

# Activity 1: Introduction

Each week, you will work in teams of 3–4 students to learn new concepts. This activity will introduce you to the process. We'll also take a first look at computer hardware and Java code.

## Model 1 Team Roles

Decide who will be what role for today. We will rotate roles throughout the course. If you have three people, one may have two roles. If you have five people, two may share the same role.

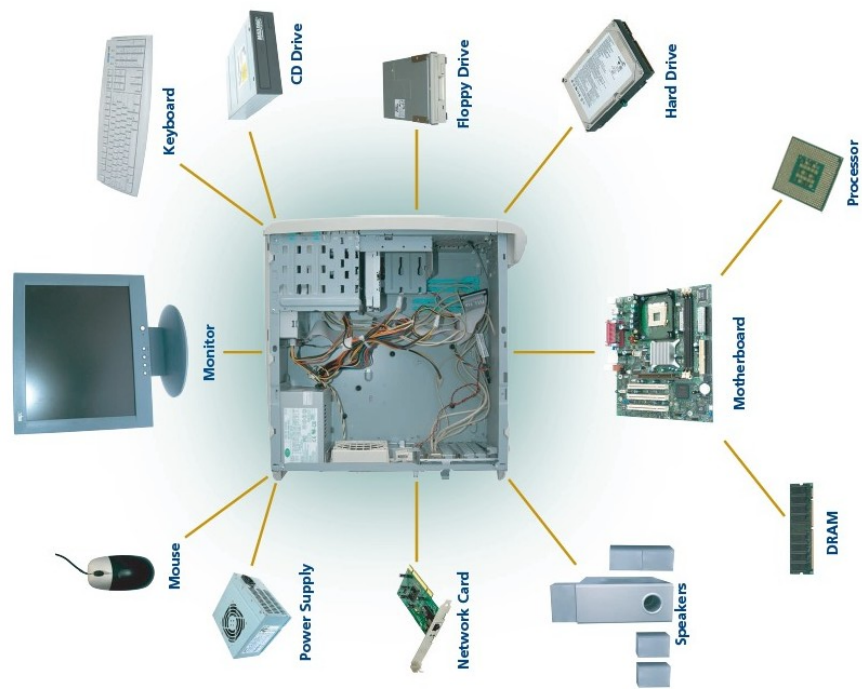
Manager:
Presenter:
Recorder:
Reflector:

### Questions (12 min)

Start time: \_\_\_\_\_

1. What is the difference between **bold** and *italics* on the role cards?
2. Manager: invite each person to explain their role to the team. Recorder: make sure all team members take notes by writing down key phrases next to the table above.
3. What responsibilities do two or more roles have in common?
4. For each role, give an example of how someone observing your group would know that a person is not doing their job well.
  - Manager:
  - Presenter:
  - Recorder:
  - Reflector:

## Model 2 Computer Hardware



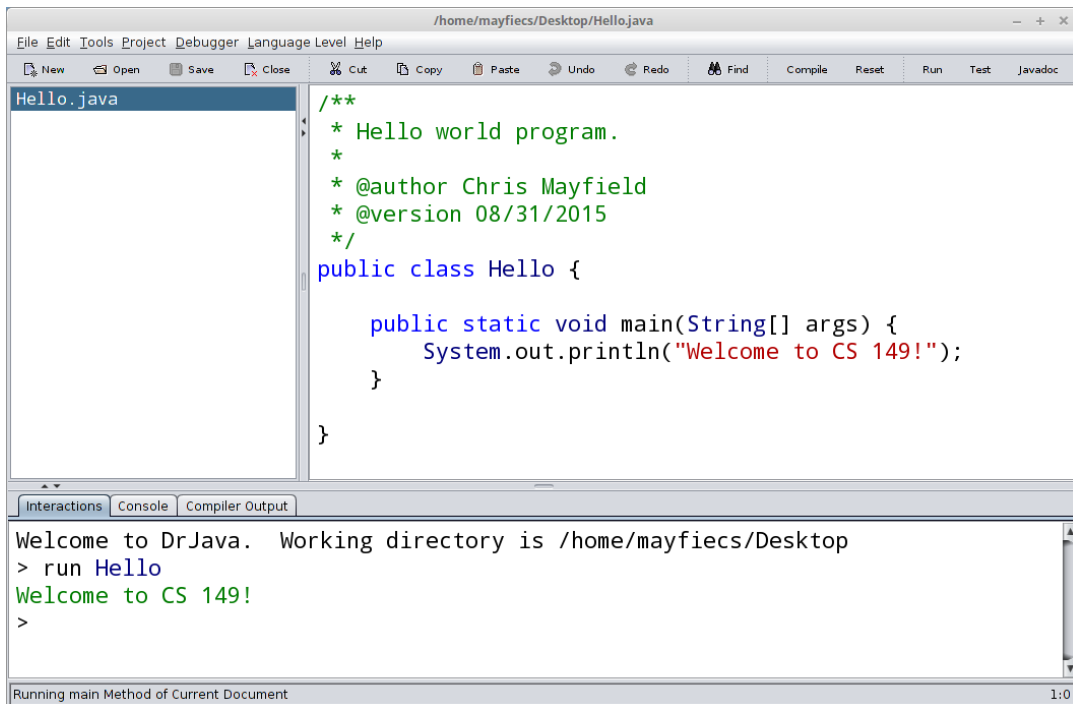
### Questions (10 min)

