

Flights

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Chapter 1

Todo List

Member `main` (`int argc, char **argv`)

oczytywanie parametrow programu z linii polecen

Chapter 2

Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

passenger	<Passenger structure	7
ticket	<Ticket structure	9

Chapter 3

File Index

3.1 File List

Here is a list of all files with brief descriptions:

functions.cpp	11
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Chapter 4

Class Documentation

4.1 passenger Struct Reference

<Passenger structure

```
#include <structures.h>
```

Collaboration diagram for passenger:



Public Attributes

- `std::string name`
Name of the passenger.
- `int seat`
Seat of the passenger.
- `passenger * pRight`
Pointer to the right child in tree.
- `passenger * pLeft`
Pointer to the left child in tree.

4.1.1 Detailed Description

<Passenger structure

4.1.2 Member Data Documentation

4.1.2.1 name

```
std::string passenger::name
```

Name of the passenger.

4.1.2.2 pLeft

```
passenger* passenger::pLeft
```

Pointer to the left child in tree.

4.1.2.3 pRight

```
passenger* passenger::pRight
```

Pointer to the right child in tree.

4.1.2.4 seat

```
int passenger::seat
```

Seat of the passenger.

The documentation for this struct was generated from the following file:

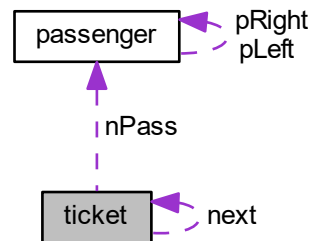
- [structures.h](#)

4.2 ticket Struct Reference

<Ticket structure

```
#include <structures.h>
```

Collaboration diagram for ticket:



Public Attributes

- `std::string flightID`
ID of the flight.
- `std::string origin`
Origin city of the flight.
- `std::string date`
Date of the flight.
- `passenger * nPass`
Pointer to the head of the passenger tree.
- `ticket * next`
Pointer to the next ticket in the list.

4.2.1 Detailed Description

<Ticket structure

4.2.2 Member Data Documentation

4.2.2.1 date

```
std::string ticket::date
```

Date of the flight.

4.2.2.2 flightID

```
std::string ticket::flightID
```

ID of the flight.

4.2.2.3 next

```
ticket* ticket::next
```

Pointer to the next ticket in the list.

4.2.2.4 nPass

```
passenger* ticket::nPass
```

Pointer to the head of the passenger tree.

4.2.2.5 origin

```
std::string ticket::origin
```

Origin city of the flight.

The documentation for this struct was generated from the following file:

- [structures.h](#)

Chapter 5

File Documentation

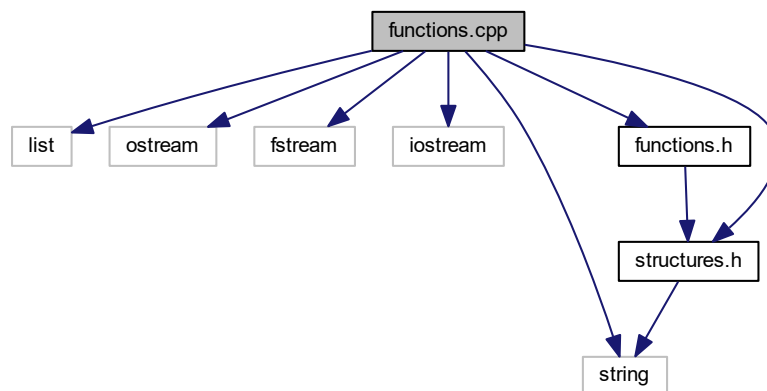
5.1 CMakeLists.txt File Reference

5.2 flights.txt File Reference

5.3 functions.cpp File Reference

```
#include <list>
#include <ostream>
#include <fstream>
#include <iostream>
#include <string>
#include "functions.h"
#include "structures.h"
```

Include dependency graph for functions.cpp:



Macros

- `#define debug(x) std::cerr << "(" << __LINE__ << ")" << #x << " == " << (x) << std::endl`

