

date\_custom\_class

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# Chapter 1

## Class Index

### 1.1 Class List

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

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## Chapter 2

# File Index

### 2.1 File List

Here is a list of all documented files with brief descriptions:

/home/w-wilson/DSSC/first_year/AP/advanced_programming-2018-19/exercises/c++/04_custom_↔		
types/date/include/ <a href="#">date.h</a>		
Declaration of <a href="#">Date</a> class . . . . .		9
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## Chapter 3

# Class Documentation

### 3.1 Date Class Reference

Implement a date class.

```
#include <date.h>
```

#### Public Member Functions

- unsigned int `day` () const  
*Returns the value of the day variable.*
- `m_enum month` () const  
*Returns the value of the month variable.*
- int `year` () const  
*Returns the value of the year variable.*
- `Date` (unsigned int `_d`, `m_enum _m`, int `_y`)  
*`Date` constructor.*
- bool `is_leap` ()  
*Checks if the year is leap.*
- void `add_day` ()  
*Adds a single day to the current date.*
- void `add_days` (const int `n`)  
*Adds multiple days.*

#### 3.1.1 Detailed Description

Implement a date class.

Contains function to add days and check if a year is leap

#### 3.1.2 Member Function Documentation

##### 3.1.2.1 `add_day()`

```
void Date::add_day ( )
```

Adds a single day to the current date.

Adds a single day checking if the month or the year needs to advance as well.

**Parameters**

<i>none</i>	
-------------	--

**Returns**

none

**3.1.2.2 add\_days()**

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

Adds multiple days.

Calls [add\\_day\(\)](#) *n* times.

**Parameters**

<i>n</i>	number of days to e added
----------	---------------------------

**Returns**

none

**3.1.2.3 is\_leap()**

```
bool Date::is_leap ( )
```

Checks if the year is leap.

Returns True if the year is divisible by 4 or by 400

**Parameters**

<i>none</i>	
-------------	--

**Returns**

bool

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

- [/home/w-wilson/DSSC/first\\_year/AP/advanced\\_programming-2018-19/exercises/c++/04\\_custom\\_types/date/include/date.h](#)
- [date.cc](#)

## 3.2 Invalid\_day Struct Reference

Struct for exceptions regarding incorrect number of days per month.

```
#include <date.h>
```

### Public Member Functions

- **Invalid\_day** (const std::string &s)

### Public Attributes

- std::string **message**

### 3.2.1 Detailed Description

Struct for exceptions regarding incorrect number of days per month.

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

- [/home/w-wilson/DSSC/first\\_year/AP/advanced\\_programming-2018-19/exercises/c++/04\\_custom\\_types/date/include/date.h](#)
- [date.cc](#)



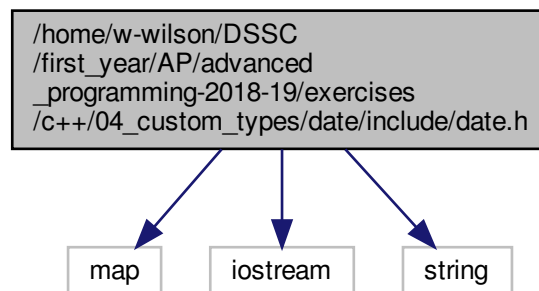
## Chapter 4

# File Documentation

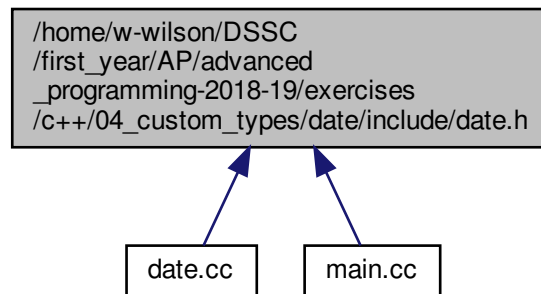
### 4.1 `/home/w-wilson/DSSC/first_year/AP/advanced_programming-2018-19/exercises/c++/04_/_custom_types/date/include/date.h` File Reference

Declaration of `Date` class.

```
#include <map>
#include <iostream>
#include <string>
Include dependency graph for date.h:
```



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



## Classes

- struct [Invalid\\_day](#)  
*Struct for exceptions regarding incorrect number of days per month.*
- class [Date](#)  
*Implement a date class.*

## Enumerations

- enum [m\\_enum](#) {  
  **jan** = 1, **feb**, **mar**, **apr**,  
  **may**, **jun**, **jul**, **aug**,  
  **sep**, **oct**, **nov**, **dec** }  
*Enum Class containing the months of a year.*

## Functions

- `std::ostream & operator<< (std::ostream &os, const Date &date)`
- `bool operator== (const Date &lhs, const Date &rhs)`
- `bool operator!= (const Date &lhs, const Date &rhs)`

### 4.1.1 Detailed Description

Declaration of [Date](#) class.

#### Author

Patrick Indri

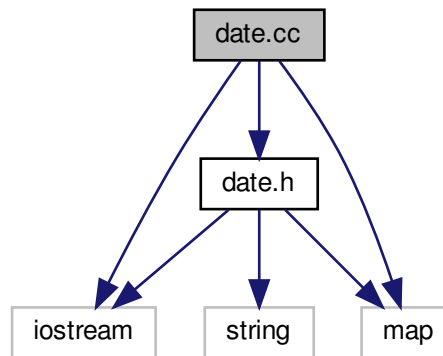
#### Date

14/01/19

## 4.2 date.cc File Reference

implementation of the [Date](#) class

```
#include <iostream>
#include <map>
#include "date.h"
Include dependency graph for date.cc:
```



### Functions

- `std::ostream & operator<< (std::ostream &os, const Date &date)`
- `bool operator== (const Date &lhs, const Date &rhs)`
- `bool operator!= (const Date &lhs, const Date &rhs)`

### 4.2.1 Detailed Description

implementation of the [Date](#) class

#### Author

Patrick Indri

#### Date

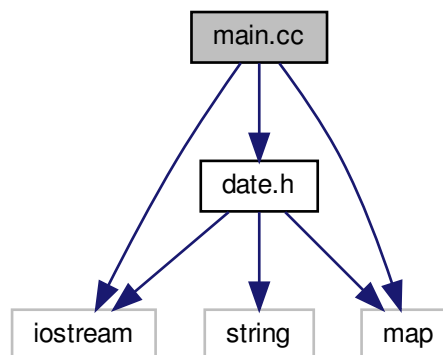
14/01/19

### 4.3 main.cc File Reference

Tests the [Date](#) class.

```
#include <iostream>
#include <map>
#include "date.h"
```

Include dependency graph for main.cc:



#### Functions

- `int main ()`

#### 4.3.1 Detailed Description

Tests the [Date](#) class.

##### Author

Patrick Indri

##### Date

14/01/19



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