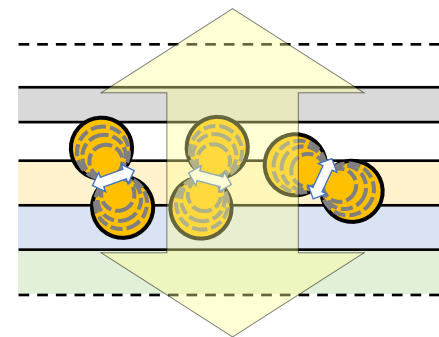


Lazy Command

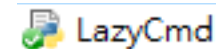
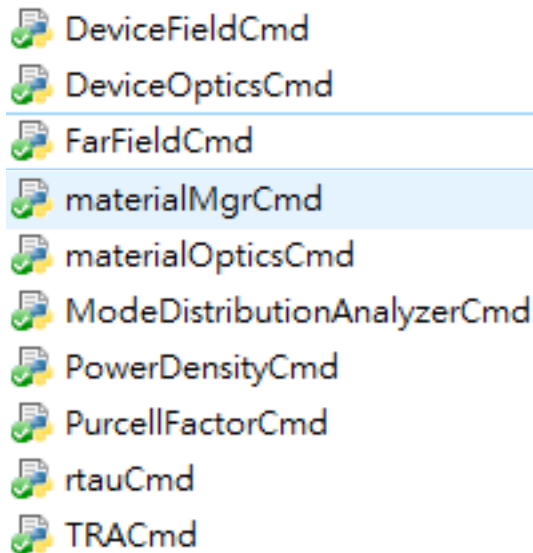
-LazyCmd.py

