Today's Plan

- Mid-semester survey: https://docs.google.com/forms/d/e/1FAIpQLScRWdXKE7eKDf0F65d-LJ0qkf6rn0l1n6JrXclyHm0iBfovOA/viewform
- Please provide feedback by 3pm today.
- Recap questions

How do you describe this semester in one or two words?

Mentimeter

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Key items that you should know now:

- → Some differences between C and C++
- → How to use <iostream>
- → Differences between C strings and std::string

What are some differences between C and C++?

Mentimeter

strings are more like python/java, not arrays

We don't need to allocate/deallocate for string

We now have Bool, Object Orientated Programming Like, Classes, Structs are slightly Different, Printing is easier, no format strings

OOP

OOP, namespace

5

What is a namespace in c++?

Mentimeter

Similar to JAVA packages or a Python Module, Essentially a set of tools for a specific function. ✕

regions/groups for organization, has identifiers ✕

In C++, items with same name can safely be placed in distinct "namespaces", similar to Java packages / Python modules ✕

where your variables or functions exist, you have to say which namespace you are using so there aren't conflicts and differing definitions ✕

The correct answer is: It defines a scope for the identifiers. By doing so, it allows us to use identifiers with the same names (but in different namespaces).

4

Why should you not use "using" in header files?

Mentimeter

- Header files are included in multiple cpp files, this would be similar to importing the namespace multiple times. ✗
- might use it in multiple .cpp files ✗
- We may accidentally include something that we are not using in source file ✗
- leads to confusing name conflicts ✗
- because if they are included in multiple source files, we have issues with multiple definitions ✗

The correct answer is: To avoid "accidental" use of "using" by including the header file.

5

Assuming proper header files are included, which of the following is a legal C++ statement?

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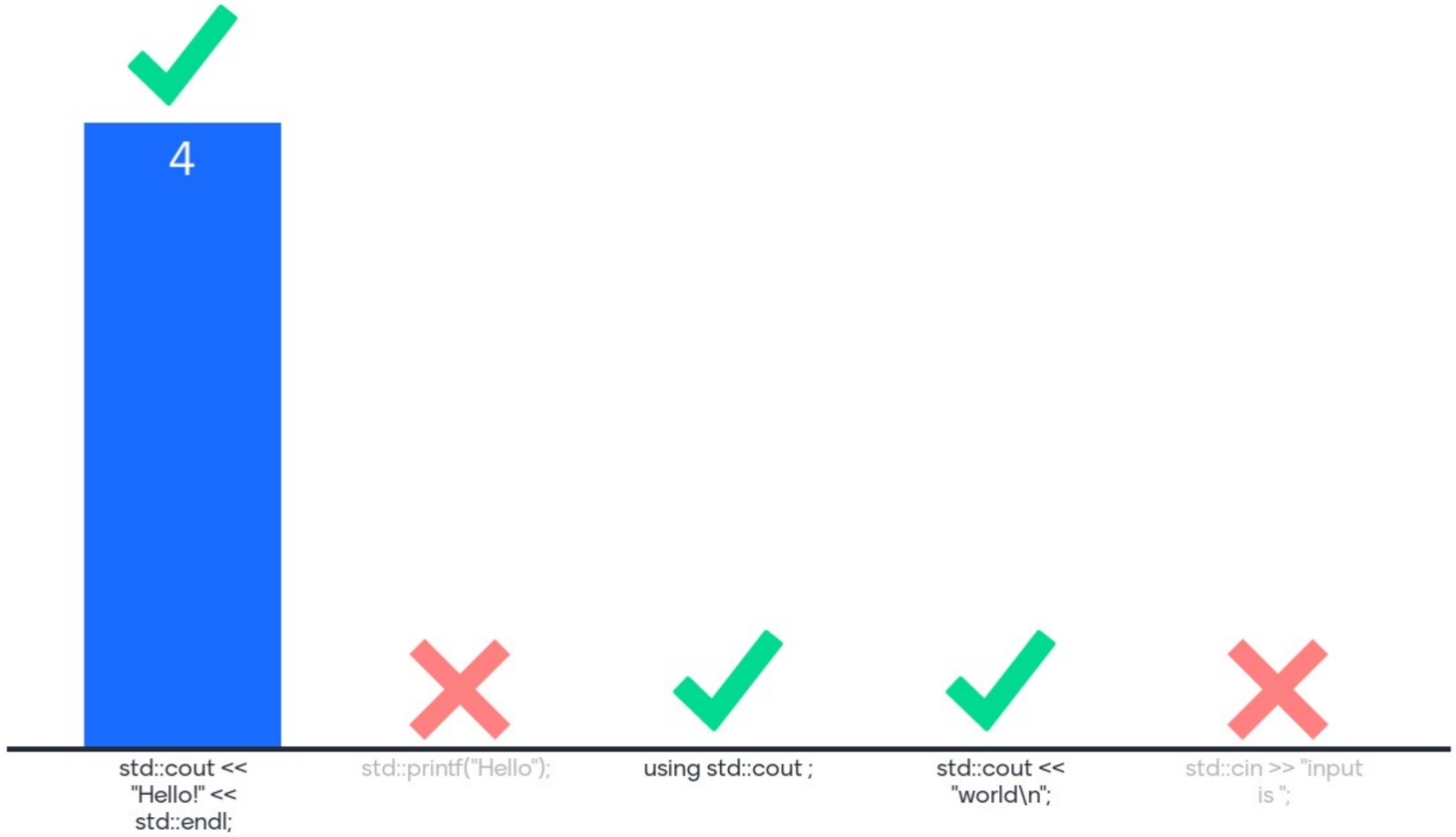


4

How long can a C++ string be?

