Your Project Name

1.0

Generated by Doxygen 1.9.5

1 Class Index 1

1.1 Class List . . . 1

2 File Index 3

2.1 File List . . . 3

3 Class Documentation 5

3.1 Date Struct Reference . . . 5

3.1.1 Member Data Documentation . . . 5

3.1.1.1 day . . . 5

3.1.1.2 month . . . 5

3.1.1.3 year . . . 6

3.2 Diet Struct Reference . . . 6

3.2.1 Member Data Documentation . . . 6

3.2.1.1 calories . . . 6

3.2.1.2 date . . . 6

3.2.1.3 food . . . 6

3.2.1.4 ID . . . 7

3.2.1.5 meal . . . 7

3.3 MealPlan Struct Reference . . . 7

3.3.1 Member Data Documentation . . . 7

3.3.1.1 date . . . 7

3.3.1.2 ID . . . 7

3.3.1.3 maxCal . . . 8

3.3.1.4 meal . . . 8

3.3.1.5 minCal . . . 8

3.4 Patients Struct Reference . . . 8

3.4.1 Member Data Documentation . . . 8

3.4.1.1 ID . . . 8

3.4.1.2 name . . . 9

3.4.1.3 phoneNumber . . . 9

3.5 Period Struct Reference . . . 9

3.5.1 Member Data Documentation . . . 9

3.5.1.1 begin . . . 9

3.5.1.2 end . . . 9

4 File Documentation 11

4.1 main.c File Reference . . . 11

4.1.1 Function Documentation . . . 11

4.1.1.1 main() . . . 11

4.2 utils.c File Reference . . . 11

4.2.1 Function Documentation . . . 12

4.2.1.1 dateInPeriod() . . . 12

4.2.1.2 exceededCalories() 12
4.2.1.3 readFile() 12
4.3 utils.h File Reference 12
4.3.1 Enumeration Type Documentation 13
4.3.1.1 FileType 13
4.3.2 Function Documentation 13
4.3.2.1 exceededCalories() 13
4.3.2.2 readFile() 13
4.4 utils.h 14

Index **15**

Chapter 1

Class Index

1.1 Class List

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

Date 5
Diet 6
MealPlan 7
Patients 8
Period 9

Chapter 2

File Index

2.1 File List

Here is a list of all files with brief descriptions:

main.c 11
utils.c 11
utils.h 12

Chapter 3

Class Documentation

3.1 Date Struct Reference

`#include <utils.h>`

Public Attributes

- int day
- int month
- int year

3.1.1 Member Data Documentation

3.1.1.1 day

`int Date::day`

Referenced by dateInPeriod().

3.1.1.2 month

`int Date::month`

Referenced by dateInPeriod(), main(), and readFile().

3.1.1.3 year

```
int Date::year
```

Referenced by dateInPeriod(), main(), and readFile().

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

- utils.h

3.2 Diet Struct Reference

```
#include <utils.h>
```

Public Attributes

- int ID
- Date date
- char meal [50]
- char food [50]
- int calories

3.2.1 Member Data Documentation

3.2.1.1 calories

```
int Diet::calories
```

Referenced by exceededCalories(), main(), and readFile().

3.2.1.2 date

```
Date Diet::date
```

Referenced by main(), and readFile().

3.2.1.3 food

```
char Diet::food[50]
```

Referenced by main(), and readFile().

3.2.1.4 ID

```
int Diet::ID
```

3.2.1.5 meal

```
char Diet::meal[50]
```

Referenced by main(), and readFile().

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

- utils.h

3.3 MealPlan Struct Reference

```
#include <utils.h>
```

Public Attributes

- int ID
- Date date
- char meal [50]
- int minCal
- int maxCal

3.3.1 Member Data Documentation

3.3.1.1 date

```
Date MealPlan::date
```

Referenced by main(), and readFile().

3.3.1.2 ID

```
int MealPlan::ID
```

3.3.1.3 maxCal

```
int MealPlan::maxCal
```

Referenced by main(), and readFile().

3.3.1.4 meal

```
char MealPlan::meal[50]
```

Referenced by main(), and readFile().

3.3.1.5 minCal

```
int MealPlan::minCal
```

Referenced by main(), and readFile().

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

- utils.h

3.4 Patients Struct Reference

```
#include <utils.h>
```

Public Attributes

- int ID
- char name [50]
- int phoneNumber

3.4.1 Member Data Documentation

3.4.1.1 ID

```
int Patients::ID
```

3.4.1.2 name

```
char Patients::name[50]
```

3.4.1.3 phoneNumber

```
int Patients::phoneNumber
```

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

- utils.h

3.5 Period Struct Reference

```
#include <utils.h>
```

Public Attributes

- Date begin
- Date end

3.5.1 Member Data Documentation

3.5.1.1 begin

```
Date Period::begin
```

Referenced by dateInPeriod().

3.5.1.2 end

```
Date Period::end
```

Referenced by dateInPeriod().

