Andrei_Ghibuci_Ass14

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1.1 File List

Here is a list of all files with brief descriptions:

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 tropological 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 allready 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 allready 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 allready 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 tropological 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.

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