instituto de telecomunicações

TÉCNICO LISBOA

ScientIST Notebooks

Utilities Documentation

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readCode.py

This script allows the automatic collection of python code from ScientIST notebooks.

An example is provided.

collectPythonCode

Open formatted scientIST notebook and retrieves a python script.

Parameters
---
notebook: str
Name of a .ipynb file.

folder: str
Directory of the folder where the notebook is located.

Returns
---
python_file:
Python file containing the code collected in the notebook.

editjson.py

This script allows the automatic formatting of non-formatted notebooks, using the scientIST version template, and to make plain notebooks from formatted notebooks.

An example is provided at the end of the script, using an empty NB (emptyNB.ipynb).

openTemplateDict

This .txt file is a dictionary that includes the styling information of the scientIST template version.

Note: the .txt file must be updated in case the scientIST template version is changed.

Parameters
---
document: .txt file
Dictionary that one wants to read.

Returns
---
jsonObjNB: .json
.json object containing the dictionary's information.

makePlain

Open FORMATTED scientIST version and retrieves a PLAIN notebook.

Parameters
---
notebook: .ipynb file
Notebook that one wants to make plain.

Returns
---
jsonObjNB: .json
.json object containing the updated dictionary's information.

makeFormatted

Open PLAIN notebook and retrieves its FORMATTED scientIST version.

Parameters
---
notebook: .ipynb file
Plain notebook to which one wants to apply the scientIST notebook's styling.

Returns
---
jsonObjNB: .json
.json object containing the updated dictionary's information.

formatAll

This function can be used to format several notebooks inside a folder.

Parameters
---
dir: string
Directory path of the folder containing the notebooks to format.

downloadIMG.py

This script allows the automatic collection of python code from formatted notebooks.

An example is provided at the end of the script.

findImageTag

Receives string, finds the img tag and retrieves the link of its source.

Parameters
---
source: str
String within which one wants to find img tags and collect image.

Returns
---
link: str
Source of the images found, i.e. the url link where the image is stored.

index_end: int
index of the last element of the link found.

savesNBimages

Receives a Notebook and Folder directory, and collects and save its images locally.
Parameters
---
notebook: str
Directory of a .ipynb file.
notebook: str
Directory where images found are to be saved.

savesNBimagesFolder

This function can be used to collect images from the notebooks inside a repository. Firstly, it identifies de directory structure, i.e. which folders there are inside it. Then it

creates folders with the same names (+'_IMG') and saves the respective images accordingly.

Parameters
---
dir: str
Directory of a notebooks's repository folder.

generateMasterTable.py

This script is used to go through the whole repository directory and build a .md file containing a comprehensive table of contents and information regarding all notebooks found.

dirFiles

Finds notebooks in a directory and collects relevant information from each.

Parameters
---
dir: string
Directory path of the repository.