FManC 1.0.0

Generated on Tue Jan 24 2023 04:37:47 for FManC by Doxygen 1.9.6

Tue Jan 24 2023 04:37:47

1 Welcome to the FManC documentation website!	1
2 Todo List	1
3 Module Index	1
3.1 Modules	1
4 File Index	2
4.1 File List	2
5 Module Documentation	2
5.1 Constant macros	2
5.1.1 Detailed Description	3
5.1.2 Macro Definition Documentation	3
5.2 File management utilities	4
5.2.1 Detailed Description	5
5.3 Functions	5
5.3.1 Detailed Description	5
5.3.2 Function Documentation	5
5.4 General macros	6
5.4.1 Detailed Description	7
5.4.2 Macro Definition Documentation	7
5.5 Macros	8
5.5.1 Detailed Description	8
5.5.2 Macro Definition Documentation	8
5.6 Main header	10
5.6.1 Detailed Description	10
5.7 Source files	11
5.7.1 Detailed Description	11
3.7.1 Detailed Description	
6 File Documentation	11
6.1 docs/documentation_pages/main_page.dox File Reference	11
6.2 src/analyze.c File Reference	11
6.2.1 Function Documentation	12
6.3 analyze.c	14
6.4 src/analyze.h File Reference	18
6.4.1 Data Structure Documentation	19
6.4.2 Macro Definition Documentation	20
6.4.3 Typedef Documentation	20
6.4.4 Function Documentation	20
6.5 analyze.h	23
6.6 src/code_utils.c File Reference	24
6.7 code_utils.c	24
6.8 src/code_utils.h File Reference	24

6.8.1 Macro Definition Documentation	24
6.9 code_utils.h	24
6.10 src/fileMan.c File Reference	25
6.10.1 Function Documentation	25
6.11 fileMan.c	26
6.12 src/fileMan.h File Reference	29
6.12.1 Detailed Description	30
6.12.2 Macro Definition Documentation	30
6.12.3 Function Documentation	30
6.13 fileMan.h	31
6.14 src/fmanc.h File Reference	32
6.14.1 Detailed Description	33
6.15 fmanc.h	33
6.16 src/third_party/lex_yy.h File Reference	33
6.16.1 Macro Definition Documentation	34
6.16.2 Function Documentation	34
6.17 lex_yy.h	34
Index	35

1 Welcome to the FManC documentation website!

Copyright

This C library is licenced under the MIT license terms

2 Todo List

Global copyFileWithoutTabAndLineBreak (char *sourceFilePath, char *pathToCopy)

Check if the path to copy has a name and an extension at the end.

Move it to code_utils.h

Global SHARED

I should change the name of "STATIC" to something like "FMANC_STATIC" to avoid any problems in case someone wants to use two libs with the same define system

3 Module Index

3.1 Modules

Here is a list of all modules:

File management utilities

Constant macros	2
Functions	5
Macros	8
Source files	11
General macros	6
Main header	10

4 File Index

4.1 File List

Here is a list of all files with brief descriptions:

src/analyze.c	- 11
src/analyze.h	18
src/code_utils.c	24
src/code_utils.h	24
src/fileMan.c	25
src/fileMan.h This header contains macro definitions and function declarations that are written in this file	29
src/fmanc.h This is the main header of the lib, where all of the headers are included	32
src/third_party/lex_yy.h	33

5 Module Documentation

5.1 Constant macros

This submodule contains constant macros used by the lib.

Collaboration diagram for Constant macros:



5.1 Constant macros

Macros

- #define MAX_FEXT_SIZE 50
- #define MAX_FNAME_SIZE 256
- #define MAX_FPATH_SIZE 512

5.1.1 Detailed Description

This submodule contains constant macros used by the lib.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

5.1.2 Macro Definition Documentation

```
5.1.2.1 MAX_FEXT_SIZE #define MAX_FEXT_SIZE 50
```

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

This the value of the maximum size of a file extension counted in characters.

Definition at line 91 of file fileMan.h.

5.1.2.2 MAX_FNAME_SIZE #define MAX_FNAME_SIZE 256

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

This the value of the maximum size of a file name counted in characters.

Definition at line 102 of file fileMan.h.

5.1.2.3 MAX_FPATH_SIZE #define MAX_FPATH_SIZE 512

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

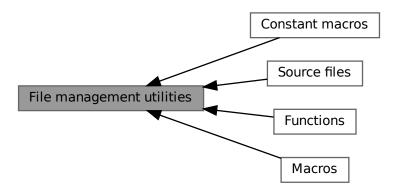
This the value of the maximum size of a file path (full (relative or not) path without name and extension) counted in characters.

Definition at line 113 of file fileMan.h.

5.2 File management utilities

This module provides utilities to manage informations about files.

Collaboration diagram for File management utilities:



Modules

· Constant macros

This submodule contains constant macros used by the lib.

• Functions

This submodule contains the functions related to file management utilities.

Macros

This submodule contains macros related to files management facilities.

· Source files

This submodule contains files related to file management utilities.

5.3 Functions 5

5.2.1 Detailed Description

This module provides utilities to manage informations about files.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

5.3 Functions

This submodule contains the functions related to file management utilities.

Collaboration diagram for Functions:



Functions

• char * copyFileWithoutTabAndLineBreak (char *sourceFilePath, char *pathToCopy)

Copy a file without tab and line break.

5.3.1 Detailed Description

This submodule contains the functions related to file management utilities.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

5.3.2 Function Documentation

5.3.2.1 copyFileWithoutTabAndLineBreak() char * copyFileWithoutTabAndLineBreak (

```
char * sourceFilePath,
char * pathToCopy )
```

Copy a file without tab and line break.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

The copied file with be renamed as <sourceFile name>_copied.<sourceFileExtension> if the param pathToCopy is set to NULL, and what you want if you specify the path with a name and extension.

Todo Check if the path to copy has a name and an extension at the end.

Move it to code_utils.h

Parameters

sourceFilePath	The source file path.	
pathToCopy	The path to copy. You can set it to NULL if you want the copied file to be in the same directory	
	as the source file.	

Return values

sourceFileName	This case is when no error has occured.
NULL	If an error has occured.

Definition at line 7 of file fileMan.c.

References getFileExtension, getFileName, MAX_FEXT_SIZE, MAX_FNAME_SIZE, and MAX_FPATH_SIZE.