Author: Wei-Kai Lee



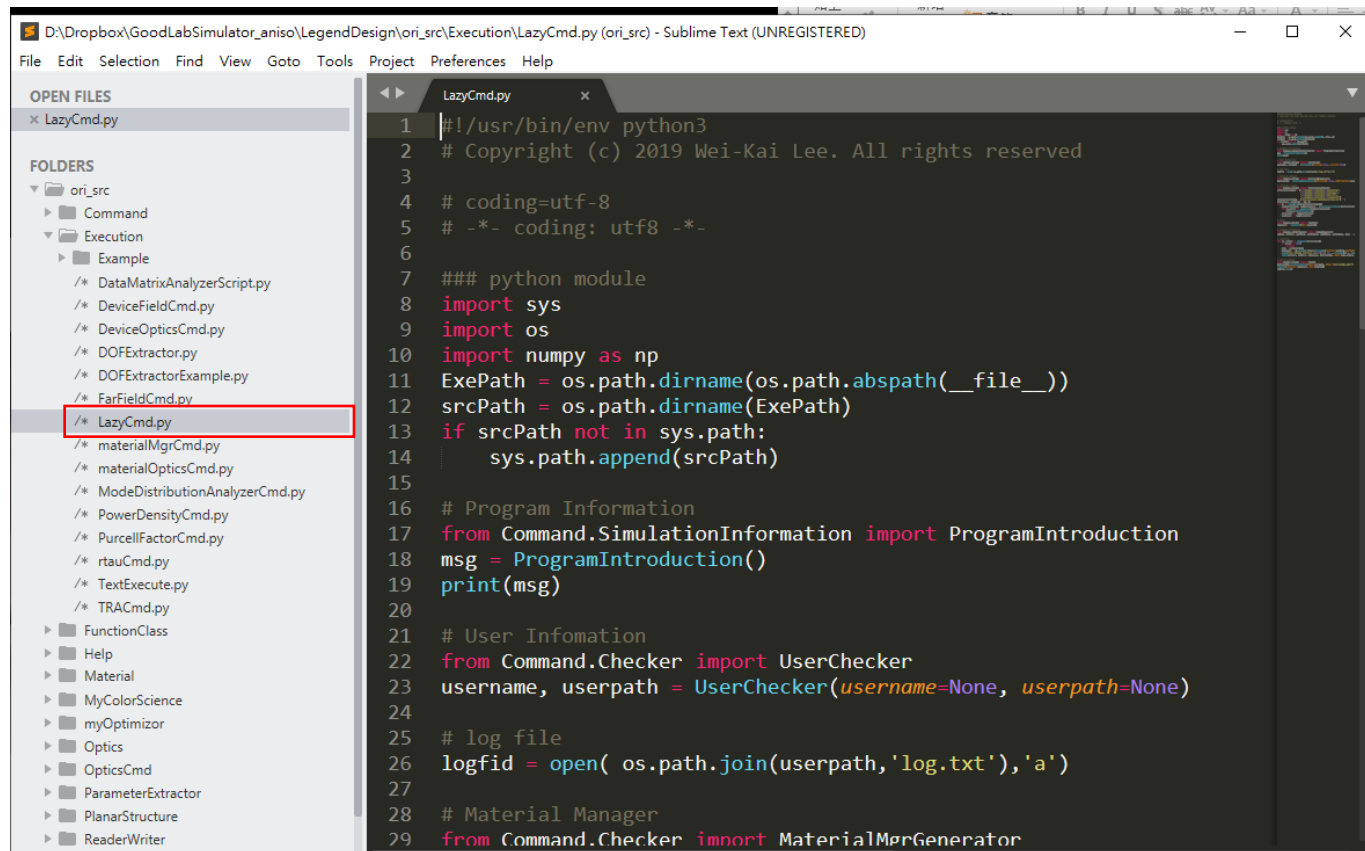
Objective

- If the user think the command line is too hard to use, we also develop a simple version for execution.



How to execute

- Open Lazy.py by text editor.



D:\Dropbox\GoodLabSimulator_aniso\LegendDesign\ori_src\Execution\LazyCmd.py (ori_src) - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

OPEN FILES

- × LazyCmd.py

FOLDERS

- ori_src
 - Command
 - Execution
 - Example
 - /* DataMatrixAnalyzerScript.py
 - /* DeviceFieldCmd.py
 - /* DeviceOpticsCmd.py
 - /* DOFExtractor.py
 - /* DOFExtractorExample.py
 - /* FarFieldCmd.py
 - /* LazyCmd.py
 - /* materialMgrCmd.py
 - /* materialOpticsCmd.py
 - /* ModeDistributionAnalyzerCmd.py
 - /* PowerDensityCmd.py
 - /* PurcellFactorCmd.py
 - /* rtauCmd.py
 - /* TextExecute.py
 - /* TRACmd.py
- FunctionClass
- Help
- Material
- MyColorScience
- myOptimizor
- Optics
- OpticsCmd
- ParameterExtractor
- PlanarStructure
- ReaderWriter

```
1 #!/usr/bin/env python3
2 # Copyright (c) 2019 Wei-Kai Lee. All rights reserved
3
4 # coding=utf-8
5 # -*- coding: utf8 -*-
6
7 ### python module
8 import sys
9 import os
10 import numpy as np
11 ExePath = os.path.dirname(os.path.abspath(__file__))
12 srcPath = os.path.dirname(ExePath)
13 if srcPath not in sys.path:
14     sys.path.append(srcPath)
15
16 # Program Information
17 from Command.SimulationInformation import ProgramIntroduction
18 msg = ProgramIntroduction()
19 print(msg)
20
21 # User Infomation
22 from Command.Checker import UserChecker
23 username, userpath = UserChecker(username=None, userpath=None)
24
25 # log file
26 logfid = open( os.path.join(userpath, 'log.txt'), 'a')
27
28 # Material Manager
29 from Command.Checker import MaterialMgrGenerator
```

Edit Lazy.py

- Structure list file path and name.

```
structureListpath = ['.\\Example\\structure\\Convention',  
                    '.\\Example\\structure\\Transparent']  
structureListfname = ['structureList-ModeAnalyzerCmd.txt',  
                      'structureList-ModeAnalyzerCmd.txt']
```

- Choose function

```
50 # execution  
51 from TextExecute import LazyCmdExecute  
52 LazyCmdExecute(structlist, sLineList, MaterialMgr, cmdID=9)
```

Command ID in the next

Edit cmdInitializer.py (setting)

D:\Dropbox\GoodLabSimulator_aniso\LegendDesign\ori_src\Command\cmdInitializer.py (ori_src) - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

