

Lecture 1

Introduction



The IT industry is ...

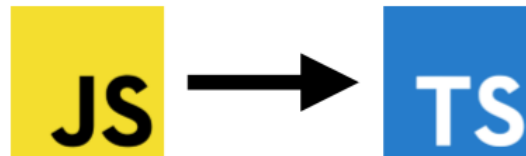
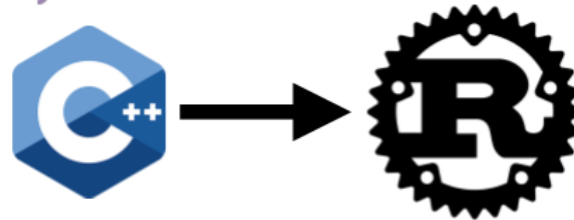
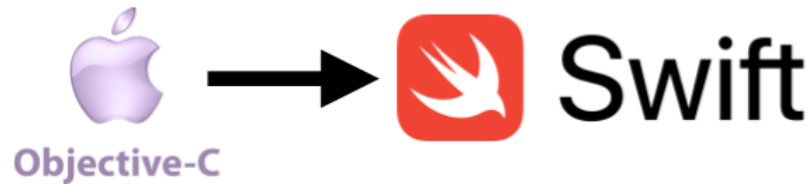
- ◎ Interesting because it is always changing.
- ◎ I am always behind.
- ◎ New things every year, really!
- ◎ Everything is separated.
- ◎ I can learn anything in isolation.



Who are you?

- ◎ Maddening because it is always changing.
- ◎ I spend forever trying to keep up.
- ◎ I keep growing my skillset, it is a continuous task.
- ◎ New skills build upon significant existing knowledge.
- ◎ If I am not integrating everything then – I am lost!!!!

Type safety matters more than ever



Microsoft's Experience

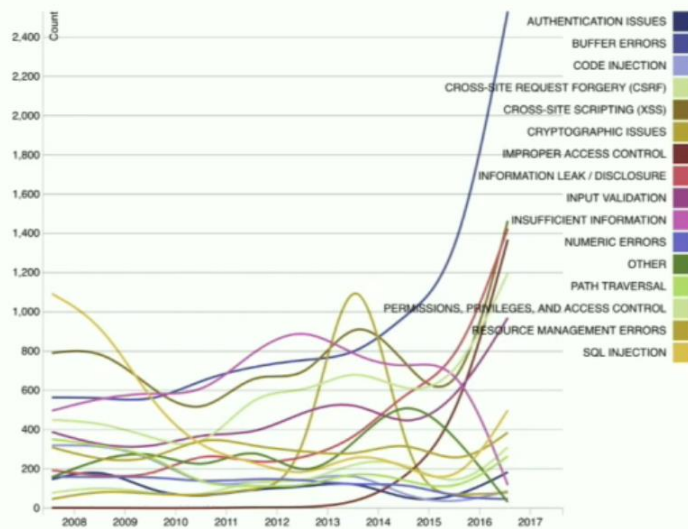


Some lessons learned

YOUR CODE HAS BUGS

NIST security vulnerability causes
from 2008-2017

(The top blue line is for buffer errors)



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THE LINUX FOUNDATION
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New mantra.....



- ◎ Memory (type) safety
 - ◎ Performance
 - ◎ Productivity
-
- ◎ Pick 3! Really ... yes, new benefits!!!
 - ◎ But very, very, very, high entry bar!
 - ◎ Poor programmers need not apply, a changing of the guard????