5.4 General macros

These macros are intended to be defined if you need to modify the headers to be included, or to modify the expansion of the SHARED macro for Windows users.

Macros

• #define SHARED

Useful to choose how to use the lib on Windows systems.

5.4 General macros 7

5.4.1 Detailed Description

These macros are intended to be defined if you need to modify the headers to be included, or to modify the expansion of the SHARED macro for Windows users.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

5.4.2 Macro Definition Documentation

5.4.2.1 SHARED #define SHARED

Useful to choose how to use the lib on Windows systems.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

If you want to use the lib with the dll, you don't need to add anything in the command line. If you want to use the static version of the lib, then put "-D STATIC" in your command line when compiling, so you let the compiler know that the keyword "SHARED" is set to nothing and the function declarations are not provided with the __declspec() attribute. You can also look at the full macro block below (wich is also in the source code of all of the headers) to see what I mean

```
# if (defined(_WIN32) || defined(WIN32))
# if defined(STATIC)
# define SHARED
# else
# if defined(BUILD_DLL)
# define SHARED __declspec(dllexport)
# else
# define SHARED __declspec(dllimport)
# endif
# endif
# else
# define SHARED
# define SHARED
# endif // Definition of SHARED macro
```

Todo I should change the name of "STATIC" to something like "FMANC_STATIC" to avoid any problems in case someone wants to use two libs with the same define system

Definition at line 78 of file fmanc.h.

5.5 Macros

This submodule contains macros related to files management facilities.

Collaboration diagram for Macros:



Macros

#define getFileExtension(sourceFilePath, extension) char extension[MAX_FEXT_SIZE] = ""; fgetFileExtension(source ← FilePath, extension)

Gives you the file extension.

• #define getFileName(sourceFilePath, name) char name[MAX_FNAME_SIZE] = ""; fgetFileName(source ← FilePath, name)

Gives you the file name.

• #define getFilePath(sourceFilePath, path) char path[MAX_FPATH_SIZE] = ""; fgetFilePath(sourceFilePath, path)

Gives you the file path (without name and extension).

5.5.1 Detailed Description

This submodule contains macros related to files management facilities.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

5.5.2 Macro Definition Documentation

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

It is stored in an array of char with the name you specify (extension).

5.5 Macros 9

Parameters

in	sourceFilePath	Full path or relative path.
out	extension	The name of the array where you store the extension.

Returns

This doesn't really return anything, but displays an error message if no extension or invalid extension. Moreover, you should check the emptyness of the created variable.

Definition at line 137 of file fileMan.h.

Gives you the file name.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

It is stored in an array of char with the name you specify (name).

Parameters

in	sourceFilePath	Full path or relative path.	
out	name	The name of the array where you stock the name.	

Returns

This doesn't really return anything, but displays an error message if no name or invalid name. Moreover, you should check the emptyness of the created variable.

Definition at line 153 of file fileMan.h.

Gives you the file path (without name and extension).

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

It is stored in an array of char with the name you specify (extension).

Parameters

	in	sourceFilePath	Full path or relative path.	
Ī	out	path	The name of the array where you stock the path.	

Returns

This doesn't really return anything, but if the path is like "main.c", then the array will have '\0' as only character. Won't display any error message if no path. Here again, check the emptyness of the created variable.

Definition at line 169 of file fileMan.h.

5.6 Main header

This header should be included if you don't know precisely what to include.

Files

• file fmanc.h

This is the main header of the lib, where all of the headers are included.

5.6.1 Detailed Description

This header should be included if you don't know precisely what to include.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

5.7 Source files

5.7 Source files

This submodule contains files related to file management utilities.

Collaboration diagram for Source files:



Files

• file fileMan.h

This header contains macro definitions and function declarations that are written in this file.

5.7.1 Detailed Description

This submodule contains files related to file management utilities.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

6 File Documentation

6.1 docs/documentation_pages/main_page.dox File Reference

6.2 src/analyze.c File Reference

Include dependency graph for analyze.c:



Functions

- size_t countCharInFile (char *filePath)
- void free_stringOccurrences (stringOccurrences *toBeDeleted)
- stringOccurrences * init_stringOccurences (size_t sizeOfString)
- int replaceStringInFile (char *filePath, char *toReplaceString, char *toAddString)
- stringOccurrences * searchStringInFile (char *filePath, char *toSearch)

6.2.1 Function Documentation

Definition at line 14 of file analyze.c.

Referenced by searchStringInFile().

Here is the caller graph for this function:



6.2.1.2 free_stringOccurrences() void free_stringOccurrences (stringOccurrences * toBeDeleted)

Definition at line 47 of file analyze.c.

References FManC_StrOcc::pos.

Referenced by replaceStringInFile(), and searchStringInFile().

Here is the caller graph for this function:



```
6.2.1.3 init_stringOccurences() stringOccurrences * init_stringOccurences ( size_t sizeOfString )
```

Definition at line 35 of file analyze.c.

References FManC_StrOcc::charCount, and FManC_StrOcc::pos.

Referenced by searchStringInFile().

Here is the caller graph for this function:



Definition at line 155 of file analyze.c.

References FManC_StrOcc::charCount, free_stringOccurrences(), getFileExtension, getFileName, getFilePath, MAX_FEXT_SIZE, MAX_FNAME_SIZE, MAX_FPATH_SIZE, FManC_StrOcc::pos, and searchStringInFile().

Here is the call graph for this function:

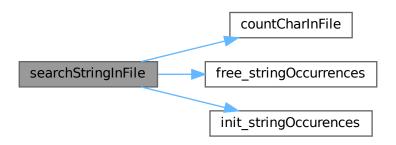


Definition at line 54 of file analyze.c.

References countCharInFile(), free_stringOccurrences(), getFileName, init_stringOccurences(), and FManC_StrOcc::pos.

Referenced by replaceStringInFile().

