

C++ Prerequisites – Checklist

April 23, 2014

The very basics: do you know ...

- what a compiler does?
- what a `main` function is?
- what the difference between an `int` and a `double` is?

If you have seen Java, you should already know ...

- the basic data types,
- functions,
- arrays (even though they work a little bit differently in C++),
- controlling structures: `for` and `while` loops, `if` and `switch` statements,
- what classes and objects are.

C++ specifics that you really should know about are ...

- what `#include <...>` does (and what a header is),
- what the difference between *call-by-reference* and *call-by-value* is,
- *pointers* (!) and *references*,
- input and output streams (`cout`, `cin`, but also `ifstream`, `ofstream`)
- the STL container classes (`vector`, `set`, `list`, ...),
- the class `string`.

C++ specifics that are good to know are ...

- keyword `const`,
- the concept of iterators over containers.