

GammaLib - Feature #2190

Add GammaLib code generator

09/02/2017 05:37 PM - Knödlseider Jürgen

Status:	In Progress	Start date:	09/02/2017
Priority:	Normal	Due date:	
Assigned To:	Knödlseider Jürgen	% Done:	50%
Category:		Estimated time:	0.00 hour
Target version:			
Description			
A code generation script should be added to automatically generate new classes, and in particular new instrument modules.			

History

#1 - 09/03/2017 03:56 AM - Knödlseider Jürgen

- % Done changed from 0 to 50

I made good progress with the code generator, and now a first script is available. It's called codegen.py and it's in dev. The script is able to create a new instrument module (or to append missing classes to an existing instrument module), including the creation of unit tests. Here is how it works:

\$ make clean
\$ dev/codegen.py

GammaLib code generator
=====

[1] Add instrument module
[2] Add spectral model
[3] Add spatial model
[4] Add temporal model
[4] Add generic class
[q] Quit
Enter your choice: 1

Add instrument module

Please enter a 3 digit-name for the module: dmp
Please enter the instrument name (e.g. "Fermi/LAT"): DAMPE
Please enter your name (e.g. "Joe Public"): Joe Public's friend
All right. Have now:
Module name: "dmp"
Instrument name .: "DAMPE"
Your name: "Joe Public's friend"
Is this correct? (y/n): y
All right. You want a new "dmp" instrument module.
Do you want event list support? (y/n): y
Do you want binned event data support? (y/n): y

[1] Add instrument module
[2] Add spectral model
[3] Add spatial model
[4] Add temporal model
[4] Add generic class
[q] Quit
Enter your choice: q
\$ autoconf
\$ automake
\$./configure
\$ make
\$ make check

and you have a brand new DAMPE instrument interface compiled and tested. Following that you can start implementing.

#2 - 09/03/2017 09:00 PM - Knödseder Jürgen

The current version of the code generator is already merged into devel.

#3 - 10/11/2017 09:00 PM - Knödseder Jürgen

- *Status changed from New to In Progress*

#4 - 01/27/2018 05:28 PM - Knödseder Jürgen

- *Target version deleted (1.5.0)*