Here is the call graph for this function:



Here is the caller graph for this function:



6.3 analyze.c

Go to the documentation of this file.

```
00001 #include <stdio.h>
00002 #include <stdlib.h>
00003 #include <errno.h>
00004 #include <string.h>
00005 #include <stdbool.h>
00006 #include <locale.h>
00007 #include <limits.h>
00008 #include <stddef.h>
00009 #include <stdint.h>
00010 #include <wchar.h>
00011 #include "analyze.h"
00012 #include "fileMan.h"
00013
00014 SHARED size_t countCharInFile(char *filePath)
00015 {
00016
           errno = 0:
           setlocale(LC_ALL, "fr_FR.UTF8");
00017
00018
           FILE *fil = fopen(filePath, "r, ccs=UTF-8");
```

6.3 analyze.c 15

```
00019
          if (fil == NULL)
00020
00021
              fprintf(stderr, "Error :%s\n", strerror(errno));
00022
              return 0;
00023
00024
          size t returned = 1:
          rewind(fil);
00025
          while (fgetwc(fil) != WEOF)
00026
00027
00028
              returned++;
00029
          }
00030
00031
          fclose(fil);
00032
          return returned;
00033 }
00034
00035 SHARED stringOccurrences *init_stringOccurences(size_t sizeOfString)
00036 {
00037
00038
          long long int *position = (long long int *) malloc(sizeof(long long int));
00039
          *position = -1;
00040
          stringOccurrences *returned = (stringOccurrences*) malloc(sizeof(stringOccurrences));
00041
          returned->pos = position;
00042
          returned->charCount = sizeOfString;
00043
00044
          return returned;
00045 }
00046
00047 SHARED void free_stringOccurrences(stringOccurrences *toBeDeleted)
00048 {
00049
          free(toBeDeleted->pos);
00050
          free (toBeDeleted);
00051 }
00052
00053
00054 SHARED stringOccurrences *searchStringInFile(char *filePath, char *toSearch)
00055 {
00056
00057
          wchar_t toSearchW[strlen(toSearch)+1];
00058
00059
          if (setlocale(LC_ALL, "fr_FR.UTF8") == NULL)
00060
          {
00061
              fprintf(stderr, "Error :%s\n", strerror(errno));
00062
              return NULL;
00063
          }
00064
00065
          if (mbstowcs(toSearchW, toSearch, strlen(toSearch)) == (size_t) - 1)
00066
          {
              fprintf(stderr, "Error :%s\n", strerror(errno));
00067
00068
              return NULL:
00069
          }
00070
00071
          toSearchW[strlen(toSearch)] = L' \setminus 0';
00072
00073
          if (countCharInFile(filePath) > LLONG_MAX || wcslen(toSearchW) > SIZE_MAX)
00074
          {
00075
              getFileName(filePath, fErrorName);
00076
              fprintf(stderr, "Error: your file named \"%s\" contains too much characters\n", fErrorName);
00077
              return NULL;
00078
          }
00079
00080
          stringOccurrences *occurencesToSearch = init stringOccurences(wcslen(toSearchW));
00081
00082
00083
          FILE *fil = fopen(filePath, "r, ccs=UTF-8");
00084
          if (fil == NULL)
00085
00086
              fprintf(stderr, "Error :%s\n", strerror(errno));
00087
              free stringOccurrences(occurencesToSearch);
00088
              return NULL;
00089
00090
          rewind(fil);
00091
00092
          unsigned int cpt_occ = 0;
00093
          wint_t temp[wcslen(toSearchW)+1];
00094
          for (size_t i = 0; i < wcslen(toSearchW)+1; ++i)</pre>
00095
          {
00096
              temp[i] = L' \setminus 0';
00097
00098
          size t cpt = 0;
00099
00100
          long long int cpt2 = 0;
00101
          cpt2 = ftell(fil);
00102
          wint_t temp2 = fgetwc(fil);
          while(temp2 != WEOF)
00103
00104
00105
              fseek(fil, cpt2, SEEK_SET);
```

```
00106
               while (cpt <= wcslen(toSearchW))</pre>
00107
00108
                   temp[cpt] = fgetwc(fil);
00109
00110
                   if (temp[cpt] != (wint_t)toSearchW[cpt] || temp[cpt] == WEOF)
00111
00112
                        if (temp[cpt] == (wint_t)toSearchW[cpt])
00113
00114
                           cpt++;
00115
00116
                       break:
00117
                   }
00118
                   else
00119
                   {
00120
                       cpt++;
00121
00122
               }
00123
00124
               if (cpt == wcslen(toSearchW))
00125
               {
00126
00127
                   occurencesToSearch->pos = realloc(occurencesToSearch->pos, cpt_occ*sizeof(long long));
00128
                   *(occurencesToSearch->pos + cpt_occ - 1) = cpt2;
00129
00130
               cpt = 0;
00131
               for (size_t i = 0; i < wcslen(toSearchW)+1; ++i)</pre>
00132
00133
                   temp[i] = L' \setminus 0';
00134
00135
               fseek(fil, cpt2, SEEK_SET);
00136
              temp2 = fgetwc(fil);
cpt2 = ftell(fil);
00137
00138
00139
           if (cpt_occ == 0)
00140
               occurencesToSearch->pos = realloc(occurencesToSearch->pos, sizeof(long long));
00141
00142
               *(occurencesToSearch->pos) = -1;
00143
00144
          else
00145
00146
               occurencesToSearch->pos = realloc(occurencesToSearch->pos, (cpt_occ + 1)*sizeof(long long));
00147
               *(occurencesToSearch->pos + cpt_occ) = -1;
00148
          }
00149
00150
          fclose(fil);
00151
           return occurencesToSearch;
00152 }
00153
00154
00155 SHARED int replaceStringInFile(char *filePath, char *toReplaceString, char *toAddString)
00156 {
00157
           stringOccurrences *toReplaceOccurrences = searchStringInFile(filePath, toReplaceString);
00158
          errno = 0;
          wchar_t toAdd[strlen(toAddString)+1];
00159
00160
          wchar_t toReplace[strlen(toReplaceString)+1];
00161
00162
           if (toReplaceOccurrences == NULL || *(toReplaceOccurrences->pos) == -1)
00163
          {
00164
               return 3;
00165
          }
00166
          if (setlocale(LC_ALL, "fr_FR.UTF8") == NULL)
00167
00168
          {
00169
               fprintf(stderr, "Error :%s\n", strerror(errno));
00170
               return -3;
00171
          }
00172
00173
          if (mbstowcs(toAdd, toAddString, strlen(toAddString)) == (size t) - 1)
00174
          {
00175
               fprintf(stderr, "Error :%s\n", strerror(errno));
00176
               return -4;
00177
          }
00178
00179
          if (mbstowcs(toReplace, toReplaceString, strlen(toReplaceString)) == (size_t) - 1)
00180
          {
00181
               fprintf(stderr, "Error :%s\n", strerror(errno));
00182
               return -4;
00183
          }
00184
          toAdd[strlen(toAddString)] = L' \setminus 0':
00185
00186
          toReplace[strlen(toReplaceString)] = L' \setminus 0';
00187
00188
          FILE *filToR = fopen(filePath, "r, ccs=UTF-8");
00189
           if (filToR == NULL)
00190
               \label{eq:continuous_principle} \texttt{fprintf(stderr, "Error :%s\n", strerror(errno));}
00191
00192
               return -1:
```

