Jaipur Engineers
Your One-Stop IT & Staffing Ecosystem

JAVA

Java Design Patterns

SAMPLE PROJECT

Delivery Cost Calculator



COURSE FEE

Fee on enquiry

JAIPUR, RAJASTHAN

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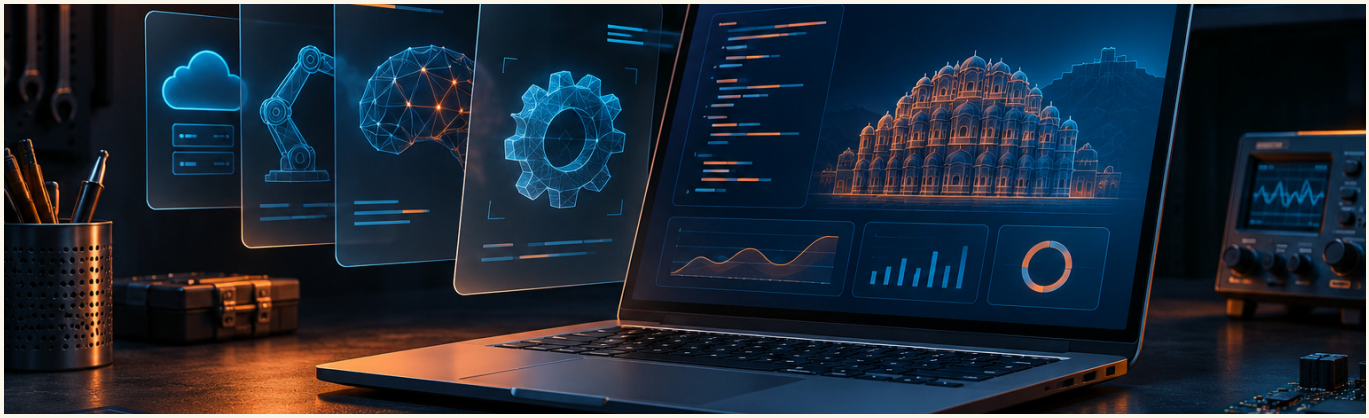
Core concepts



01

Composition, interfaces and SOLID principles

02

Creational patterns including Factory and Builder

03

Structural patterns including Adapter and Facade

Model the domain

Identify data, actions and boundaries before writing the first class.

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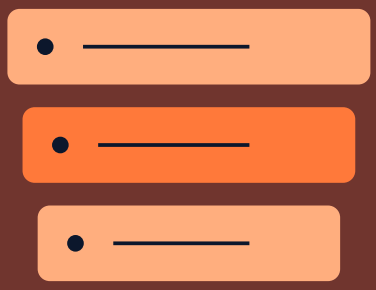
Applied skills

- **Model**
- **Execute**
- **Verify result**



04 Behavioural patterns including Strategy and Observer

05 Dependency boundaries and testable refactoring

06 Pattern selection, trade-offs and code review

PROJECT DELIVERABLES

A runnable Java project, test results and notes on design and error handling.

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Portfolio project

Delivery Cost Calculator

Refactor a delivery calculator using strategy objects and demonstrate the trade-offs in tests.



Model the domain

Identify data, actions and boundaries before writing the first class.

Check a failure

Write a test for a rejected operation and confirm the data stays consistent.

A runnable Java project, test results and notes on design and error handling.

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Course fees

COURSE FEE

Fee on enquiry

Ask admissions for the course fee, available batches and enrolment details.

ADMISSIONS

+91 70146 92039

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122/228, Indra Path, Thadi Market

Mansarovar, Jaipur, Rajasthan 302020

SCAN FOR MAP

Check course details

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Course content

MODULES 01–02

01

Lessons & practice

- Composition
- Interfaces
- SOLID principles

HANDS-ON

Refactor an order rule behind a small interface and explain its responsibilities.

02

Lessons & practice

- Creational patterns including Factory
- Builder

HANDS-ON

Construct a valid request object with a builder and test required inputs.

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Course content

MODULES 03–04

03

Lessons & practice

- Structural patterns including Adapter
- Facade

HANDS-ON

Adapt an existing data provider to a common interface or add a simpler facade.

04

Lessons & practice

- Behavioural patterns including Strategy
- Observer

HANDS-ON

Swap delivery-cost strategies and publish a status change to a test observer.

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Course content

MODULES 05–06

05

Lessons & practice

- Dependency boundaries
- Testable refactoring

HANDS-ON Use test doubles at a dependency boundary before refactoring a service.

06

Lessons & practice

- Pattern selection
- Trade-offs
- Code review

HANDS-ON Compare the original and refactored code and explain the maintenance trade-off.