Flowchart for the whole **filename_space_remover** program

Start

Stop

get user input source directory

test that user input directory is valid

user input directory valid?

no → print: invalid user input directory abort message

yes

import excluded directories from configuration file

report totals for:
all regular and directory filenames

intra-filename space regular and directory filenames, ignoring excludes and get user response wrt credibility of totals reported

totals look credible ?

no → print: check filesystem manually then re-run this program abort message

yes

filenames with spaces still exist ?

no → print: no intra-filename spaces found here, so exiting this program abort message

yes

report listings for:
intra-filename space regular filenames
intra-filename space directory filenames

get user response :
continue on to file renaming or edit the excludes configuration file and relist?

```
                    ┌──────────────────┐
                    ▼                  │
              ╱ manual fs ╲            │
             ╱ or config file ╲   no   │
            ╱  changes to make ─────────────────┐
             ╲       ?       ╱                   │
              ╲     ╱                            │
               yes                               │
                │                                │
                ▼◄───────────────────┐           │
         ┌─────────────────────┐     │           │
         │ edit/update the      │    │           │
         │ excluded directories │    │           │
         │ configuration file   │    │           │
         └─────────────────────┘    │           │
                │                    │           │
                ▼                    │           │
           ╱ manual fs ╲             │           │
     yes  ╱ or config file ╲  no     │           │
 ┌───────── changes now ──────────────┘          │
 │         ╲ completed ok ╱                       │
 │          ╲     ?     ╱                         │
 │           ╲   ╱                                │
 │                                               │
 │      ╱──────────────────────╲                 │
 │     ╱  get user confirmation  ╲◄──────────────┘
 │    ╱   for the renaming of up   ╲
 │   ╱    to date listing of        ╲
 │    ╲   intra-space filename files╱
 │     ╲──────────────────────────╱
 │                │
 │                ▼
 │           ╱ ok to ╲                ╱─────────────────────────╲
 │          ╱ rename files ╲   no    ╱  print:                   ╲
 │         ╱      ?       ─────────── You chose not to rename the ───────────►
 │          ╲          ╱             ╲ listed files, so we're     ╱
 │           ╲   ╱                    ╲ done. Exiting now        ╱
 │            yes                      ╲ abort message          ╱
 │             │                        ╲────────────────────╱
 │             ▼
 │      ┌──────────────────────────┐
 │      │ rename files with        │
 │      │ intra-filename spaces    │
 │      └──────────────────────────┘
 │             │
 │             ▼
 │      ╱────────────────────────────────╲
 │     ╱ report totals for:               ╲
 │    ╱ all regular filenames              ╲
 │    ╲ intra-filename space regular filenames
 │     ╲ all directory filenames          ╱
 │      ╲ intra-filename space directory filenames
 │       ╲──────────────────────────────╱
 │             │
 │             ▼
 │          ╱ filenames ╲              ╱──────────────────────────╲
 │         ╱ with spaces  ╲   no      ╱  print:                    ╲
 │        ╱ still exist ? ──────────── no files with intra-filename ───────►
 │         ╲           ╱              ╲ spaces found here, so       ╱
 │          ╲   ╱                      ╲ exiting this program       ╱
 │           yes                        ╲ SUCCESS message          ╱
 │            │                          ╲──────────────────────╱
 │            │
 │            │                      ╱──────────────────────────╲
 │            │                     ╱  print:                    ╲
 └────────────────────────────────── Unexpected error: spaced     ──────────►
                                    ╲ files are still here!       ╱
                                     ╲ ABORT message             ╱
                                      ╲──────────────────────────╱
```