



# Conclusion and Final Words

Java Programming using the Eclipse IDE

transforming performance  
through learning

## Course Outline

- **Introduction to Java and Eclipse**
  - Installing the software
- **Primitives**
- **Control Flow**
- **Introduction to Objects**
- **Inheritance**
- **Collections**
- **Error Handling**
- **GUIs and Swing**
- **Java Servlets, JSPs and Web Applications**
- **Functional Programming**
- **Documentation**
- **Packaging it all up**
- **Test Driven Development in Java**

## Course Objectives

- **By the end of this course you should be able to:**
  - Install and setup java and Eclipse IDE
  - Write programs and run them from both the command line and the IDE
  - Understand the basics of java programming
    - Creating objects and methods
    - Control flow within methods
    - Manipulating data
    - Access control
  - Write several programs starting from the very simple command line programs through to full GUI applications using JavaFX
  - Have a look at web applications using J2EE (Servlets and JSPs)
  - Have a look at functional programming in Java using Java 8
  - Packaging up Java files to use as executables, or deploying onto web servers
  - Test Driven Development in Java

## Where Next?

- **Books**
  - Cay Horstman – Big Java, Core Java for the Impatient
  - Kathy Siera and Bert Bates – Head First Java
- **Documentation and Tutorials Online**
  - <https://docs.oracle.com/javase/8/docs/api/index.html>
  - <http://docs.oracle.com/javase/tutorial/>
  - <http://www.coderanch.com/forums>
    - A good place to ask beginner questions. Can be a bit friendlier than stack overflow when starting out
- **Practice!**
  - And practice some more, and some more

## QA Courses

- **Test Driven Development in a Java Environment**
  - Introduction to test driven development in Java
  - More detail about how to use JUnit and Mocking for tests
- **User Experience Fundamentals**
  - Putting the user at the centre of any human computer interaction
  - Some of the details and theory behind interface design
- **Understanding the Java Spring Framework**
  - Looking in depth into the spring framework for Java
  - Looks at databases and the Hibernate ORM
- **Java SE 8 Fundamentals/Programming**
  - Written by Oracle, covers basic through to more advanced concepts in Java

## Evaluation

- **Go to [evaluation.qa.com](http://evaluation.qa.com)**
- **Course Code: QAJVAECL**
- **PIN:**