C++ Club Meeting Notes

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A new decade, a new tool: libman

- Colby Pike (vector-of-bool)
- Reddit
- GitHub
- Specification

libman is a new level of indirection between package management and build systems.

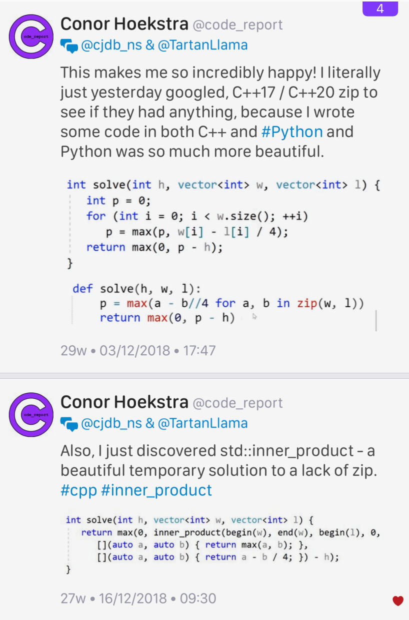
dds is Drop-Dead Simple build and package manager.

- CppCon 2019: Robert Schumacher “How to Herd 1,000 Libraries”

A hidden gem: `inner_product`

- Article

A hidden gem: `inner_product`



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Conor Hoekstra @code_report
@cjdb_ns & @TartanLlama

This makes me so incredibly happy! I literally just yesterday googled, C++17 / C++20 zip to see if they had anything, because I wrote some code in both C++ and #Python and Python was so much more beautiful.

```
int solve(int h, vector<int> w, vector<int> l) {
   int p = 0;
   for (int i = 0; i < w.size(); ++i)
      p = max(p, w[i] - l[i] / 4);
   return max(0, p - h);
}
```

```
def solve(h, w, l):
    p = max(a - b//4 for a, b in zip(w, l))
    return max(0, p - h)
```

29w • 03/12/2018 • 17:47

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Also, I just discovered std::inner_product - a beautiful temporary solution to a lack of zip. #cpp #inner_product

```
int solve(int h, vector<int> w, vector<int> l) {
   return max(0, inner_product(begin(w), end(w), begin(l), 0,
      [](auto a, auto b) { return max(a, b); },
      [](auto a, auto b) { return a - b / 4; }) - h);
}
```

27w • 16/12/2018 • 09:30

Lingo 0.1.0: Text encoding for modern C++

- GitHub: C++11, MIT
- Reddit

Argumentum

> *Argumentum is a C++17 library for writing command-line program interfaces, inspired by Python argparse*

- GitHub: C++17, MPL
- Reddit

Structured Exceptions (Win32) and C++

- Raymond Chen: How can I handle both structured exceptions and C++ exceptions potentially coming from the same source?
    - Reddit
- Raymond Chen: Can I throw a C++ exception from a structured exception?

Book: C++ Move Semantics – The Complete Guide, by Nicolai Josuttis

- Website

> *Move semantics, introduced with C++11, has become a hallmark of modern C++ programming. However, it also complicates the language in many ways. Even after several years of support of move semantics experienced programmers struggle with all the details of move semantics. And style guides still don’t recommend the right consequences for programming even of trivial classes.*