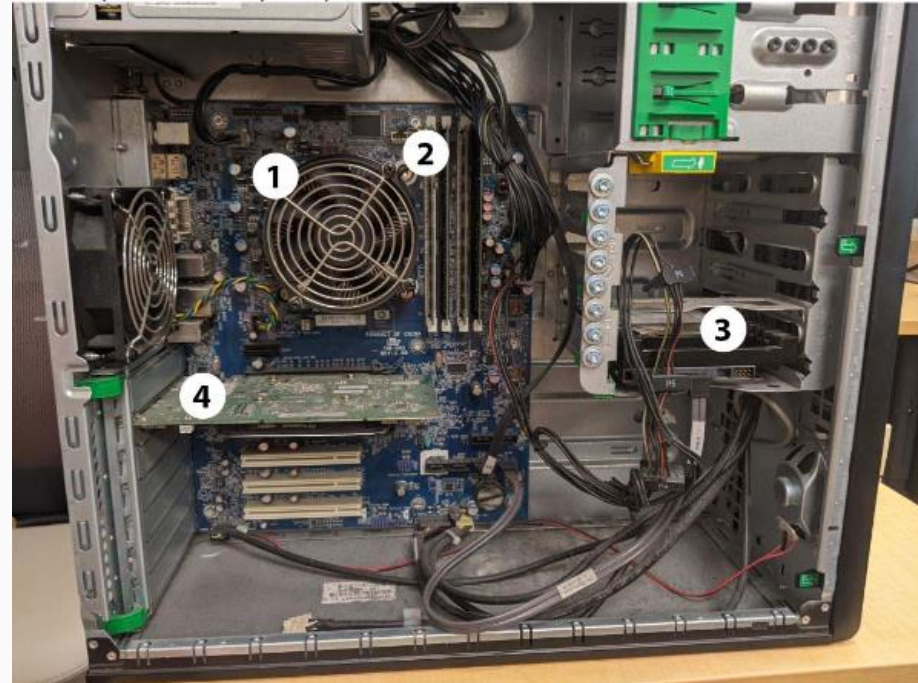
- Code should be modularized
  - Easier to read
  - Easier to test and debug
  - Easier to find things
  - Reusability

# Basic Components of a Computer

- Motherboard
- CPU (Central Processing Unit)
- Main Memory/RAM (Random Access Memory)
- Storage (Hard Disk Drive)
- PSU (Power Supply Unit)
- Network adaptors
- GPU (Graphics Processing Unit)

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# What is a Java package?

- **A Namespace for Your Code:** Packages are used to group related classes and interfaces together.
- **Avoiding Name Conflicts:** They prevent naming collisions. You can have two classes named `Exercise1`, as long as they live in different packages.
- **Organization:** Just like folders on your computer organize files, packages organize Java classes.
- **The package Keyword:** Every Java file belonging to a package must start with the package statement as the first line of code.



# Directories vs. Packages

- **One-to-One Mapping:** In Java, the package name must exactly match the directory structure on your hard drive.
- **The Dot Notation:** We use dots `.` to represent subdirectories.
  - **Package:** `cs250.exercises`
  - **Folder Path:** `cs250/exercises/`
- **Case Sensitivity:** Java is case-sensitive. If your package is `cs250`, your folder must be named `cs250`, not `CS250`.

# Compiling and Running with Packages

- **Navigating the Terminal:** You should always compile and run your code from the **root directory** (the folder containing the cs250 folder), not from inside the exercises folder.

- **Compilation:**

```
javac cs250/exercises/Exercise1.java
```

- **Execution:** You must use the "Fully Qualified Name" of the class.

```
java cs250.exercises.Exercise1 <arguments>
```

# Your turn!

1. Everyone log into a lab machine
2. Open VS Code
3. Create a terminal (Ctrl + `)
4. `mkdir cs250`
5. `cd cs250`
6. `mkdir exercises`