Start time: \_\_\_\_\_

5. For each category, list examples of computer hardware and human anatomy. (Keep it clean.)

	Computer	Human
Input		
Output		
Processing		
Storage		

## Model 3 Hello, World!



The screenshot shows the DrJava IDE interface. The top menu bar includes File, Edit, Tools, Project, Debugger, Language Level, and Help. Below the menu is a toolbar with icons for New, Open, Save, Close, Cut, Copy, Paste, Undo, Redo, Find, Compile, Reset, Run, Test, and Javadoc. The main editor window displays the code for Hello.java, which includes a multi-line comment and a public class Hello with a main method. The console window at the bottom shows the output of running the program, including the DrJava welcome message and the program's output.

```
File Edit Tools Project Debugger Language Level Help
New Open Save Close Cut Copy Paste Undo Redo Find Compile Reset Run Test Javadoc

Hello.java
/**
 * Hello world program.
 *
 * @author Chris Mayfield
 * @version 08/31/2015
 */
public class Hello {

    public static void main(String[] args) {
        System.out.println("Welcome to CS 149!");
    }

}

Interactions Console Compiler Output
Welcome to DrJava. Working directory is /home/mayfiecs/Desktop
> run Hello
Welcome to CS 149!
>

Running main Method of Current Document 1:0
```

### Questions (8 min)

Start time: \_\_\_\_\_

6. What is the name of the class? What is the name of the file? What directory is it in?
7. How many lines of code is the above program? How many statements does it have?
8. What is the purpose of the first six lines? What is the purpose of the two blank lines?
9. Describe in your own words what `System.out.println` means. Be very specific.

## Model 4 Employability Skills

“What do employers look for when they are seeking new college graduates to take on jobs? According to NACE’s *Job Outlook 2016* survey, they are looking for leaders who can work as part of a team.” <http://www.naceweb.org/s11182015/employers-look-for-in-new-hires.aspx>

**Attributes employers seek on a candidate’s resume**

	Attribute	% of respondents
1.	Leadership	80.1%
2.	Ability to work in a team	78.9%
3.	Communication skills (written)	70.2%
4.	Problem-solving skills	70.2%
5.	Communication skills (verbal)	68.9%
6.	Strong work ethic	68.9%
7.	Initiative	65.8%
8.	Analytical/quantitative skills	62.7%
9.	Flexibility/adaptability	60.9%
10.	Technical skills	59.6%

### Questions (10 min)

**Start time:** \_\_\_\_\_

10. What is the relationship between the top two attributes employers seek?
11. How is communication (written and verbal) related to problem-solving?
12. As a team, come up with a short description/example of each attribute.
  - 1.
  - 2.
  - 3.
  - 4.
  - 5.
  - 6.
  - 7.
  - 8.
  - 9.
  - 10.
13. Which of these skills do you expect to develop in this course? Why?