

What Unit testing and Integration testing

By Ramesh Fadatare (Java Guides)

What is Unit Testing

Unit testing involves the testing of each unit or an individual component of the software application.

The purpose is to validate that each unit of the software code performs as expected

Unit testing is done during development (coding phase) of an application by the developers

Unit may be a an individual function, method, procedure, module and object



What is Unit Testing

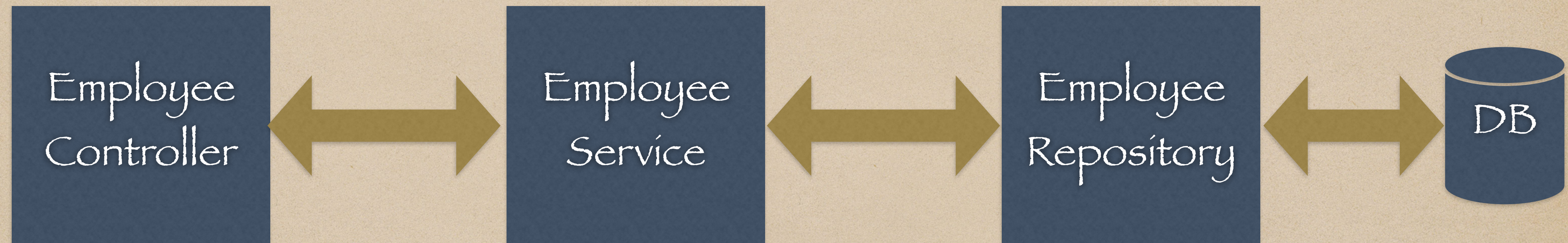
In Java, JUnit framework is used for unit testing Java applications

Most of the times one component will depend on other component(s), so while implementing unit tests we should mock the dependencies with the desired behaviour using frameworks like **Mockito**.

Integration Testing

As the name suggests, integration tests focus on integrating different layers of the application. That also means no mocking is involved.

Basically, we write integration tests for testing a feature which may involve interaction with multiple components.



Examples:

Employee Management Feature (EmployeeRepository, EmployeeService, EmployeeController).

User Management Feature (UserController, UserService, and UserRepository).

Login Feature (LoginRepository, LoginController, Login Service) etc