OPEN FILES

- × LazyCmd.py
- × cmdInitializer.py

FOLDERS

- ori_src
 - Command
 - __pycache__
 - __init__.py
 - Checker.py
 - cmdInitializer.py
 - CommandProcedureTemplate.py
 - HelpPrint.py
 - setting.py
 - SimulationInformation.py
 - StructureCmd.py
 - StructureResultCmd.py
 - UserTemplateCmd.py
 - Execution
 - Example
 - DataMatrixAnalyzerScript.py
 - DeviceFieldCmd.py
 - DeviceOpticsCmd.py
 - DOFExtractor.py
 - DOFExtractorExample.py
 - FarFieldCmd.py
 - LazyCmd.py
 - materialMgrCmd.py
 - materialOpticsCmd.py
 - ModeDistributionAnalyzerCmd.py
 - PowerDensityCmd.py
 - PurcellFactorCmd.py
 - rtauCmd.py
 - TextExecute.py
 - TRACmd.py

```
10 import os
11 import numpy as np
12 ExePath = os.path.dirname(os.path.abspath(__file__))
13 srcPath = os.path.dirname(ExePath)
14 if srcPath not in sys.path:
15     sys.path.append(srcPath)
16 from Help.NumberGenerator import mySpacing2List
17
18 def commandGenerator(cmdID):
19     if cmdID == 0:
20         return DeviceOpticsCmdGenetator()
21     elif cmdID == 1:
22         return rtauCmdGenetator()
23     elif cmdID == 2:
24         return rtauZCmdGenetator()
25     elif cmdID == 3:
26         return TRACmdGenetator()
27     elif cmdID == 4:
28         return DeviceFieldCmdGenetator()
29     elif cmdID == 5:
30         return PowerDensityCoherentSetCmdGenetator()
31     elif cmdID == 6:
32         return PowerDensityIncoherentStackingCmdGenetator()
33     elif cmdID == 7:
34         return PowerDensityZCmdGenetator()
35     elif cmdID == 8:
36         return PurcellFactorCmdGenetator()
37     elif cmdID == 9:
38         return ModeAnalyzerCmdGenetator()
39     elif cmdID == 10:
40         return FarFieldCmdGenetator()
41     assert False
42 def DeviceOpticsCmdGenetator():
43     # Must Not Modified
```

CmdID

Edit cmdInitializer.py (setting)

- Open cmdInitializer.py by text editor.

```
117 ▼ def TRACmdGenetator():
118     # Must Not Modified
119     calThick, calEMLBool, calWVBool, calPOSBool = True, False, False, False
120     from OpticsCmd.WaveOpticsCmd.PlanarOpticsCmd import TRA
121     cmdFun = TRA.run.runTRA_Structure
122     SetDict = TRA.setting._TRADict.copy()
123     SetDict['SAVE_RUN_TIME_RESULT'] = False
124     # Can be Modified
125     SetDict['WAVELENGTH'] = mySpacing2List(380,780,10)
126     SetDict['THETA'] = mySpacing2List(0,90,1)
127     SetDict['PHI'] = [0]
128     SetDict['KXKO'] = mySpacing2List(0,1,0.1)
129     SetDict['KYKO'] = mySpacing2List(0,1,0.1)
130     SetDict['DIRECTION'] = 'TOP'
131     SetDict['RUN_TIME_WRITEMATRIX'] = False
132     SetDict['RUN_TIME_PLOT_VS_WV'] = False
133     SetDict['RUN_TIME_PLOT_VS_XY'] = False
134     SetDict['RUN_TIME_PLOT_CONTOUR'] = False
135     Mode='ANGLE'
136     return cmdFun, SetDict, calThick, calEMLBool, calWVBool, calPOSBool, Mode
137 ▼ def DeviceFieldCmdGenetator():
138     # Must Not Modified
139     calThick, calEMLBool, calWVBool, calPOSBool = True, True, True, True
140     from OpticsCmd.WaveOpticsCmd.SourceOpticsCmd import DeviceField
141     cmdFun = DeviceField.run.runDFz_Structure
142     SetDict = DeviceField.setting._DFDict.copy()
143     SetDict['SAVE_RUN_TIME_RESULT'] = False
144     # Can be Modified
145     SetDict['KTKO'] = mySpacing2List(0,1,0.1)
146     SetDict['THETAKT'] = np.array([0], dtype=np.float64)
147     SetDict['KXKO'] = mySpacing2List(-1,1,0.1)
148     SetDict['KYKO'] = mySpacing2List(-1,1,0.1)
149     SetDict['Z'] = mySpacing2List(-50,50,1)
150     # Run time bool
151     SetDict['RUN_TIME_PLOT'] = False
152     # Write E, H
153     SetDict['WRITE_E'] = True
154     SetDict['WRITE_H'] = True
155     # Write Mode, Unit, Bool
```