Subject: Can U++ TheIDE be used with cxxtest ?
Posted by jlfranks on Wed, 19 Aug 2020 05:15:02 GMT
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We are looking at how to use TDD with U++ TheIDE.
We have several projects that are either console or GUI based.

We would like to use cxxtest framework for this effort.

Is there a way to use U++ TheIDE and cxxtest framework for unit testing?

-- Jeff Franks

Subject: Re: Can U++ TheIDE be used with cxxtest ?
Posted by mr_ped on Wed, 19 Aug 2020 07:50:14 GMT
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Can't answer your question directly, but for my CLI/U++ projects I'm using for years the "UnitTest++", there's even some original old version in the Bazaar here on web.

But I don't see any obvious reason why U++ should pose any problem to regular C++ UT framework, at least in the trivial land of CLI. I never got the grasp of GUI unit testing, in my projects I always just test the "model" classes without any GUI widgets, and keep the presenter/view part outside of the UT scope - something I wish I would learn to manage better, but so far never had enough "time" for that.

edit: about TheIDE vs UnitTest++: my app can be compiled with UT flag (one of the configurations), at that moment it will in the main launch the test runner instead of going into the app itself, and output the results, so I have them visible in TheIDE console, or I can redirected them to log files when running it from command line. No neat green/red semaphore, but I don't miss that, for me "OK/FAIL" text in console is enough.

Subject: Re: Can U++ TheIDE be used with cxxtest ?
Posted by mirek on Wed, 19 Aug 2020 07:54:44 GMT
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jlfranks wrote on Wed, 19 August 2020 07:15We are looking at how to use TDD with U++ TheIDE.
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Well, it is still C++, so it should work, right?

Alternatively, you could setup something similar to U++ testing infrastructure. Instead of putting tests into some headers as classes, you can put individual tests / test groups into packages (we have now about 157 of these, see https://github.com/ultimatepp/ultimatepp/tree/master/autotes t). Testing then compiles and runs one after another. I like to a bit more as each test is individual process, so if it crashes or freezes, other tests are not affected....

Mirek

Subject: Re: Can U++ TheIDE be used with cxxtest ?
Posted by Klugier on Wed, 19 Aug 2020 18:40:52 GMT
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Hello Jeff,

Personally I would suggest using Google Test + Google Mocks. Sometime ago I created port for upp and it is available through bazzar. It is still active and supported by Google. On 3rd of October they release version 1.10.x. It posses around 16.5K stars on GitHub.

If you want to use full TDD with good code coverage and stable environment mocks are needed. For example you will be able to simulate network payload or hardware behavior easily.

To use that technology in Upp world I highly suggest backend/frontend separation and test back-end in separate package.

Mirek, you could consider using GTest in auto-test. I think your tests will benefit from that technology especially when using concepts such as test suites and you could still use small GTest app per package instead everything in one bag.

Examples below:
- Testing
- Mocking

Wikipedia:
- Mock_object
- Test-Driven Development (TDD) Shines with Mocking

Sincerely,
Klugier

Subject: Resolved with Google Test -- Re: Can U++ TheIDE be used with cxxtest ?

Posted by jlfranks on Thu, 20 Aug 2020 19:44:55 GMT
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That was an excellent suggestion!!
It was so easy to do because the gtest plugin was already available.

I'm now well along with a number of unit tests.
This is working out very well.

The tests involve "back-end" code as you suggested.

I'll probably follow-on with Google mock when I need it.

Thanks again.

-- Jeff Franks