apyshell

Release 1.0

Mark Anacker

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CHAPTER

ONE

APYSHELL PACKAGE

1.1 Subpackages

1.2 Submodules

1.2.1 apyshell.apyshell module

apyshell - Python Embedded apy script runnner

This script creates a framework for running lightweight scripts under the apyengine interpreter. It demonstrates embedding and controlling the engine. It can be run either stand-alone, or itself embedded into an application.

Credits

• version: 1.0

• last update: 2023-Nov-17

· License: MIT

• Author: Mark Anacker <closecrowd@pm.me>

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apyshell (script, basedir='/opt/apyshell/scripts', extensiondir='/opt/apyshell/extensions', extension_opts=None, args=None, initscript=None, globals=False)

Execute a script file under anyengine.

This is the main entry point.

Args: script: The .apy script to execute.

Returns: The return value. True for success, False otherwise.

 $\mathtt{savepid}\left(pfile\right)$

Save our current PID if we can.

Note: this doesn't do any checking of the file path. Take care if running under root.

usage()

Help message.

1.2.2 apyshell.extensionapi module

extensionapi - The interface between extensions and the engine.

An instance of this class is passed to the extensions at load time to give them an API back into the engine via the ExtensionMgr

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```
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class ExtensionAPI (eng, parent, internal=True)
     Bases: object
     getSysvar_(name, default=None)
          Return the value of a system variable or a default
     getvar_(vname, default=None)
          Return the value of a script variable or a default
     handleEvents (name, data)
     isDef_(name)
          Return True is the name is defined
     listDefs_(exception_list=None)
          Return a list of script def procs
     list_Modules_()
          Return a list of install_()-ed modules
     {\tt loadScript\_(\it filename, \it persist=False)}
          Load and execute a script file
     logError (modname=", *args)
     regcmd (name, func=None)
          Add a new command callable by scripts
     registerCmds (mdict)
     setSysvar_(name, val)
          Set a system variable
     setvar_(vname, val)
          Set a script variable
     unregisterCmds (mdict)
debug (*args)
```

1.2.3 apyshell.extensionmgr module

extensionmgr - Handles extension load/unload for apyshell.

This script supports the extension handling commands for apyshell.

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   • Author: Mark Anacker <closecrowd@pm.me>
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class ExtensionMgr (eng, epath, options=None)
     Bases: object
     handleEvents (name, data)
     isExtLoaded (ename)
          Return True if an extension is loaded
     listExtensions_()
          Return a list[] of currently-loaded extensions
     loadExtension_(ename)
          Load an extension by name (no paths allowed), and it has to be available in the extensions directory.
     register()
     scanExtensions_()
          Return a list[] of available extensions
     scanForExtensions (dir, iflag)
     shutdown()
     unloadExtension_(ename)
          Remove a currently-loaded extension
quoteSpecial(orig)
```

1.2.4 apyshell.support module

support - Various stand-alone support functions for apyshell.

This file contains various utility functions used by apyshell.

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checkFileName (fname)
     Check a file name
     Checks the given filename for characters in the set of a-z, A-Z, _ or -
          Args: fname: The name to check
          Returns: True if the name is entirely in that set False if there were invalid char(s)
debugMsq (source=", *args)
enableDebug(arg)
errorMsg (source=", *args)
get_queue (q, defvalue=None, timeout=0)
getparam (table, key, default, remove=False)
retError (api, module, msg, ret=False)
sanitizePath(path)
     Clean a path.
     Remove dangerous characters from a path string.
          Args: path: The strin with the path to clean
          Returns: The cleaned path or None if there was a problem
setparam (table, key, value, replace=False)
swapparam (table, oldkey, newkey, value=None)
unlock (lock)
```

1.3 Module contents

ApyShell - Python Embedded apy script runnner

This package creates a framework for running lightweight scripts under the apyengine interpreter. It demonstrates embedding and controlling the engine. It can be run either stand-alone, or itself embedded into an application.

The companion project "apyengine" has documentation and examples of how to use the apyengine outside of this package. The entire apyengine package is included in this package for convenience. https://github.com/closecrowd/apyengine

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