Git Project

Example Project
Matthew C. Lindeman
Date April 17, 2023

```
1
    #include "include/file_preprocessing.h"
2
3
    path_wrapper * init_path_wrapper(char * path_file) {
4
      path_wrapper * the_pw = calloc(1, sizeof(struct PATH_WRAPPER_T));
      int path_size = end_path_pos(path_file);
5
6
      int total_path_file_size = strnlen(path_file, MAX_PATH_SIZE);
7
      if(path_size == 0) {
8
        the_pw->path = NULL;
9
        the_pw->filename = calloc(total_path_file_size + 1, sizeof(char));
10
        strncpy(the_pw->filename, path_file, total_path_file_size);
11
12
        the_pw->path = calloc(path_size + 1, sizeof(char));
13
        strncpy(the_pw->path, path_file, path_size);
14
        the_pw->filename = calloc((total_path_file_size - path_size) + 1,
15
            sizeof(char));
        strncpy(the_pw->filename, path_file + path_size,
16
17
            (total_path_file_size - path_size));
18
      if(!contains_py_extension(the_pw->filename))
19
20
        the_pw->filename = add_py_extension(the_pw->filename);
21
      the_pw = make_path_file(the_pw);
22
      return the_pw;
23
24
25
    int contains_py_extension(char * filename) {
26
      int filename_size = strnlen(filename, MAX_PATH_SIZE);
27
      if(!strncmp(filename + (filename_size - PY_EXTENSION_SIZE), PY_EXTENSION,
28
            MAX_PATH_SIZE))
29
        return 1:
30
      else
        return 0;
31
32
33
34
    int end_path_pos(char * path_file) {
      if(!strrchr(path_file, PATH_DELIMITER))
35
36
        return 0;
37
      else
38
        return ((int)(strrchr(path_file, PATH_DELIMITER) - path_file) + 1);
39
40
41
    char * add_py_extension(char * filename) {
42
      int filename_size = strnlen(filename, MAX_PATH_SIZE);
      filename = realloc(filename, (filename_size + PY_EXTENSION_SIZE + 1)
43
44
          * sizeof(char));
      strncat(filename, PY_EXTENSION, PY_EXTENSION_SIZE);
45
46
      return filename;
47 | \}
```