

Date

Generated by Doxygen 1.8.13



# Contents

<b>1</b>	<b>Implementation of the Date class.</b>	<b>1</b>
<b>2</b>	<b>Bug List</b>	<b>3</b>
<b>3</b>	<b>Class Index</b>	<b>5</b>
3.1	Class List . . . . .	5
<b>4</b>	<b>File Index</b>	<b>7</b>
4.1	File List . . . . .	7
<b>5</b>	<b>Class Documentation</b>	<b>9</b>
5.1	Date Class Reference . . . . .	9
5.1.1	Constructor & Destructor Documentation . . . . .	9
5.1.1.1	Date() [1/2] . . . . .	9
5.1.1.2	Date() [2/2] . . . . .	10
5.1.1.3	~Date() . . . . .	10
5.1.2	Member Function Documentation . . . . .	10
5.1.2.1	add_days() . . . . .	10
5.1.2.2	day() . . . . .	11
5.1.2.3	litprint() . . . . .	11
5.1.2.4	month() . . . . .	12
5.1.2.5	print() . . . . .	12
5.1.2.6	year() . . . . .	13

<b>6 File Documentation</b>	<b>15</b>
6.1 <a href="#">/home/andrea/DSSC/advanced_programming-2018-19/exercises/c++/04_custom_types/Date/src/↔ Date.cpp File Reference</a> . . . . .	15
6.1.1 Variable Documentation . . . . .	16
6.1.1.1 days . . . . .	16
6.1.1.2 MonthsLookup . . . . .	16
6.2 <a href="#">/home/andrea/DSSC/advanced_programming-2018-19/exercises/c++/04_custom_types/Date/src/↔ Date.h File Reference</a> . . . . .	16
6.2.1 Enumeration Type Documentation . . . . .	17
6.2.1.1 Months . . . . .	17
6.3 <a href="#">/home/andrea/DSSC/advanced_programming-2018-19/exercises/c++/04_custom_types/Date/src/main.cpp File Reference</a> . . . . .	18
6.3.1 Function Documentation . . . . .	18
6.3.1.1 main() . . . . .	18
<b>Index</b>	<b>21</b>

## Chapter 1

# Implementation of the Date class.

has three private attributes to represent day, month and year use a scoped enum for month it has the following public functions:

```
it has a constructor that takes as arguments a day, a month and a year. (Forget about the validation for now)
it has a day() function that returns the day
it has a month() function that returns the month
it has a year() function that returns the year
it has a function add_days(const unsigned int n) which adds n days. You have to take care to increment months
```



## Chapter 2

# Bug List

### Member [MonthsLookup](#)

enum use for month to be fixed. Had to implement a lookup method that could be avoided.





## Chapter 3

# Class Index

### 3.1 Class List

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

<a href="#">Date</a> . . . . .	9
--------------------------------	---



## Chapter 4

# File Index

### 4.1 File List

Here is a list of all files with brief descriptions:

/home/andrea/DSSC/advanced_programming-2018-19/exercises/c++/04_custom_types/Date/src/ <a href="#">Date.cpp</a> . . . . .	15
/home/andrea/DSSC/advanced_programming-2018-19/exercises/c++/04_custom_types/Date/src/ <a href="#">Date.h</a> . . . . .	16
/home/andrea/DSSC/advanced_programming-2018-19/exercises/c++/04_custom_types/Date/src/ <a href="#">main.cpp</a> . . . . .	18



## Chapter 5

# Class Documentation

### 5.1 Date Class Reference

```
#include <Date.h>
```

#### Public Member Functions

- `Date ()`
- `Date (int dd, Months mm, int yy)`
- `~Date ()`
- `int day ()`  
*getter of day*
- `string month ()`  
*getter of month: to be rewritten later using enum*
- `int year ()`  
*getter of year*
- `void print ()`  
*Prints the date in standard output, using 3 characters for the month.*
- `void litprint ()`  
*add n days to a date, taking in to account new months*
- `void add_days (int n)`

#### 5.1.1 Constructor & Destructor Documentation

##### 5.1.1.1 `Date()` [1/2]

```
Date::Date ( )
```

### 5.1.1.2 Date() [2/2]

```
Date::Date (
    int dd,
    Months mm,
    int yy )
```

< Constructor, invoked e-g. by [Date](#) d{21,Feb,2019} Here is the call graph for this function:



### 5.1.1.3 ~Date()

```
Date::~Date ( ) [default]
```

Here is the caller graph for this function:



