**DEPENDENCY INJECTION**

class Customer {

private String id;

private String name;

public Customer(String id, String name) {

this.id = id;

this.name = name;

}

public String getId() { return id; }

public String getName() { return name; }

}

interface CustomerRepository {

Customer findCustomerById(String id);

}

class CustomerRepositoryImpl implements CustomerRepository {

@Override

public Customer findCustomerById(String id) {

// Simulate fetching from a database

return new Customer(id, "AAA");

}

}

class CustomerService {

private CustomerRepository repository;

public CustomerService(CustomerRepository repository) {

this.repository = repository;

}

public void printCustomerDetails(String id) {

Customer customer = repository.findCustomerById(id);

System.out.println("Customer ID: " + customer.getId());

System.out.println("Customer Name: " + customer.getName());

}

}

public class Main {

public static void main(String[] args) {

CustomerRepository repository = new CustomerRepositoryImpl();

CustomerService service = new CustomerService(repository);

service.printCustomerDetails("CUST1001");

}

}

