

CSE565 Unit Test Framework

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I. What is a unit testing framework?

A unit testing framework is a software tool or library that provides a structured environment to support the writing, execution, and management of unit tests.

II. How would a developer utilize a framework?

A developer uses a framework to run automated tests by providing inputs and expected outputs, with the framework verifying that the actual output matches expectations.

III. What benefits does a framework provide?

A framework increases testing speed and efficiency, improves accuracy and quality, and reduces maintenance costs for tests.

IV. Identify 2 frameworks for further consideration: Jest vs Jasmine.

Feature	Jasmine	Jest
Installation	manual installation as a standalone library	pre-packaged with Create React App
Syntax	BDD style	TDD style
Assertions	basic assertions	assertions and mock support
Snapshot Testing	requires additional library	built-in support
Asynchronous Testing	not as good as Jest	easy and fast
Test Reporting	basic reports	detailed test and coverage reporting
Ecosystem	work better with Angular	developed to work with React

V. Reference

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