Mentimeter

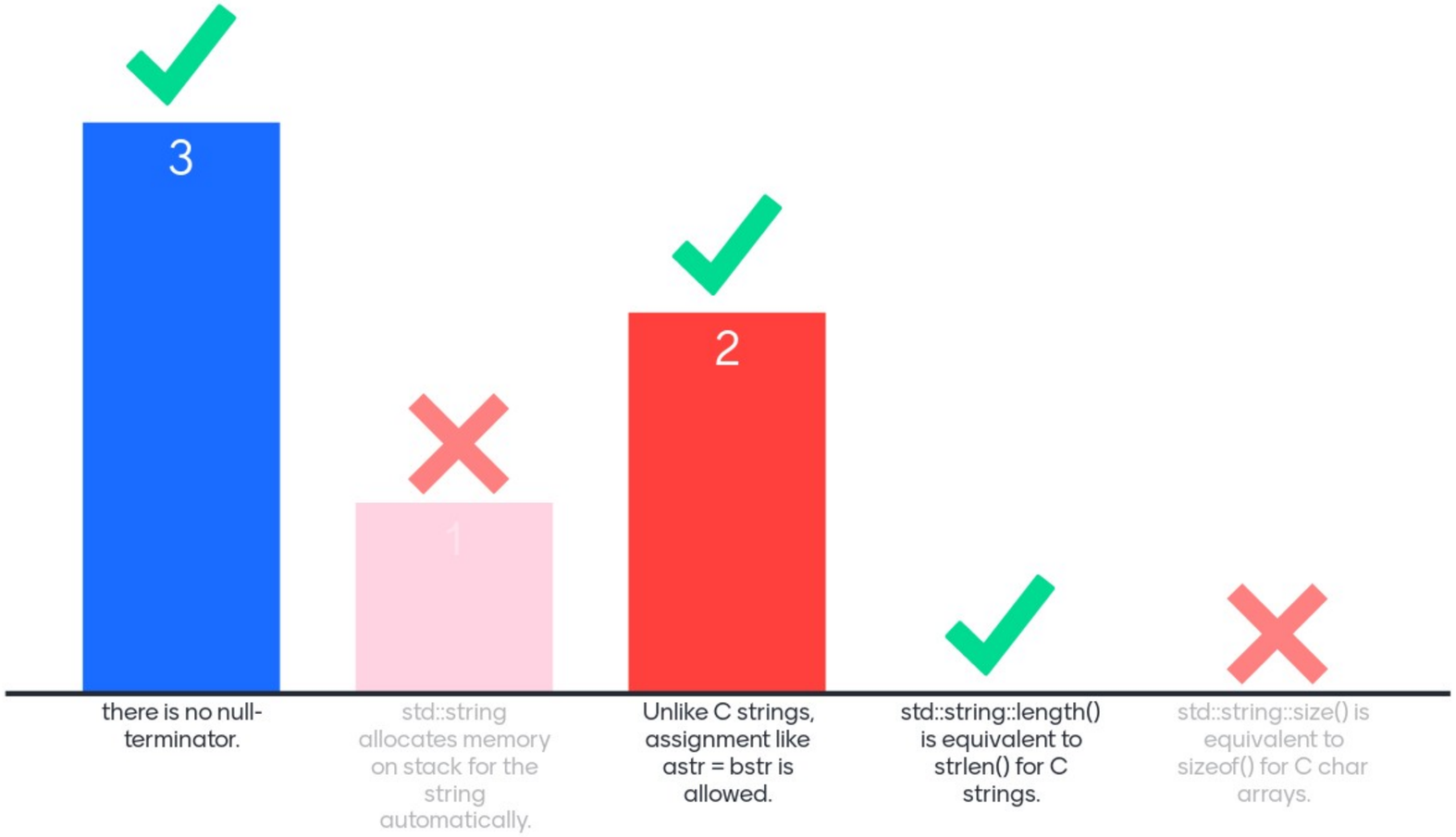
- LONG! It is defined in the heap automatically.
- very long
- unlimited
- arbitrarily long
- arbitrarily long, it is dynamically allocated and automatically managed, not by the programmer

The correct answer is: As long as there is enough memory for it.

5

Which of the below about std::string is true?

Mentimeter



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Q & A

Work on your midterm project in a breakout room.