

Andrei_Ghibuci_Ass14

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Contents

1	File Index	1
1.1	File List	1
2	File Documentation	3
2.1	functions.c File Reference	3
2.1.1	Function Documentation	3
2.1.1.1	depth_first_search()	3
2.1.1.2	orientations()	4
2.1.2	Variable Documentation	4
2.1.2.1	adjacency_destination	4
2.1.2.2	adjacency_source	4
2.1.2.3	counter	4
2.1.2.4	orientation	5
2.1.2.5	reach	5
2.2	functions.h File Reference	5
2.2.1	Function Documentation	5
2.2.1.1	depth_first_search()	5
2.2.1.2	orientations()	5
2.3	main.c File Reference	6
2.3.1	Function Documentation	6
2.3.1.1	main()	6
2.3.2	Variable Documentation	6
2.3.2.1	counter	6
2.3.2.2	orientation	6
	Index	7

Chapter 1

File Index

1.1 File List

Here is a list of all files with brief descriptions:

functions.c	3
functions.h	5
main.c	6

Chapter 2

File Documentation

2.1 functions.c File Reference

```
#include "functions.h"  
#include <stdio.h>  
#include <stdlib.h>  
#include <time.h>
```

Functions

- void [orientations](#) (int [orientation](#) [][1001], int i, int n)
- void [depth_first_search](#) (int source)

Variables

- int [reach](#) [1001]
- int [counter](#) = 0
- int [orientation](#) [1001][1001]
- int [adjacency_source](#) [1001]
- int [adjacency_destination](#) [1001]

2.1.1 Function Documentation

2.1.1.1 [depth_first_search\(\)](#)

```
void depth_first_search (  
    int source )
```

This function will do the topological sort of the graph.

Definition at line 62 of file functions.c.

2.1.1.2 orientations()

```
void orientations (
    int orientation[][1001],
    int i,
    int n )
```

Function that reads and makes the graph orientated.

Definition at line 34 of file functions.c.

2.1.2 Variable Documentation

2.1.2.1 adjacency_destination

```
int adjacency_destination[1001]
```

Vector that retain if the destination node already appeared in the sort

Definition at line 29 of file functions.c.

2.1.2.2 adjacency_source

```
int adjacency_source[1001]
```

Vector that retain if the source node already appeared in the sort

Definition at line 24 of file functions.c.

2.1.2.3 counter

```
int counter = 0
```

This variable will be used to counter how many pieces were used in the sort.

Definition at line 14 of file functions.c.

2.1.2.4 orientation

```
int orientation[1001][1001]
```

A matrix that retain the orientations between the nodes of the graph.

Definition at line 19 of file functions.c.

2.1.2.5 reach

```
int reach[1001]
```

This vector is a representation of the current node and if this node was already visited.

Definition at line 9 of file functions.c.

2.2 functions.h File Reference

Functions

- void [orientations](#) (int [orientation](#)[][1001], int i, int n)
- void [depth_first_search](#) (int node)

2.2.1 Function Documentation

2.2.1.1 depth_first_search()

```
void depth_first_search (  
    int source )
```

This function will do the topological sort of the graph.

Definition at line 62 of file functions.c.

2.2.1.2 orientations()

```
void orientations (  
    int orientation[][1001],  
    int i,  
    int n )
```

Function that reads and makes the graph orientated.

Definition at line 34 of file functions.c.

2.3 main.c File Reference

```
#include "functions.h"  
#include <stdio.h>  
#include <stdlib.h>
```

Functions

- int `main` ()

Variables

- int `orientation` [1001][1001]
- int `counter`

2.3.1 Function Documentation

2.3.1.1 `main()`

```
int main ( )
```

Main function of my project

Definition at line 18 of file main.c.

2.3.2 Variable Documentation

2.3.2.1 `counter`

```
int counter
```

Variable that was used for counting the number of used pieces.

Definition at line 13 of file main.c.

2.3.2.2 `orientation`

```
int orientation[1001][1001]
```

Matrix that was used allready in the function orientations and explained.

Definition at line 8 of file main.c.

Index

adjacency_destination

functions.c, [4](#)

adjacency_source

functions.c, [4](#)

counter

functions.c, [4](#)

main.c, [6](#)

depth_first_search

functions.c, [3](#)

functions.h, [5](#)

functions.c, [3](#)

adjacency_destination, [4](#)

adjacency_source, [4](#)

counter, [4](#)

depth_first_search, [3](#)

orientation, [4](#)

orientations, [3](#)

reach, [5](#)

functions.h, [5](#)

depth_first_search, [5](#)

orientations, [5](#)

main

main.c, [6](#)

main.c, [6](#)

counter, [6](#)

main, [6](#)

orientation, [6](#)

orientation

functions.c, [4](#)

main.c, [6](#)

orientations

functions.c, [3](#)

functions.h, [5](#)

reach

functions.c, [5](#)