## 5.1.2 Member Function Documentation

### 5.1.2.1 add\_days()

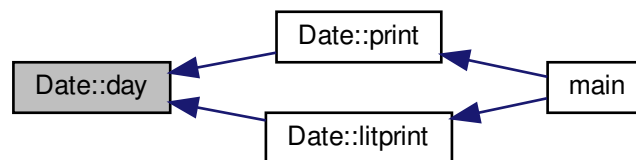
```
void Date::add_days (
    int n )
```

## 5.1.2.2 day()

```
int Date::day ( )
```

getter of day

Here is the caller graph for this function:

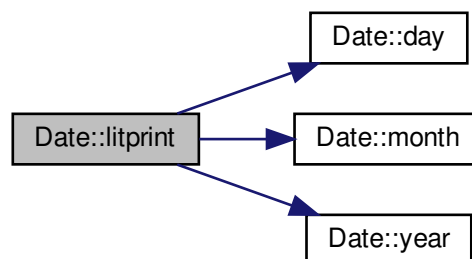


## 5.1.2.3 litprint()

```
void Date::litprint ( )
```

add n days to a date, taking in to account new months

Here is the call graph for this function:



Here is the caller graph for this function:

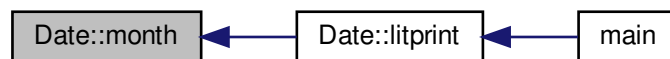


#### 5.1.2.4 month()

```
string Date::month ( )
```

getter of month: to be rewritten later using enum

< can't get enums, only int values. Created a lookup array. EDIT: can be fixed with static\_casting Here is the caller graph for this function:

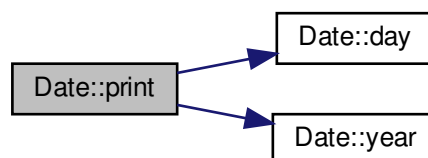


#### 5.1.2.5 print()

```
void Date::print ( )
```

Prints the date in standard output, using 3 characters for the month.

Here is the call graph for this function:



Here is the caller graph for this function:



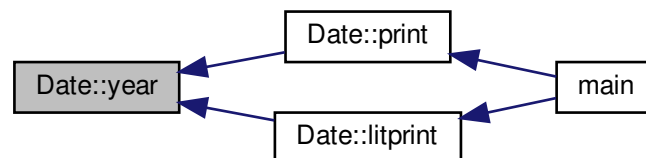


## 5.1.2.6 year()

```
int Date::year ( )
```

getter of year

Prints the date in standard output, using numbers for the month Here is the caller graph for this function:



The documentation for this class was generated from the following files:

- [/home/andrea/DSSC/advanced\\_programming-2018-19/exercises/c++/04\\_custom\\_types/Date/src/Date.h](#)
- [/home/andrea/DSSC/advanced\\_programming-2018-19/exercises/c++/04\\_custom\\_types/Date/src/Date.cpp](#)

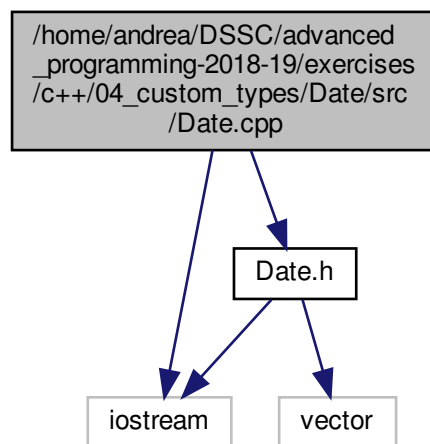


## Chapter 6

# File Documentation

### 6.1 /home/andrea/DSSC/advanced\_programming-2018-19/exercises/c++/04\_custom\_types/Date/src/Date.cpp File Reference

```
#include <iostream>
#include "Date.h"
Include dependency graph for Date.cpp:
```



### Variables

- `std::vector< string > MonthsLookup {"Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"}`  
*Implementation of the `Date` class.*
- `std::vector< int > days {31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 31,}`  
*Month lenght, in days, for `add_days()`*

### 6.1.1 Variable Documentation

#### 6.1.1.1 days

```
std::vector<int> days {31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 31,}
```

Month lenght, in days, for add\_days()

#### 6.1.1.2 MonthsLookup

```
std::vector<string> MonthsLookup {"Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul", "Aug",  
"Sep", "Oct", "Nov", "Dec"}
```

Implementation of the [Date](#) class.

