Text Processing

C++ handles text by using std::string and std::string_view utilities.

WE'LL COVER THE FOLLOWING ^

- String
- String View
- Regular Expression

With strings and regular expressions, C++ has two powerful libraries to process text.

String

std::string possesses a rich collection of methods to analyze and modify its
text. Because it has a lot in common with an std::vector of characters, the
algorithms of the STL can be used for std::string. std::string is the
successor of the C string but a lot easier and safer to use. C++ strings manage
their memory themselves.

String View

In contrast to a std::string a std::string_view is quite cheap to copy. A
std::string_view is a non-owning reference to a std::string.

Regular Expression

Regular expression is a language for describing text patterns. You can use regular expressions to determine whether a text pattern is present once or more times in a particular text. But that's not all. Regular expressions can be used to replace the content of the matched patterns with a text.

In the next lesson, we will talk about input and output in the C++ Standard Libarary.