Test Case Re-use in Gopher

Summary –

To allow test case and test data re-use, separate the URL from the test data and assign at run-time.

The details –

Yesterday in the Sprint planning meeting a possible new requirement was mentioned – test GUI features (header, footer, etc.) that appear on multiple pages. Stories mention testing these features as part of the over-all user story.

It was suggested that re-use of functions might offer an approach. After much thought last night, I think we can re-use test cases for this purpose in the new Gopher. Currently, this is not supported because we only have one URL (stored in a property file) per Gopher installation.

Previously I suggested that the URL for the test starting point be an argument for the test case and that it be just another instance of TestData. This is reflected in the current database design. The design is flexible but does not allow re-use of the TestCase without duplicating all its TestData.

I now believe that a better solution is to have the URL separated from the TestData and related at run-time. Shekhar mentioned a concern about this and I now believe he is right.

The current persistent object relations look like this:

TestCase----0TestRun-----0TestData

| |

0 0

TestDataType TestRunResult

where ‘------0’ shows a one too many relationship.

The URL is just one of the TestData currently. Since the URL is a TestData, if we want to re-use the TestCase we have to create new TestData with the URL values we need and all the data for that TestCase has to be duplicated.

I think we should change to this:

TestClass----0TestCase----0TestData

| |

0 0

TestDataType TestRun

|

0

TestRunResult

where TestCase has been renamed to TestClass and TestRun is renamed to TestCase. TestClass is a template for TestCase. TestCase has TestData related to it.

TestRun is a new object and looks like:

TestRun

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String: URL

Long: test-case-id

Now we can re-use the TestCase and its TestData and assign a URL (via a TestRun) at run-time.

This allows us to add a TestCase to a suite, have a unique URL associated and have its data reused.

We can have TestRuns created where each TestRun uses a unique URL. In the XML we will use for data ingest we can have:

<TestRun>

<URL>[http://dishanywhere.com/shows</URL](http://dishanywhere.com/shows%3c/URL)>

<test-case-id>1</test-case-id>

</TestRun>

<TestRun>

<URL>[http://dishanywhere.com/movies</URL](http://dishanywhere.com/movies%3c/URL)>

<test-case-id>1</test-case-id>

</TestRun>

<TestRun>

<URL>[http://dishanywhere.com/mydvr</URL](http://dishanywhere.com/mydvr%3c/URL)>

<test-case-id>1</test-case-id>

</TestRun>

Etc. and test all the pages where the header is present.

I realize my explanations may not be the best. The pseudo-UML I am using is the core of my argument.

I intend to find a suitable UML drawing tool and use that in the near future.

Please ask me questions and comment soon as possible because I want to make any database changes before going much farther.

-Greg