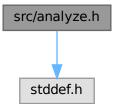
6.3 analyze.c 17

```
00193
00194
          rewind(filToR);
00195
00196
00197
          getFilePath(filePath, sFilePath);
00198
00199
00200
          getFileName(filePath, sFileName);
00201
           if (sFileName[0] == ' \setminus 0')
00202
00203
               return -2;
00204
00205
          getFileExtension(filePath, sFileExt);
00206
           if (sFileExt[0] == '\0')
00207
00208
               return -2;
00209
          }
00210
00211
          FILE *filToW = NULL;
00212
          char *replaced = "replaced";
          char *tempName = malloc((MAX_FNAME_SIZE + MAX_FPATH_SIZE + MAX_FEXT_SIZE)*sizeof(char));
00213
00214
           *tempName = ' \setminus 0';
          if(sFilePath[0] != ' \setminus 0')
00215
00216
00217
               tempName = strcat(tempName, sFilePath);
00218
               tempName = strcat(tempName, replaced);
00219
               tempName = strcat(tempName, sFileExt);
00220
               filToW = fopen(tempName, "w+, ccs=UTF-8");
00221
00222
          else
00223
          {
               tempName = strcat(tempName, replaced);
tempName = strcat(tempName, sFileExt);
00224
00225
00226
               filToW = fopen(tempName, "w+, ccs=UTF-8");
00227
          }
00228
00229
00230
          if (filToW == NULL)
00231
          {
00232
               fprintf(stderr, "Error :%s\n", strerror(errno));
00233
               return -1;
00234
          rewind(filToW):
00235
00236
00237
          int cpt = 0;
00238
           int old_cpt = 0;
00239
          wint_t temp = L' \setminus 0';
00240
          wint_t temp2 = fgetwc(filToR);
00241
00242
00243
          while (temp2!=WEOF)
00244
00245
               ungetwc(temp2, filToR);
00246
               while (*(toReplaceOccurrences->pos + cpt) != -1 && *(toReplaceOccurrences->pos + cpt) >= 0)
00247
00248
                    if (ftell(filToR) == *(toReplaceOccurrences->pos + cpt))
00249
00250
                        for (size_t i = 0; i < wcslen(toAdd); ++i)</pre>
00251
00252
                            if(fputwc(toAdd[i], filToW) != (wint_t) toAdd[i])
00253
                                fprintf(stderr, "ERR :%s\n", strerror(errno));
00254
00255
                                return 1;
00256
00257
                        cpt++;
00258
00259
                        for (size_t i = 0; i<toReplaceOccurrences->charCount; ++i)
00260
00261
                            if (fgetwc(filToR) == WEOF)
00262
                                break;
00263
00264
                   }
00265
                   if (temp2!=WEOF && old cpt == cpt)
00266
00267
                   {
00268
                        temp = fgetwc(filToR);
00269
                        if(fputwc(temp, filToW) != temp)
00270
                            \texttt{fprintf(stderr, "ERR : \$s \n", strerror(errno));}
00271
00272
00273
00274
                   }
00275
                   else
00276
00277
                        old_cpt++;
00278
                   }
00279
               }
```

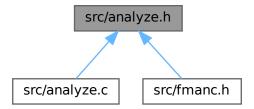
```
00281
              if (temp!=WEOF)
00282
00283
                  temp = fgetwc(filToR);
00284
                  if(fputwc(temp, filToW) != temp)
00285
00286
                      fprintf(stderr, "ERR :%s\n", strerror(errno));
00287
00288
00289
              temp2 = fgetwc(filToR);
00290
00291
         }
00292
00293
          fclose(filToR);
00294
          fclose(filToW);
00295
00296
          if (remove(filePath) != 0)
00297
00298
              fprintf(stderr, "ERR :%s\n", strerror(errno));
00299
              return 2;
00300
          else if (rename(tempName, filePath) != 0)
00301
00302
              fprintf(stderr, "ERR :%s\n", strerror(errno));
00303
00304
              return 2;
00305
          }
00306
00307
          free(tempName);
00308
          free_stringOccurrences(toReplaceOccurrences);
00309
00310
          return 0;
00311 }
```

6.4 src/analyze.h File Reference

Include dependency graph for analyze.h:



This graph shows which files directly or indirectly include this file:



Data Structures

struct FManC_StrOcc

Macros

• #define SHARED

Typedefs

typedef struct FManC_StrOcc stringOccurrences

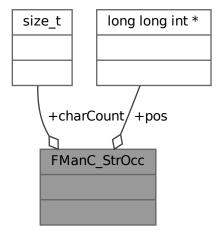
Functions

- int copyFileWithoutStrings (const unsigned int argc, char *filePath,...)
- size_t countCharInFile (char *filePath)
- void free_stringOccurrences (stringOccurrences *toBeDeleted)
- stringOccurrences * init stringOccurences (size t sizeOfString)
- int replaceStringInFile (char *filePath, char *toReplaceString, char *toAddString)
- stringOccurrences * searchStringInFile (char *filePath, char *toSearch)

6.4.1 Data Structure Documentation

6.4.1.1 struct FManC_StrOcc Definition at line 25 of file analyze.h.

Collaboration diagram for FManC_StrOcc:



Data Fields

size_t	charCount	
long long int *	pos	

6.4.2 Macro Definition Documentation

6.4.2.1 SHARED #define SHARED

Definition at line 18 of file analyze.h.

6.4.3 Typedef Documentation

6.4.3.1 stringOccurrences typedef struct FManC_StrOcc stringOccurrences

Definition at line 31 of file analyze.h.

6.4.4 Function Documentation

```
6.4.4.1 copyFileWithoutStrings() int copyFileWithoutStrings ( const unsigned int argc, char * filePath, ... )
```

6.4.4.2 countCharInFile() size_t countCharInFile (char * filePath)

Definition at line 14 of file analyze.c.

Referenced by searchStringInFile().

