Subject: Re: U++ Command Line Argument Processor Package Posted by captainc on Sat, 15 Nov 2008 17:26:03 GMT

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All new version of UCLAP. Version 0.3.0.

This is a major upgrade to support validation for standard arguments as well as delimited arguments.

Backwards compatibility with 0.2.x series is broken.

Programs called take the form:MyProgramExecutable [OPTIONS] [ARGUMENTS] Where:

OPTIONS is an unordered list of command line options specified by delimiters and flags ARGUMENTS is an ordered list of arguments that come after the OPTIONS

Example: the tail program output the last few lines of a file. tail -n 3 myfile

-n is an option (delmited argument) whose value is 3. myfile is a normal base argument.

So now, in UCLAP, you specify options and arguments like this:

(From example 3b in package)

ArgProcessor ap("CmdLineArgProcessor Example", "3b");

Option

sool> sum_opt ("Summation", "If specified, program will calculate the sum of the numbers.", true);

Option<bool> avg_opt ("Average", "If specified, program will calculate the average of the numbers.", true);

MultiArg<double> numbers ("Number", "An number.", true);

ArgSet set1 sum, set2 avg;

set1_sum << sum_opt << numbers;

set2 avg << avg opt << numbers;

ap << set1 sum << set2 avg;

ap.ProcessCmdLine(CommandLine());

And the usage information generated for this code above looks like this:

Usage Information:

- 1. CmdLineArgProcessorExample -s <Number1> ...
- 2. CmdLineArgProcessorExample -a <Number1> ...
 - -s, --summation: If specified, program will calculate the sum of the numbers.
 - -a, --average: If specified, program will calculate the average of the numbers.

Number: An number.

This argument must be specified 1 to an unlimited number of times.

Todo:

- Work a bit more on output formatting (maybe make an output formatting package).
- --> most of the gnu tools limit the line width to 80 characters for all programs that output to the command line. Small consoles might be a problem for the output of this package in certain situations.

- See if using an Xor Argument type would be beneficial and shorten the output.

The zip file contains the main package, a package with examples, and the unit testing package. Topic++ documentation has also been updated.

File Attachments

1) CmdLineArgProcessor-0.3.0-all.zip, downloaded 622 times