## Introduction

Below, you can find a list of the topics that we'll cover in the section.

C++17 is a significant update for the language, and it brings a lot of features in the Standard Library.

So far, this book has covered the most important aspects, but there are many more things to describe!

This part of the course briefly summarises other changes in the Standard Library:

- What's std::byte?
- What are the new functionalities of **maps** and **sets**
- New algorithms: sampling
- Special Mathematical Functions
- Shared Pointers and Arrays
- Non-member size(), data() and empty()
- constexpr additions to the Standard Library
- How to lock multiple mutexes with scoped\_lock?
- What's a polymorphic allocator? How can it help with memory management?

Let's get started with std::byte.