

Operadores

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Chapter 1

Class Index

1.1 Class List

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

Vetor2d	5
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Chapter 2

File Index

2.1 File List

Here is a list of all files with brief descriptions:

main.cpp	9
vetor2d.cpp	10
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Chapter 3

Class Documentation

3.1 Vetor2d Class Reference

```
#include <vetor2d.h>
```

Public Member Functions

- [Vetor2d](#) (float _x=0, float _y=0)
- [Vetor2d](#) (const [Vetor2d](#) &copia)
- [~Vetor2d](#) ()
- void [setX](#) (float x_)
- float [getX](#) ()
- void [setY](#) (float y_)
- float [getY](#) ()
- void [print](#) (void)
- float [norma](#) (void)
- [Vetor2d produto](#) (float a)
- float [produto](#) ([Vetor2d](#) v2)
- [Vetor2d soma](#) ([Vetor2d](#) v)
- [Vetor2d operator+](#) ([Vetor2d](#) v)
- [Vetor2d operator*](#) (float a)

Friends

- [Vetor2d operator*](#) (float a, [Vetor2d](#) v)
- std::ostream & [operator<<](#) (std::ostream &os, [Vetor2d](#) v)

3.1.1 Constructor & Destructor Documentation

3.1.1.1 Vetor2d() [1/2]

```
Vetor2d::Vetor2d (
    float _x = 0,
    float _y = 0 )
```

3.1.1.2 Vetor2d() [2/2]

```
Vetor2d::Vetor2d (
    const Vetor2d & copia )
```

3.1.1.3 ~Vetor2d()

```
Vetor2d::~Vetor2d ( )
```

3.1.2 Member Function Documentation

3.1.2.1 getX()

```
float Vetor2d::getX ( )
```

3.1.2.2 getY()

```
float Vetor2d::getY ( )
```

3.1.2.3 norma()

```
float Vetor2d::norma (
    void )
```

3.1.2.4 operator*()

```
Vetor2d Vetor2d::operator* (
    float a )
```

3.1.2.5 operator+()

```
Vetor2d Vetor2d::operator+ (
    Vetor2d v )
```

3.1.2.6 print()

```
void Vetor2d::print (
    void )
```

3.1.2.7 produto() [1/2]

```
Vetor2d Vetor2d::produto (
    float a )
```

3.1.2.8 produto() [2/2]

```
float Vetor2d::produto (
    Vetor2d v2 )
```

3.1.2.9 setX()

```
void Vetor2d::setX (
    float x_ )
```

3.1.2.10 setY()

```
void Vetor2d::setY (
    float y_ )
```

3.1.2.11 soma()

```
Vetor2d Vetor2d::soma (
    Vetor2d v )
```

3.1.3 Friends And Related Function Documentation

3.1.3.1 operator*

```
Vetor2d operator* (
    float a,
    Vetor2d v ) [friend]
```

3.1.3.2 operator<<

```
std::ostream & operator<< (
    std::ostream & os,
    Vetor2d v ) [friend]
```

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

- [vetor2d.h](#)
- [vetor2d.cpp](#)

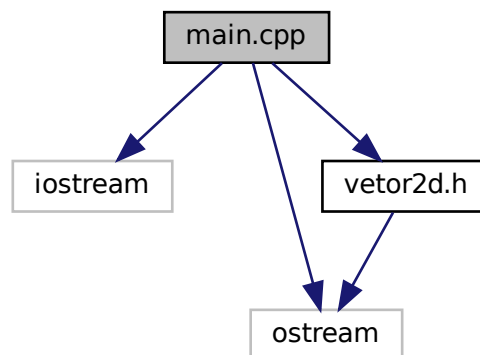
Chapter 4

File Documentation

4.1 main.cpp File Reference

```
#include <iostream>  
#include <ostream>  
#include "vetor2d.h"
```

Include dependency graph for main.cpp:



Functions

- int `main` ()

4.1.1 Function Documentation

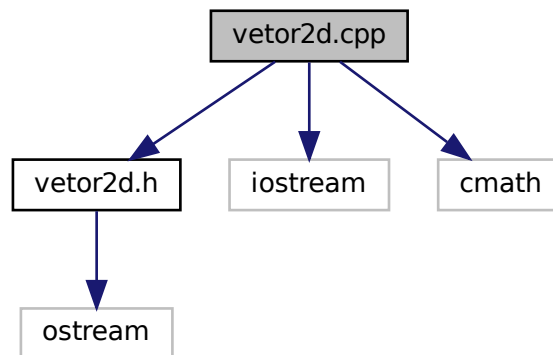
4.1.1.1 main()

```
int main ( )
```

4.2 vetor2d.cpp File Reference

```
#include "vetor2d.h"  
#include <iostream>  
#include <cmath>
```

Include dependency graph for vetor2d.cpp:



Functions

- `std::ostream & operator<< (std::ostream &os, Vetor2d v)`
- `Vetor2d operator* (float a, Vetor2d v)`

4.2.1 Function Documentation

4.2.1.1 operator*()

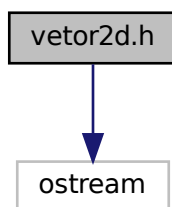
```
Vetor2d operator* (  
    float a,  
    Vetor2d v )
```

4.2.1.2 operator<<()

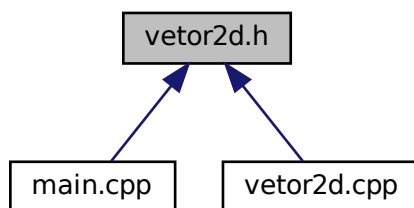
```
std::ostream & operator<< (  
    std::ostream & os,  
    Vetor2d v )
```

4.3 vetor2d.h File Reference

```
#include <ostream>  
Include dependency graph for vetor2d.h:
```



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



Classes

- class `Vetor2d`

4.4 vetor2d.h

[Go to the documentation of this file.](#)

```
1 // diretivas de compilacao
2 #ifndef VETOR2D_H
3 #define VETOR2D_H
4 #include <ostream>
5
6 class Vetor2d{
7 private:
8     float x, y;
9 public:
10     // metodo construtor
11     // Vetor2d(); // construtor padrao (default)
12
13     // metodo construtor COM ARGUMENTOS
14     Vetor2d(float _x=0, float _y=0);
15     // Vetor2d(float _xy);
16
17     // metodo construtor DE COPIA
18     // const informa que a variavel copia
19     // NAO PODERA SER ALTERADA
20     // usado para COPIA PROFUNDA (deep copy)
21     Vetor2d(const Vetor2d &copia);
22
23     // metodo destrutor
24     ~Vetor2d();
25
26     void setX(float x_);
27     float getX();
28     void setY(float y_);
29     float getY();
30     void print(void);
31     float norma(void);
32
33     // sobrecargas dos metodos produto
34     Vetor2d produto(float a);
35     float produto(Vetor2d v2);
36
37     Vetor2d soma(Vetor2d v);
38     Vetor2d operator + (Vetor2d v);
39
40     Vetor2d operator *(float a);
41     // uma funcao amiga eh uma funcao
42     // cujo acesso aos campos privados eh
43     // permitido
44     friend Vetor2d operator *(float a, Vetor2d v);
45
46     friend std::ostream &operator<< (std::ostream& os, Vetor2d v);
47
48 };
49 // FUNCAO
50 // 4*v1 -> operator*(4,v1)
51 //Vetor2d operator *(float a, Vetor2d v);
52
53 #endif // VETOR2D_H
54
55
56
57
```


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