Here is the caller graph for this function:



```
6.4.4.3 free_stringOccurrences() void free_stringOccurrences ( stringOccurrences * toBeDeleted )
```

Definition at line 47 of file analyze.c.

References FManC_StrOcc::pos.

Referenced by replaceStringInFile(), and searchStringInFile().

Here is the caller graph for this function:



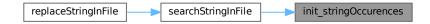
6.4.4.4 init_stringOccurences() stringOccurrences * init_stringOccurences (size_t sizeOfString)

Definition at line 35 of file analyze.c.

References FManC_StrOcc::charCount, and FManC_StrOcc::pos.

Referenced by searchStringInFile().

Here is the caller graph for this function:



```
\textbf{6.4.4.5} \quad \textbf{replaceStringInFile()} \quad \texttt{int replaceStringInFile ()}
```

```
char * filePath,
char * toReplaceString,
char * toAddString )
```

Definition at line 155 of file analyze.c.

References FManC_StrOcc::charCount, free_stringOccurrences(), getFileExtension, getFileName, getFilePath, MAX_FEXT_SIZE, MAX_FNAME_SIZE, MAX_FPATH_SIZE, FManC_StrOcc::pos, and searchStringInFile().

Here is the call graph for this function:



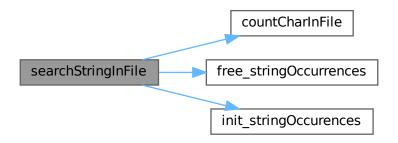
```
6.4.4.6 searchStringInFile() stringOccurrences * searchStringInFile ( char * filePath, char * toSearch )
```

Definition at line 54 of file analyze.c.

References countCharInFile(), free_stringOccurrences(), getFileName, init_stringOccurences(), and FManC_StrOcc::pos.

Referenced by replaceStringInFile().

Here is the call graph for this function:



6.5 analyze.h 23

Here is the caller graph for this function:



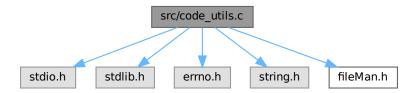
6.5 analyze.h

Go to the documentation of this file.

```
00001 #ifndef ANALYZE_H
00002 #define ANALYZE_H
00003
00004 \# if (defined(_WIN32) || defined(WIN32))
00008 /************ "-D BUILD_DLL" ************/
00009 # else
00010 #
          if defined(BUILD_DLL)
00011 #
             define SHARED __declspec(dllexport)
           else
00012 #
             define SHARED __declspec(dllimport)
00013 #
00014 #
           endif
00015 # endif
00016 /************ DEFAULT **************/
00017 # else
00018 # define SHARED
00019 # endif
00020
00022 #include <stddef.h>
00023
00024
00025 SHARED struct FManC_StrOcc
00026 {
          size_t charCount;
00028
         long long int *pos;
00029 };
00030
00031 SHARED typedef struct FManC_StrOcc stringOccurrences;
00032
00033 SHARED size_t countCharInFile(char *filePath);
00034 SHARED stringOccurrences *init_stringOccurences(size_t sizeOfString);
00035 SHARED void free_stringOccurrences(stringOccurrences *toBeDeleted);
00036 SHARED stringOccurrences *searchStringInFile(char *filePath, char *toSearch);
00037 SHARED int replaceStringInFile(char *filePath, char *toReplaceString, char *toAddString); 00038 SHARED int copyFileWithoutStrings(const unsigned int argc, char *filePath, ...); // to do
00039
00040
00041 #endif
00042
```

6.6 src/code_utils.c File Reference

Include dependency graph for code_utils.c:



6.7 code_utils.c

Go to the documentation of this file.

```
00001 #include <stdio.h>
00002 #include <stdlib.h>
00003 #include <errno.h>
00004 #include <string.h>
00005 #include "fileMan.h"
00006
```

6.8 src/code_utils.h File Reference

Macros

#define SHARED

6.8.1 Macro Definition Documentation

6.8.1.1 SHARED #define SHARED

Definition at line 18 of file code_utils.h.

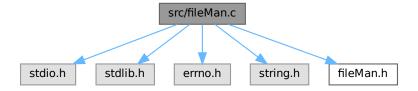
6.9 code_utils.h

Go to the documentation of this file.

```
00001 #ifndef CODE_UTILS_H
00002 #define CODE_UTILS_H
00003
00007 #
         define SHARED
00008 /************ "-D BUILD_DLL" ************/
00009 # else
00010 #
         if defined(BUILD_DLL)
00011 #
           define SHARED __declspec(dllexport)
00012 #
         else
          define SHARED __declspec(dllimport)
00013 #
00014 #
         endif
00015 # endif
00016 /************ DEFAULT **************/
00017 # else
00018 # define SHARED
00019 # endif
00020
00021 #endif
```

6.10 src/fileMan.c File Reference

Include dependency graph for fileMan.c:



Functions

- char * copyFileWithoutTabAndLineBreak (char *sourceFilePath, char *pathToCopy)

 Copy a file without tab and line break.
- void fgetFileExtension (const char *const sourceFilePath, char *extension)
- void fgetFileName (const char *const sourceFilePath, char *fileName)
- void fgetFilePath (const char *const sourceFilePath, char *filePath)

6.10.1 Function Documentation

Definition at line 71 of file fileMan.c.

References MAX_FEXT_SIZE, MAX_FNAME_SIZE, and MAX_FPATH_SIZE.

```
6.10.1.2 fgetFileName() void fgetFileName ( const char *const sourceFilePath, char * fileName )
```

Definition at line 119 of file fileMan.c.

References MAX_FEXT_SIZE, MAX_FNAME_SIZE, and MAX_FPATH_SIZE.

```
6.10.1.3 fgetFilePath() void fgetFilePath (

const char *const sourceFilePath,

char * filePath )
```

Definition at line 192 of file fileMan.c.

References MAX FEXT SIZE, MAX FNAME SIZE, and MAX FPATH SIZE.

