



# Sertifikat Pelatihan

## *Certificate of Training*

NO. 327753

MENYATAKAN, BAHWA  
This to certify that

*Adhi Nugraha*

TELAH MENGIKUTI PELATIHAN  
has completed the training of

**Pengenalan Bahasa Pemrograman Java J2SE**

*J2SE Java Programming Language*

YANG DILAKSANAKAN PADA  
Was held on

20 Juni - 25 Juni 2022

Jakarta, 25 Juni 2022

Rektor  
Universitas Gunadarma



Sertifikat ini telah ditanda tangani secara elektronik sesuai dengan standard yang berlaku dan diakui secara sah oleh hukum.

Prof. Dr. E. S. Margianti, SE, MM



## Pelatihan **Pengenalan Bahasa Pemrograman Java J2SE**

Course Title *J2SE Java Programming Language*

<b>Materi</b>	<b>Subjects</b>
1. Pengantar Bahasa Pemrograman Java : Tujuan Teknologi Java, Java Virtual Machine, Garbage collection, Java Runtime Environment (JRE)	1. Introduction to Java : Main purpose of Java Technology, Java Virtual Machine, Garbage collection, Java Runtime Environment
2. Ekspresi dan Kontrol : Ekspresi, Operator, Casting, Percabangan, perulangan, Switch	2. Expression and Control : Expression, Operator, Casting, Branching Statement, Switch Statement, Statement loop
3. Pemrograman Berorientasi Obyek : Rekayasa perangkat lunak, Analisis dan desain, Class, Deklarasi Class, Enkapsulasi, Package	3. Object Oriented Programming : Software Engineering, Analysis and Design Phase, Class as the design of the Object, Class declaration in Java, Information Hiding, Encapsulation, Source File Layout, Statement of Package
4. Desain Class: Subclass, Single Inheritance, Access Control, Method Overriding, Method Override, Polymorphism, Konstruktor, Class Object, Wrapper Class	4. Class Design : Subclassing, Single Inheritance, Access Control, Method Overriding, Application Method Overridden, Polymorphism, Application for Parent Class Constructors, Class Object, Wrapper Class
5. Threads : Dasar kontrol Thread, Sinkronisasi teknologi Java, Kontrol model untuk Sinkronisasi	5. Threads : Basic Controls in Thread, Synchronization in Java Technology, Model Control for Synchronization
6. Membangun Java GUI : Abstract Windowing Toolkit (AWT), membangun Graphical User Interface, BorderLayout Manager, Merancang AWT, J2SDK Event Model, Event Handling, Komponen AWT, Membuat Menu	6. Building a Java GUI : Abstract Windowing Toolkit (AWT), Build Graphical User Interface, BorderLayout Manager, Drawing AWT, J2SDK Event Model (Delegation Model), Event Handling, AWT Components, How to Create Menu

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Materi	Subjects
7. I/O Streams : Dasar dasar I/O, Data Stream, Rangkaian I/O Stream, Proses Stream, Dasar Class Byte Stream, Dasar Class Character Stream, Konversi Byte dan Character	7. Advanced I/O Streams : The basics of I/O, Data in the Stream, The series of I / O Stream, Process Stream, Basics Class Byte Stream, Basics Class Character Stream, Convert Byte and Character
8. Jaringan : Socket, Jaringan dengan teknologi Java, Model jaringan Java	8. Networking : Socket, Networking with Java Technology, Java Networking Model



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