Functions

- string `ltrim` (const std::string &s)
- string `rtrim` (const std::string &s)
- string `trim` (const std::string &s)
- ticket * `addTicket` (ticket *&t, const string &ID, const string &ori, const string &dist)
- void `insertPassenger` (passenger *&pH, const string &p, const int &seat)
- void `addPassenger` (ticket *&t, const string &ID, const string &ori, const string &dist, const string &p, const int &seat)
- bool `datecheck` (int y, int m, int d)
- void `readTEXTfile` (ticket *&t, const string &file_name)
- void `printBTree` (passenger *pIN, ofstream &filename)
- void `makeTXTfile` (ticket *t)
- void `deletePassenger` (passenger *&p)
- void `deleteTicket` (ticket *&t)

Variables

- const string `WHITESPACE` = "\n\r\t\f\v"

5.3.1 Macro Definition Documentation

5.3.1.1 debug

```
#define debug(
    x ) std::cerr << "(" << __LINE__ << ")" " << #x << " == " << (x) << std::endl
::endl
```

5.3.2 Function Documentation

5.3.2.1 addPassenger()

```
void addPassenger (
    ticket *& t,
    const string & ID,
    const string & ori,
    const string & dist,
    const string & p,
    const int & seat )
```


5.3.2.2 addTicket()

```
ticket* addTicket (
    ticket *t,
    const string & ID,
    const string & ori,
    const string & dist )
```

5.3.2.3 datecheck()

```
bool datecheck (
    int y,
    int m,
    int d )
```

5.3.2.4 deletePassenger()

```
void deletePassenger (
    passenger *& p )
```

The function deletes passengers from BTree

Parameters

<i>p</i>	pointer to address of passenger in BTree
----------	--

5.3.2.5 deleteTicket()

```
void deleteTicket (
    ticket *& t )
```

Parameters

<i>t</i>	pointer to address of ticket in a list
----------	--

5.3.2.6 insertPassenger()

```
void insertPassenger (
    passenger *& pH,
```

```
const string & p,
const int & seat )
```

5.3.2.7 ltrim()

```
string ltrim (
    const std::string & s )
```

5.3.2.8 makeTXTfile()

```
void makeTXTfile (
    ticket * t )
```

The function makes output file using ticket

Parameters

<i>t</i>	pointer to adress of the list of tickets
----------	--

5.3.2.9 printBTree()

```
void printBTree (
    passenger * pIN,
    ofstream & filename )
```

5.3.2.10 readTEXTfile()

```
void readTEXTfile (
    ticket *& t,
    const string & file_name )
```

5.3.2.11 rtrim()

```
string rtrim (
    const std::string & s )
```

5.3.2.12 trim()

```
string trim (  
    const std::string & s )
```

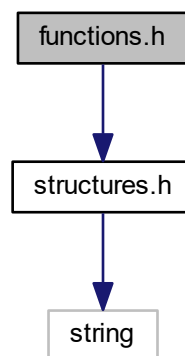
5.3.3 Variable Documentation

5.3.3.1 WHITESPACE

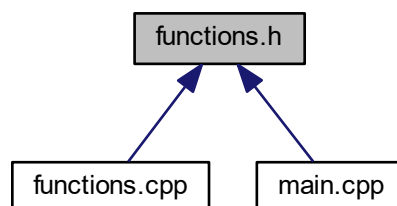
```
const string WHITESPACE = " \n\r\t\f\v"
```

5.4 functions.h File Reference

```
#include "structures.h"  
Include dependency graph for functions.h:
```



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



Functions

- `ticket * addTicket (ticket *&t, const std::string &ID, const std::string &ori, const std::string &dist)`
- `void readTEXTfile (ticket *&t, const std::string &file_name)`
- `void addPassenger (ticket *&t, const std::string &ID, const std::string &ori, const std::string &dist, const std::string &p, const int &seat)`
- `void insertPassenger (passenger *&pH, const std::string &p, const int &seat)`
- `void makeTXTfile (ticket *t)`
- `void deletePassenger (passenger *&p)`
- `void deleteTicket (ticket *&t)`

5.4.1 Function Documentation

5.4.1.1 addPassenger()

```
void addPassenger (
    ticket *& t,
    const std::string & ID,
    const std::string & ori,
    const std::string & dist,
    const std::string & p,
    const int & seat )
```

The function searches for proper ticket and calls insertPassenger function

Parameters

<i>t</i>	pointer to address of the list of the tickets
<i>ID</i>	address of the ID of the flight from the pointer towards the list
<i>ori</i>	address of the origin of the flight from the pointer towards the list
<i>date</i>	address of the date of the flight from the pointer towards the list
<i>p</i>	address of the the passenger of the flight from the pointer towards the list
<i>seat</i>	address of the seat of the passenger from the pointer towards the list