6.11 fileMan.c

Go to the documentation of this file.

```
00001 #include <stdio.h>
00002 #include <stdlib.h>
00003 #include <errno.h>
00004 #include <string.h>
00005 #include "fileMan.h"
00006
00007 SHARED char *copyFileWithoutTabAndLineBreak(char *sourceFilePath, char *pathToCopy) //not finished.
      TODO : change the return value
80000
00009
00010
00011
          getFileName(sourceFilePath, sourceFileName);
00012
          getFileExtension(sourceFilePath, sourceFileExtension);
00013
00014
          FILE *sourceFile = fopen(sourceFilePath, "r");
00015
00016
          if (sourceFile == NULL)
00017
00018
               fprintf(stderr, "Error :%s\n", strerror(errno));
00019
              return NULL:
00020
00021
          rewind(sourceFile);
00022
          char *copiedName = (char*) malloc((strlen(pathToCopy)+10)*sizeof(char));
00023
00024
          if(copiedName == NULL) return copiedName;
00025
          if (pathToCopy == NULL)
00026
          {
00027
               copiedName = strcat(strcat(sourceFileName,"_copied"), sourceFileExtension);
00028
00029
          else
00030
00031
               copiedName = strcpy(copiedName, pathToCopy);
00032
00033
          if(copiedName == NULL) return copiedName;
          FILE *copiedFile = fopen(copiedName, "w");
if (copiedFile == NULL)
00034
00035
00036
              fprintf(stderr, "Error :%s\n", strerror(errno));
fclose(sourceFile);
00037
00038
00039
              return NULL;
00040
00041
          rewind(copiedFile);
00042
00043
          while(fgetc(sourceFile) != EOF)
00044
00045
               fseek(sourceFile, -1, SEEK_CUR);
00046
               if (fgetc(sourceFile) != '\n')
00047
                   fseek(sourceFile, -1, SEEK_CUR);
if (fgetc(sourceFile) != '\t')
00048
00049
00050
                   {
00051
                       fseek (sourceFile, -1, SEEK CUR);
                       fputc(fgetc(sourceFile), copiedFile);
00052
00053
                   }
00054
               }
00055
00056
          static char returnedName[MAX_FEXT_SIZE+MAX_FNAME_SIZE+MAX_FPATH_SIZE] = {'\0'}; // find a way to
     modify this
00057
          int i = 0;
00058
           while (sourceFileName[i] != '\0' && (size_t) i < strlen(sourceFileName))</pre>
00059
00060
               *(returnedName + i) = sourceFileName[i];
00061
               i++;
00062
00063
          *(returnedName + i) = ' \setminus 0';
00064
00065
          fclose(copiedFile);
00066
          fclose(sourceFile);
```

6.11 fileMan.c 27

```
00067
          free(copiedName);
00068
          return returnedName;
00069 }
00070
00071 SHARED void fgetFileExtension(const char* const sourceFilePath, char *extension)
00072 {
00073
          if (strlen(sourceFilePath) > MAX_FEXT_SIZE + MAX_FPATH_SIZE + MAX_FNAME_SIZE)
00074
00075
              fprintf(stderr, "\nError : Full path is too big\n");
00076
              return;
00077
00078
          int cpt = strlen(sourceFilePath);
          char pt = *(sourceFilePath + cpt);
00079
00080
00081
00082
          while((pt != '.') && (cpt >= 0) && (pt != '/') && (pt != '\\'))
00083
00084
              cpt--;
00085
              if (cpt>=0)
00086
00087
                  pt = *(sourceFilePath + cpt);
00088
00089
              else break;
00090
00091
          if (cpt < 0)
00092
00093
              fprintf(stderr, "\nError : incorrect file path\n");
00094
00095
          else if (pt == '/' || pt == '\\')
00096
00097
00098
              fprintf(stderr, "\nError : incorrect file path\n");
00099
00100
          }
00101
00102
          else
00103
          {
00104
              char res[strlen(sourceFilePath)-cpt+1];
00105
              for (size_t i = cpt; i < strlen(sourceFilePath); ++i)</pre>
00106
00107
                  res[i - cpt] = *(sourceFilePath + i);
00108
              res[strlen(sourceFilePath)-cpt] = '\0';
00109
00110
              for (size_t i = 0; i < strlen(res); ++i)</pre>
00111
00112
                   *(extension + i) = res[i];
00113
              *(extension + strlen(res)) = ' \setminus 0';
00114
00115
00116
          }
00117 }
00118
00119 SHARED void fgetFileName(const char* const sourceFilePath, char *fileName)
00120 {
          if (strlen(sourceFilePath) > MAX_FEXT_SIZE + MAX_FPATH_SIZE + MAX_FNAME_SIZE)
00121
00122
00123
              fprintf(stderr, "\nError : Full path is too big\n");
00124
              return;
00125
00126
          int cpt = strlen(sourceFilePath);
          char pt = *(sourceFilePath + cpt);
00127
00128
00129
          while(cpt >= 0)
00130
              cpt--;
00131
00132
              if (cpt>=0)
00133
              {
                  pt = *(sourceFilePath + cpt);
00134
00135
              else break;
if (pt == '/' || pt == '\\' || pt == '~')
00136
00137
00138
              {
00139
                  break;
00140
00141
00142
          cpt++;
00143
          if (cpt < 0 || (size_t) cpt == strlen(sourceFilePath))</pre>
00144
              fprintf(stderr, "\nError : incorrect file path\n");
00145
00146
              return:
00147
          }
00148
          else
00149
          {
00150
              char res[strlen(sourceFilePath)-cpt+1];
00151
              for (size_t i = cpt; i < strlen(sourceFilePath); ++i)</pre>
00152
              {
00153
                  res[i - cpt] = *(sourceFilePath + i);
```