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

- utils.h

Chapter 4

File Documentation

4.1 main.c File Reference

```
#include "utils.h"
#include <stdio.h>
```

Functions

- int main ()

4.1.1 Function Documentation

4.1.1.1 main()

```
int main ( )
```

References Diet::calories, Diet::date, MealPlan::date, DIET, Diet::food, MealPlan::maxCal, Diet::meal, MealPlan::meal, MEAL_PLAN, MealPlan::minCal, Date::month, PATIENTS, readFile(), and Date::year.

4.2 utils.c File Reference

```
#include "utils.h"
#include <stdio.h>
```

Functions

- int readFile (char *path, void *data, int max_size, FileType fileType)
- int dateInPeriod (Date date, Period period)
- int exceededCalories (Diet *diet, int max_size, int calories, Period period)

4.2.1 Function Documentation

4.2.1.1 dateInPeriod()

```
int dateInPeriod (
            Date date,
            Period period )
```

References Period::begin, Date::day, Period::end, Date::month, and Date::year.

Referenced by exceededCalories().

4.2.1.2 exceededCalories()

```
int exceededCalories (
            Diet * diet,
            int max_size,
            int calories,
            Period period )
```

References Diet::calories, and dateInPeriod().

4.2.1.3 readFile()

```
int readFile (
            char * path,
            void * data,
            int max_size,
            FileType fileType )
```

References Diet::calories, Diet::date, MealPlan::date, DIET, Diet::food, MealPlan::maxCal, Diet::meal, MealPlan::meal, MEAL_PLAN, MealPlan::minCal, Date::month, PATIENTS, and Date::year.

Referenced by main().

4.3 utils.h File Reference

Classes

- struct Date
- struct Period
- struct Patients
- struct Diet
- struct MealPlan

Enumerations

- enum FileType { PATIENTS , DIET , MEAL_PLAN }

Functions

- int readFile (char *path, void *data, int max_size, FileType fileType)
- int exceededCalories (Diet *diets, int calories, Period period)

4.3.1 Enumeration Type Documentation

4.3.1.1 FileType

```
enum FileType
```

Enumerator

PATIENTS	
DIET	
MEAL_PLAN	

4.3.2 Function Documentation

4.3.2.1 exceededCalories()

```
int exceededCalories (
            Diet * diets,
            int calories,
            Period period )
```

4.3.2.2 readFile()

```
int readFile (
            char * path,
            void * data,
            int max_size,
            FileType fileType )
```

References Diet::calories, Diet::date, MealPlan::date, DIET, Diet::food, MealPlan::maxCal, Diet::meal, MealPlan::meal, MEAL_PLAN, MealPlan::minCal, Date::month, PATIENTS, and Date::year.

Referenced by main().

4.4 utils.h

Go to the documentation of this file.

```
1 //DataTypes
2 typedef struct {
3         int day;
4         int month;
5         int year;
6 } Date;
7
8 typedef struct {
9     Date begin;
10     Date end;
11 } Period;
12
13 typedef struct {
14     int ID;
15     char name[50];
16     int phoneNumber;
17 } Patients;
18
19 typedef struct {
20     int ID;
21     Date date;
22     char meal[50];
23     char food[50];
24     int calories;
25 } Diet;
26
27 typedef struct {
28     int ID;
29     Date date;
30     char meal[50];
31     int minCal;
32     int maxCal;
33 } MealPlan;
34
35 typedef enum {
36     PATIENTS,
37     DIET,
38     MEAL_PLAN
39 } FileType;
40
41 //Funcoes
42 int readFile(char *path, void *data, int max_size, FileType fileType);
43 int exceededCalories(Diet *diets, int calories, Period period);
```

Index

begin
    Period, 9

calories
    Diet, 6

Date, 5
    day, 5
    month, 5
    year, 5
date
    Diet, 6
    MealPlan, 7
dateInPeriod
    utils.c, 12
day
    Date, 5
DIET
    utils.h, 13
Diet, 6
    calories, 6
    date, 6
    food, 6
    ID, 6
    meal, 7

end
    Period, 9
exceededCalories
    utils.c, 12
    utils.h, 13

FileType
    utils.h, 13
food
    Diet, 6

ID
    Diet, 6
    MealPlan, 7
    Patients, 8

main
    main.c, 11
main.c, 11
    main, 11
maxCal
    MealPlan, 7
meal
    Diet, 7
    MealPlan, 8
MEAL_PLAN
    utils.h, 13
MealPlan, 7
    date, 7
    ID, 7
    maxCal, 7
    meal, 8
    minCal, 8
minCal
    MealPlan, 8
month
    Date, 5

name
    Patients, 8

PATIENTS
    utils.h, 13
Patients, 8
    ID, 8
    name, 8
    phoneNumber, 9
Period, 9
    begin, 9
    end, 9
phoneNumber
    Patients, 9

readFile
    utils.c, 12
    utils.h, 13

utils.c, 11
    dateInPeriod, 12
    exceededCalories, 12
    readFile, 12
utils.h, 12
    DIET, 13
    exceededCalories, 13
    FileType, 13
    MEAL_PLAN, 13
    PATIENTS, 13
    readFile, 13

year
    Date, 5