5.4.1.2 addTicket()

```
ticket* addTicket (
    ticket *& t,
    const std::string & ID,
    const std::string & ori,
    const std::string & dist )
```

The function creates a new ticket singly linked list passed on the input from the txt file

Parameters

<i>t</i>	pointer to adress of the list of the tickets
<i>ID</i>	input ID of the flight from the txt file
<i>ori</i>	origin of the flight from the txt file
<i>date</i>	date of the flight from the txt file

Returns

next ticket in a list

5.4.1.3 deletePassenger()

```
void deletePassenger (
    passenger *& p )
```

The function deletes passengers from BTree

Parameters

<i>p</i>	pointer to address of passenger in BTree
----------	--

5.4.1.4 deleteTicket()

```
void deleteTicket (
    ticket *& t )
```

Parameters

<i>t</i>	pointer to address of ticket in a list
----------	--

5.4.1.5 insertPassenger()

```
void insertPassenger (
    passenger *& pH,
    const std::string & p,
    const int & seat )
```

The function insets passenger to ticket

Parameters

<i>pH</i>	pointer to adress to the BTree of the passengers
<i>p</i>	address of the name of the passenger
<i>seat</i>	address of the seat of the passenger

5.4.1.6 makeTXTfile()

```
void makeTXTfile (
    ticket * t )
```

The function makes output file using ticket

Parameters

<i>t</i>	pointer to adress of the list of tickets
----------	--

5.4.1.7 readTEXTfile()

```
void readTEXTfile (
    ticket *& t,
    const std::string & file_name )
```

The function reads input file and calls addTicket function

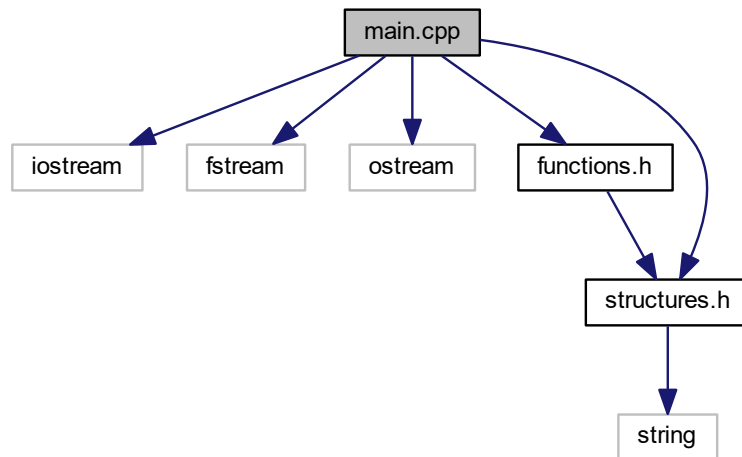
Parameters

<i>t</i>	pointer to address of the list of the tickets
<i>file_name</i>	name of the file to be read

5.5 main.cpp File Reference

```
#include <iostream>
#include <fstream>
#include <ostream>
#include "functions.h"
#include "structures.h"
```

Include dependency graph for main.cpp:



Functions

- int `main` (int argc, char **argv)

5.5.1 Function Documentation

5.5.1.1 main()

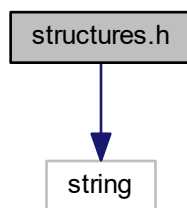
```
int main (  
    int argc,  
    char ** argv )
```

Todo odczytywanie parametrów programu z linii poleceń

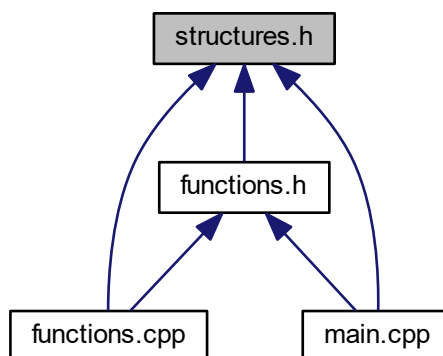
5.6 structures.h File Reference

```
#include <string>
```

Include dependency graph for structures.h:



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



Classes

- struct [passenger](#)
< *Passenger structure*
- struct [ticket](#)
< *Ticket structure*

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