

Java Language Fundamentals

Overview

In this lab, you'll create a new project and define a class that makes use of fundamental Java language features.

Source folders

Student project: `StudentJavaLang` (you will create this project)
Solution project: `SolutionJavaLang`

Roadmap

There are 3 exercises in this lab, of which the last exercise is "if time permits". Here is a brief summary of the tasks you will perform in each exercise; more detailed instructions follow later:

1. Creating a project and adding a main class
2. Declaring and using variables
3. Additional suggestions

Exercise 1: Creating a project and adding a main class

In Eclipse, create a new Java project named `StudentJavaLang`.

In the `StudentJavaLang` project, create a new package named `student.javalang` (this is the naming convention we use for packages on this course).

In the `student.javalang` package, create a new Java class named `Main` (it doesn't actually matter what you call the class, but `Main` is as good as any ☺). In the `Main` class, write a simple `main()` method to act as the entry-point for your application.

Run the application as it stands, to make sure everything is OK so far.

Exercise 2: Declaring and using variables

In the `main()` method, add code to do the following:

- Ask the user to enter an employee's name, plus their salary (use the `Scanner` class to help you get the user's input).
- Output the details by using `System.out.println()`.

Run the application to verify it all works. Then add more code as follows:

- Ask the user to enter the name and employee for another employee.
- Output these details.
- Also output the average salary.

Exercise 3 (If time permits): Additional suggestions

- Use the `Math` class to determine the minimum and maximum salaries.
- Use the `StringBuilder` class to accumulate some useful information efficiently, and then display it. You can find information about `StringBuilder` in the online JavaDoc documentation.