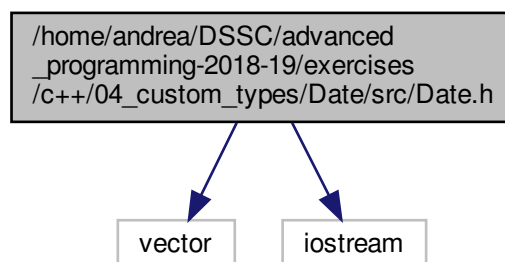
dd Day of the month mm Month of the year yy Year

**Bug** enum use for month to be fixed. Had to implement a lookup method that could be avoided.

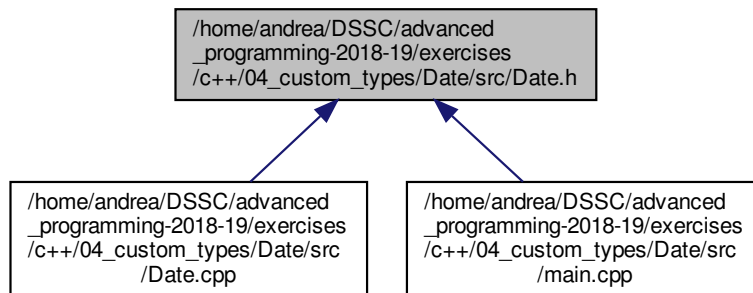
lookup vector for Months

## 6.2 /home/andrea/DSSC/advanced\_programming-2018-19/exercises/c++/04\_custom\_↵ types/Date/src/Date.h File Reference

```
#include <vector>  
#include <iostream>  
Include dependency graph for Date.h:
```



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



## Classes

- class [Date](#)

## Enumerations

- enum [Months](#) {  
[Jan](#) = 1, [Feb](#), [Mar](#), [Apr](#),  
[May](#), [Jun](#), [Jul](#), [Aug](#),  
[Sep](#), [Oct](#), [Nov](#), [Dec](#) }

### 6.2.1 Enumeration Type Documentation

#### 6.2.1.1 Months

enum [Months](#)

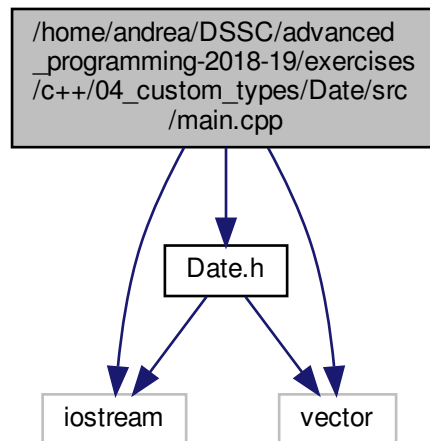
##### Enumerator

Jan	
Feb	
Mar	
Apr	
May	
Jun	
Jul	
Aug	
Sep	
Oct	
Nov	
Dec	

### 6.3 /home/andrea/DSSC/advanced\_programming-2018-19/exercises/c++/04\_custom\_types/Date/src/main.cpp File Reference

```
#include <iostream>
#include <vector>
#include "Date.h"
```

Include dependency graph for main.cpp:



#### Functions

- `int main()`

*Main: testing the implemented class.*

#### 6.3.1 Function Documentation

##### 6.3.1.1 `main()`

```
int main ( )
```

Main: testing the implemented class.

< test constructor

< test getters

< test getters

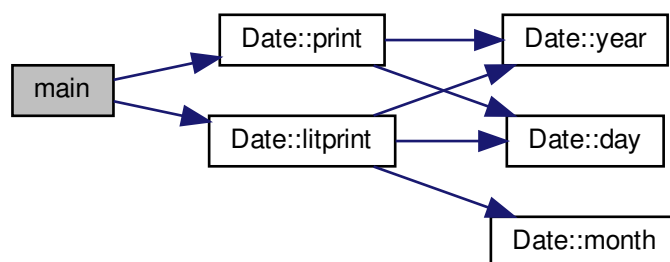
---

< test getters

< test getters

< test direct methods

< test add\_days Here is the call graph for this function:







# Index

/home/andrea/DSSC/advanced\_programming-2018-  
19/exercises/c++/04\_custom\_types/Date/src/↵ year  
Date.cpp, 12  
Date.h, 16

/home/andrea/DSSC/advanced\_programming-2018-  
19/exercises/c++/04\_custom\_types/Date/src/↵  
Date.h, 16

/home/andrea/DSSC/advanced\_programming-2018-  
19/exercises/c++/04\_custom\_types/Date/src/main.↵  
cpp, 18

~Date  
Date, 10

add\_days  
Date, 10

Date, 9  
~Date, 10  
add\_days, 10  
Date, 9  
day, 10  
litprint, 11  
month, 12  
print, 12  
year, 12

Date.cpp  
days, 16  
MonthsLookup, 16

Date.h  
Months, 17

day  
Date, 10

days  
Date.cpp, 16

litprint  
Date, 11

main  
main.cpp, 18

main.cpp  
main, 18

month  
Date, 12

Months  
Date.h, 17

MonthsLookup  
Date.cpp, 16

print  
Date, 12