



Fundamentals of the Java Programming Language

خلاصه :

The “Java Fundamentals” course is designed to provide students with the skills for developing Java applications.

This course explains the object oriented concepts in detail using syntax and the constructs of Java 5 programming language. Java documentation, Good object oriented design, component development, exception handling, Java libraries (I/O, Collection...) and packaging will be discussed thoroughly.

مدت دوره: ۴۰ ساعت

پیش نیاز: آشنایی با مفاهیم شی گرای

اهداف دوره: در انتهای این دوره دانشمویان قادر خواهند بود:

- Explain key concepts related to Java technology and Java programming and list the phases of a typical application development lifecycle.
- Analyze a problem and design interfaces and classes to solve the problem.
- Demonstrate object-oriented reuse principles through the use of object references.
- Create sophisticated Java applications that leverage the object-oriented features of the Java language, such as inheritance and polymorphism.
- Use the File I/O class libraries to read and write to and from data and text files.
- Test, document, package and deploy your java applications.

سرفصل دوره:

- **Introduction to Objects**
- **Everything is an Object**
- **Controlling Program Flow**
- **Initialization & Cleanup**
- **Hiding the Implementation**
- **Reusing Classes**
- **Polymorphism**
- **Interfaces & Inner Classes**
- **Error Handling with Exceptions**
- **The Java I/O System**