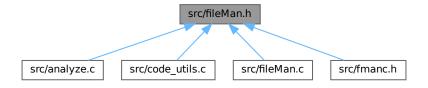
```
00154
00155
               res[strlen(sourceFilePath)-cpt] = '\0';
00156
               for (size_t i = 0; i < strlen(res); ++i)</pre>
00157
               {
00158
                   *(fileName + i) = res[i];
00159
00160
               *(fileName + strlen(res)) = '\0';
00161
               cpt = strlen(fileName) - 1;
               char *tmp_recov = (char*) malloc((strlen(fileName)+10)*sizeof(char));
00162
00163
               int tmp_recov_char_num = strlen(fileName) + 1;
00164
00165
               tmp_recov = strncpy(tmp_recov, fileName, tmp_recov_char_num);
00166
               if (tmp_recov == NULL)
00167
00168
                   fprintf(stderr, "\nInternal problem into the lib\n");
00169
                   free(tmp_recov);
00170
                   return:
00171
               }
00172
               else
00173
00174
                   while(cpt >= 0 && fileName[cpt] != '.')
00175
00176
                        fileName[cpt] = ' \setminus 0';
00177
                        cpt--;
00178
00179
                   if (cpt < 0)
00180
                        fileName = strncpy(fileName, tmp_recov, tmp_recov_char_num);
fileName[tmp_recov_char_num-1] = '\0';
00181
00182
00183
00184
                   else fileName[cpt] = '\0';
00185
00186
00187
               free(tmp_recov);
00188
          }
00189
00190 }
00191
00192 SHARED void fgetFilePath(const char* const sourceFilePath, char *filePath)
00193 {
           if (strlen(sourceFilePath) > MAX_FEXT_SIZE + MAX_FPATH_SIZE + MAX_FNAME_SIZE)
00194
00195
               fprintf(stderr, "\nError : Full path is too big\n");
00196
00197
               return;
00198
00199
           int cpt = strlen(sourceFilePath);
00200
          char pt = *(sourceFilePath + cpt);
00201
00202
          while (cpt >= 0)
00203
00204
               cpt--;
00205
               if (cpt>=0)
00206
00207
                   pt = *(sourceFilePath + cpt);
00208
00209
              else break;
if (pt == '/' || pt == '\\')
00210
00211
00212
                   break;
00213
               }
00214
          }
00215
00216
          if (cpt < 0)
00217
          {
00218
               return;
00219
          }
00220
00221
          else
00222
          {
               char res[cpt+1];
      for (size_t i = 0; i < (size_t)cpt; ++i) // cpt >= 0 anyway so we can actually do this cast to avoid this useless gcc -Wextra warning
00224
00225
              {
00226
                   res[i] = *(sourceFilePath + i);
00227
00228
               res[cpt + 1] = ' \setminus 0';
00229
               for (size_t i = 0; i < strlen(res); ++i)</pre>
00230
                   *(filePath + i) = res[i];
00231
00232
               if (pt == '/')
00233
00234
               {
00235
                   *(filePath + strlen(res)-1) = '/';
00236
               }
00237
               else
00238
               {
00239
                   *(filePath + strlen(res)-1) = '\\';
```

```
00240 }
00241 *(filePath + strlen(res)) = '\0';
00242
00243 }
00244 }
```

6.12 src/fileMan.h File Reference

This header contains macro definitions and function declarations that are written in this file.

This graph shows which files directly or indirectly include this file:



Macros

#define getFileExtension(sourceFilePath, extension) char extension[MAX_FEXT_SIZE] = ""; fgetFileExtension(source ← FilePath, extension)

Gives you the file extension.

#define getFileName(sourceFilePath, name) char name[MAX_FNAME_SIZE] = ""; fgetFileName(source←
 FilePath, name)

Gives you the file name.

• #define getFilePath(sourceFilePath, path) char path[MAX_FPATH_SIZE] = ""; fgetFilePath(sourceFilePath, path)

Gives you the file path (without name and extension).

- #define MAX_FEXT_SIZE 50
- #define MAX_FNAME_SIZE 256
- #define MAX_FPATH_SIZE 512
- #define SHARED

Useful to choose how to use the lib on Windows systems.

Functions

- int copyFileWithoutStrings (const unsigned int argc, char *filePath,...)
- char * copyFileWithoutTabAndLineBreak (char *sourceFilePath, char *pathToCopy)

Copy a file without tab and line break.

- void fgetFileExtension (const char *const sourceFileName, char *extension)
- void fgetFileName (const char *const sourceFilePath, char *fileName)
- void fgetFilePath (const char *const sourceFilePath, char *filePath)

6.12.1 Detailed Description

This header contains macro definitions and function declarations that are written in this file.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

These functions are made to operate simple operation on files or file names, when there is no need to analyze something like occurrences,

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

Definition in file fileMan.h.

6.12.2 Macro Definition Documentation

6.12.2.1 SHARED #define SHARED

Useful to choose how to use the lib on Windows systems.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

For more informations, please see the definition of the SHARED macro in the main header

Definition at line 71 of file fileMan.h.

6.12.3 Function Documentation

6.13 fileMan.h 31

```
6.12.3.2 fgetFileExtension() void fgetFileExtension ( const char *const sourceFileName, char * extension )
```

Definition at line 71 of file fileMan.c.

References MAX FEXT SIZE, MAX FNAME SIZE, and MAX FPATH SIZE.

Definition at line 119 of file fileMan.c.

References MAX_FEXT_SIZE, MAX_FNAME_SIZE, and MAX_FPATH_SIZE.

Definition at line 192 of file fileMan.c.

References MAX FEXT SIZE, MAX FNAME SIZE, and MAX FPATH SIZE.

6.13 fileMan.h

Go to the documentation of this file.

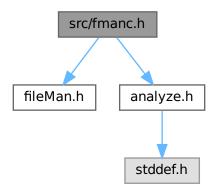
```
00001
00046 #ifndef FILEMAN_H
00047 #define FILEMAN_H
00059 # if defined(STATIC)
00060 #
         define SHARED
00061 /************* "-D BUILD_DLL" ************
00062 # else
00063 #
         if defined(BUILD_DLL)
00064 #
          define SHARED __declspec(dllexport)
00065 #
        else
00066 #
          define SHARED __declspec(dllimport)
00067 #
         endif
00068 # endif
00070 # else
00071 # def
00072 # endif
       define SHARED
00073
00090 #ifndef MAX_FEXT_SIZE
00091 #define MAX_FEXT_SIZE 50
```

```
00092 #endif
00093
00101 #ifndef MAX_FNAME_SIZE
00102 #define MAX_FNAME_SIZE 256
00103 #endif
00104
00112 #ifndef MAX_FPATH_SIZE
00113 #define MAX_FPATH_SIZE 512
00114 #endif
00115
00116
00136 #ifndef getFileExtension
00137 #define getFileExtension(sourceFilePath, extension) char extension[MAX_FEXT_SIZE] = "";
     fgetFileExtension(sourceFilePath, extension)
00138 #endif
00139
00140
00152 #ifndef getFileName
00153 #define getFileName(sourceFilePath, name) char name[MAX_FNAME_SIZE] = ""; fgetFileName(sourceFilePath,
     name)
00154 #endif
00155
00156
00168 #ifndef getFilePath
00169 #define getFilePath(sourceFilePath, path) char path[MAX_FPATH_SIZE] = ""; fgetFilePath(sourceFilePath,
00170 #endif
00171
00172
00197 SHARED char *copyFileWithoutTabAndLineBreak(char *sourceFilePath, char *pathToCopy); // copied file
     will be named like <sourceFile name>_copied
00198 SHARED int copyFileWithoutStrings(const unsigned int argc, char *filePath, ...); // to do
00199 SHARED void fgetFileExtension(const char* const sourceFileName, char *extension);
00200 SHARED void fgetFileName(const char* const sourceFilePath, char *fileName);
00201 SHARED void fgetFilePath(const char* const sourceFilePath, char *filePath);
00202
00203
00204 #endif
```

6.14 src/fmanc.h File Reference

This is the main header of the lib, where all of the headers are included.

