## **C** Syntax

## **Syntax**

You have already seen the following code a couple of times in the first chapters. Let's break it down to understand it better:

## **Example**

```
#include <stdio.h>
int main() {
  printf("Hello World!");
  return 0;
}
```

## **Example explained**

**Line 1:** #include <stdio.h> is a **header file library** that lets us work with input and output functions, such as printf() (used in line 4). Header files add functionality to C programs.

Don't worry if you don't understand how #include <stdio.h> works. Just think of it as something that (almost) always appears in your program.

**Line 2:** A blank line. C ignores white space. But we use it to make the code more readable.

**Line 3:** Another thing that always appear in a C program, is main(). This is called a **function**. Any code inside its curly brackets {} will be executed.

**Line 4:** printf() is a **function** used to output/print text to the screen. In our example it will output "Hello World!".

Note that: Every C statement ends with a semicolon;

Note: The body of int main() could also been written as:
int main(){printf("Hello World!");return 0;}

**Remember:** The compiler ignores white spaces. However, multiple lines makes the code more readable.

**Line 5:** return 0 ends the main() function.

**Line 6:** Do not forget to add the closing curly bracket } to actually end the main function.