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What is Junit ?
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=> Free & open source java based framework

=> It is used for unit testing

Note: It is used only for java projects unit testing

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What is Unit Testing ?
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=> Testing individual components of the application is called as Unit testing.

=> Unit testing is used to identify whether code is working as expected or not.

=> Unit testing is used to identify bugs in the code.

=> With the help of unit testing we can identify bugs at early stage
(before giving to testing team).

=> By performing unit testing we can provide quality code
(bug free code) to higher environments.

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What is isolated unit testing ?
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=> Controller methods are depends on service methods and service methods depends on dao/repo methods.

=> When we are testing controller method that time only controller method should be executed (service method shouldn't be called).

=> To perform isolated unit testing we will use Mocking.

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What is Mocking ?
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=> The process of creating substitute object for real-object is called as Mocking.

=> To perform mocking we have several mocking frameworks

- a) Mockito
- b) Easy Mock
- c) Power Mock
- d) JMock

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What is code coverage ?
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=> The process of identifying which lines of code is unit tested and which lines of code is missed in unit testing.

=> Industry standard is minimum 80% code coverage for the project.

=> To get code coverage report we can use 'jacocco' plugin.

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Unit Testing for Boot application

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=> Spring Boot provided 'spring-boot-starter-test' dependency to perform unit testing.

Note: This dependency will be added by default when we create boot application.

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SpringBoot Rest API + Junit + Mocking + Jacoco

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https://github.com/ashokitschool/sb_rest_api_junit_app.git

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Q) How to perform unit testing for private methods ?

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