Include dependency graph for fmanc.h:



Macros

• #define SHARED

Useful to choose how to use the lib on Windows systems.

6.15 fmanc.h 33

6.14.1 Detailed Description

This is the main header of the lib, where all of the headers are included.

Author

Axel PASCON (a.k.a. brvtalcake)

Date

2022

If you don't want to have troubles, just include this one instead of including the others one by one.

Definition in file fmanc.h.

6.15 fmanc.h

Go to the documentation of this file.

```
00001
00026 #ifndef FMANC_H
00027 #define FMANC_H
00028
00064 # if (defined(_WIN32) || defined(WIN32))
00065 /************* "-D STATIC" **************
00066 # if defined(STATIC)
00067 # define SHARED
           define SHARED
00068 /************ "-D BUILD_DLL" ************/
00069 # else
           if defined(BUILD_DLL)
00070 #
              define SHARED __declspec(dllexport)
00072 #
00073 #
             define SHARED __declspec(dllimport)
00074 #
           endif
00075 # endif
00076 /********** DEFAULT *************/
00077 # else
         define SHARED
00079 \# endif // Definition of SHARED macro
08000
00081
00082 #include "fileMan.h"
00083 #include "analyze.h"
00102 /*
00103 \#define USE_CODE_UTILS // just to make doxygen generate the doc
00104 #undef USE_CODE_UTILS
00105 */
00106
00107 #if defined(USE_CODE_UTILS)
00108 #include "code_utils.h"
00109 #include "./third_party/lex_yy.h"
00110 #endif // USE_CODE_UTILS
00111
00112
00113 #endif // fmanc.h
```

6.16 src/third_party/lex_yy.h File Reference

Macros

#define SHARED

Functions

• int deleteCStyleComments (char *filePath)

6.16.1 Macro Definition Documentation

```
6.16.1.1 SHARED #define SHARED
```

Definition at line 18 of file lex_yy.h.

6.16.2 Function Documentation

```
6.16.2.1 deleteCStyleComments() int deleteCStyleComments ( char * filePath )
```

6.17 lex_yy.h

Go to the documentation of this file.

```
00001 #ifndef LEX_YY_H
00002 #define LEX_YY_H
00003
00004 # if (defined(_WIN32) || defined(WIN32))
00006 # if defined(STATIC)
00007 #
           define SHARED
00008 /************ "-D BUILD_DLL" ***********/
00009 # else
00010 # if
          if defined(BUILD_DLL)
00011 #
             define SHARED __declspec(dllexport)
00012 #
          else
           define SHARED __declspec(dllimport)
          endif
00014 #
00015 # endif
00016 /****************** DEFAULT *************/
00017 # else
00018 # define SHARED
00019 # endif
00020
00021 SHARED int deleteCStyleComments(char *filePath);
00022
00023
00024 #endif
```

Index

analyze.c	free stringOccurrences
countCharInFile, 12	analyze.c, 12
free stringOccurrences, 12	analyze.h, 20
init_stringOccurences, 12	Functions, 5
replaceStringInFile, 13	copyFileWithoutTabAndLineBreak, 5
searchStringInFile, 13	,
analyze.h	General macros, 6
copyFileWithoutStrings, 20	SHARED, 7
countCharInFile, 20	getFileExtension
free stringOccurrences, 20	Macros, 8
init_stringOccurences, 21	getFileName
replaceStringInFile, 21	Macros, 9
searchStringInFile, 22	getFilePath
SHARED, 20	Macros, 9
stringOccurrences, 20	
3	init_stringOccurences
code_utils.h	analyze.c, 12
SHARED, 24	analyze.h, <mark>21</mark>
Constant macros, 2	land and
MAX_FEXT_SIZE, 3	lex_yy.h
MAX_FNAME_SIZE, 3	deleteCStyleComments, 34
MAX FPATH SIZE, 3	SHARED, 34
copyFileWithoutStrings	Macros, 8
analyze.h, 20	getFileExtension, 8
fileMan.h, 30	getFileName, 9
copyFileWithoutTabAndLineBreak	getFilePath, 9
Functions, 5	Main header, 10
countCharInFile	
analyze.c, 12	MAX_FEXT_SIZE
analyze.h, 20	Constant macros, 3
,	MAX_FNAME_SIZE
deleteCStyleComments	Constant macros, 3
lex_yy.h, 34	MAX_FPATH_SIZE
docs/documentation_pages/main_page.dox, 11	Constant macros, 3
	replaceStringInFile
fgetFileExtension	analyze.c, 13
fileMan.c, 25	analyze.h, 21
fileMan.h, 31	analyzon, zi
fgetFileName	searchStringInFile
fileMan.c, 25	analyze.c, 13
fileMan.h, 31	analyze.h, 22
fgetFilePath	SHARED
fileMan.c, 25	analyze.h, 20
fileMan.h, 31	code_utils.h, 24
File management utilities, 4	fileMan.h, 30
fileMan.c	General macros, 7
fgetFileExtension, 25	lex_yy.h, 34
fgetFileName, 25	Source files, 11
fgetFilePath, 25	src/analyze.c, 11, 14
fileMan.h	src/analyze.h, 18, 23
copyFileWithoutStrings, 30	src/code_utils.c, 24
fgetFileExtension, 31	src/code_utils.h, 24
fgetFileName, 31	src/fileMan.c, 25, 26
fgetFilePath, 31	src/fileMan.h, 29, 31
SHARED, 30	src/fmanc.h, 32, 33
FManC_StrOcc, 19	src/third_party/lex_yy.h, 33, 34
	5. 5, 5 5_party, 15x_j j, 00, 01

36 INDEX

stringOccurrences analyze.h, 20