ValidateAndRead Library

# Libraries/Classes calling on ValidateAndRead Library

Main

# Internal Library/Class dependencies

Discounting Library

Import Flows Library

Import Analysis Class

Import Alternative Class

Import BCN Class

Import Sensitivity Class

Import Scenario Class

Import json

From types import SimpleNamespace

# External Library Dependencies

None (validateFile will probably need external libraries once we know how to handle it)

# Functions

validateFile()

readFile()

generateUserObjects()

# Pseudo Code

Optional inputs are in italics

Begin Pseudocode

Import json

From types import SimpleNamespace

Import Discounting Library

Import Flows Library

Import Analysis Class

Import Alternative Class

Import BCN Class

Import Sensitivity Class

Import Scenario Class

Define validateFile(inputJSONFile)

This will require ELDST’s help to set up and may eventually be housed in another library. For now, ignore it.

End validateFile

readFile(inputJSONFile)

If file is properly validated

Parse JSON file into a separate data list for each User Defined object type

Call to validateDiscountRate() to verify consistency of discounting input

If discounting input is valid

Pass

Else if

Call to Discounting Library to fill in missing information

Add missing information to appropriate place in list for the object(s) in questions

If all required information is in the objects

Return list of lists containing each object (denoted as objectList)

Else if objects are missing required elements or contain invalid entries

Return error: invalid object

Return objectList

End readFile

Define generateUserObjects(objectList)

Using objectList from readFile()

Loop through objects in objectList

Generate User defined objects with calls to class constructers and validate as constructed (validation is currently a separate method in each user Class

Analysis Class

Alternative Class

BCN Class

Scenario Class

Sensitivity Class

End generateUserObjects