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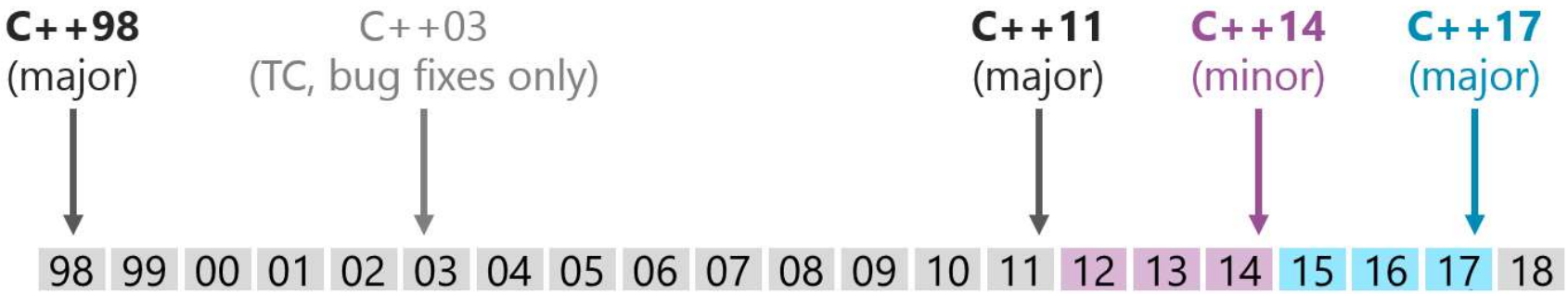
DI TECNOLOGIA

Modern C++

202x

Modern C++


C++98
(major)
C++03
(TC, bug fixes only)
C++11
(major)
C++14
(minor)
C++17
(major)
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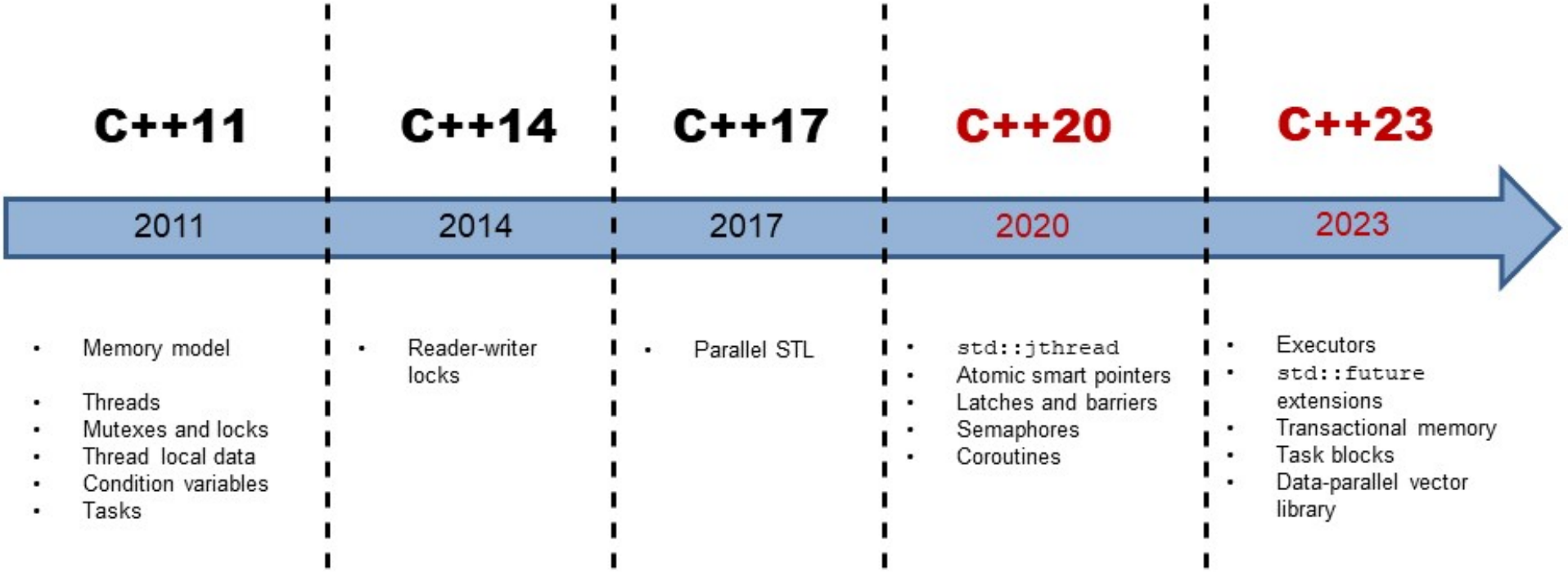

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Prerequisites

To fully understand the course, it is required:

- Basic knowledge of standard C++98

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The program

1 **Presentation of the course, tools**

2 **Prerequisites: refresh of C++98**

3 **The basics: nullptr, auto, type aliases, initializer list, uniform initialization**

4 **The basics: range-based loops, constexpr, scoped enums, override and final.**

5 **Advanced topics: Lambda functions, STL containers, algorithms**

6 **Advanced topics: Move semantics, Smart pointers**

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The program

7 Advanced topics: Multithread

8 Advanced topics: New features in C++20

9 Hands on code

10 Correction and discussion of the final assignment

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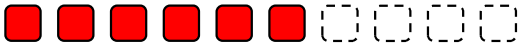
The final assignment

- You will fork a GitHub repository with some code to develop / questions to answer / report to write / ...
- You will develop the assignment and push on your fork.
- We shall review the assignment and discuss in the last lesson.