Create Your First C/C++ Test Project - Visual Studio 2010

This paper describes how to integrate CppUTest based testing into your production code base using the Visual Studio environment.

Install and build CppUTest

Go to cpputest.org, and get the latest released cpputest. (3.7.1 was used at the time of this writing)
You can download the zip or git clone
(The instructions assume you put it c:\your-workspace\tools\cpputest)
Double click the sln file
Select "Start Without Debugging" (shortcut: CTRL-F5)
See the tests run
Close Visual Studio
Add an environment variable called CPPUTEST_HOME to your environment variables that points the home directory of CppUTest. (c:\your-workspace\tools\cpputest)

Unzip and build the starter project

Unzip cpputest-starter-project-vs-3.7.1.zip into your workspace
for example c:\your-workspace\your-workspace\product\unittest
The starter projecr should be in the same soure repository as your production code
Double click the sln file in
..\cpputest-starter-project-vs-3.7.1\vs-test-build\
Select "Start Without Debugging" (shortcut: CTRL-F5)
See the test build in Visual Studioresults in the console window and these test results in a pop up console window

```
.
OK (2 tests, 2 ran, 0 checks, 0 ignored, 0 filtered out, 0 ms)
```

Cause the test to fail

Open example.c, change the return result.
Select "Start Without Debugging" (shortcut: CTRL-F5)
You should see the test case fail
Restore the example()'s return result and see tests pass again.
Things that can go wrong:

- Your build fails because it cannot find CppUTest includes
- Define the environment variable CPPUTEST_HOME to be equal to the location of CppUTest

You are ready to start testing your code.

See wingman-sw.com/articles/get-your-legacy-c-into-a-test-harness
You can add one file at a time to your Visual Studio "ProductionCodeLib" project
Tests are added to "AllTests" console application project