Settings

Currently there are 5 settings, `default_input`, `default_output_folder`, `truth_table_file`, `silent_run`, and `skip_dose_structure`.

- Each setting should be on a single line, following the format:
  - <setting> = <value>
- On each line, all whitespaces before and after <setting>, before and after <value> are ignored.
  - For the `default_input` setting which can accept multiple values separated by asterix (*), whitespace before and after each * is ignored as well.
- Most of the values are file paths, which may be case sensitive depending on your operating system.

The following sections will explain the meaning and how each setting can be specified.

default_input

`default_input` specifies locations (aka paths) where the program should look for dicom files to process.

These locations could point to individual dicom files, or folders containing multiple dicom files. For individual files, it processes them normally; for folders, it scans the contents of the folder and processes each dicom RTPLAN. It will not process dicoms in any subfolders.

It accepts the locations of any number of files or folders. Each location must be separated by an asterix *.

e.g. `default_input = file1 * folder1 * folder2 * file2`

Additionally, each location can be attached to a case number. This would tell the program that the file is a certain case, or all dicoms in a folder are a certain case. The format is <location,case> replacing what would have been <location>. There should not be spaces between the location, comma and case number.

e.g. `default_input = file1,case1 * folder1,case2 * folder2 * file2`

default_output_folder

`default_output_folder` specifies a path where the csv reports produced by the program will be saved.

If the path points to an existing folder, the csv reports will be saved within. If the path points to a folder that doesn't exist, a folder will be created and the reports will be saved inside. However, the folders higher up in the path must exist, otherwise an error will be returned.

truth_table_file

`truth_table_file` specifies a path where the program should look for the truth table to apply to the dicoms processed.

The path should point to a csv file. More information about how to write or edit the excel table can be found in Writing-Truth-Tables pdf in this folder, or online.

silent_run

`silent_run` is a true/false option to suppress output that is printed to the console when running the program.

This includes the output reminding the truth table used, as well as the locations of each dicom processed and its corresponding report. It is case insensitive; set it to `true` to suppress, and `false` to keep the console prints.

skip_dose_structure

`skip_dose_structure` is a true/false option to have the program look for RTDOSE and RTSTRUCT dicoms associated with RTPLANs being processed.

If set to `false`, the program will examine all dicoms in the specified folder and keep track of RTDOSE and RTSTRUCT dicom locations as well as their StudyInstanceUID. When a RTPLAN is being processed and there are matching StudyInstanceUID RTDOSE and RTSTRUCT files, those datasets will become available to the extraction functions. This will help with development of 'hard' parameters in the future.

The motivation to set this value to `true` is that opening RTSTRUCT files is quite slow. Currently, none of the extracted parameters use the RTDOSE and RTSTRUCT data anyway; so scanning for them does not change the result but increases run time significantly. However, in the future when the hard parameters are being extracted, the datasets will be needed and this setting should be set to `false`.

StudyInstanceUID was chosen as the value to link plan/dose/structure (as opposed to SeriesInstanceUID, SOPInstanceUID) due to it being a tag that all 3 share the same in the provided datasets.