CSCA48 Summer 2017
Week 4 - Linked Lists

Brian Harrington

University of Toronto

May 24, 2017

UNIVERSITY OF
TORONTO
SCARBOROUGH

THE BIG TWIST

- Ready for a big reveal?
- It might blow your mind
- Hope you're sitting down
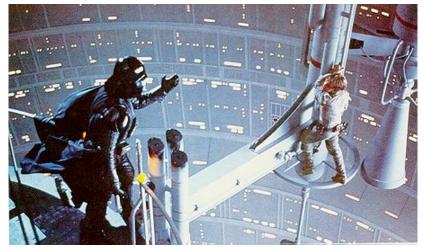- Lists don't exist!

DUN DUN DUUUUUUUUN......

I see dynamically extensible arrays...

Dun dun duuuuuuuun......

The greatest trick Python ever pulled was convincing the world lists exist.

DUN DUN DUUUUUUUUN......

You destroyed fixed sized data allocation
No... I AM a fixed sized data allocation.

DUN DUN DUUUUUUUUN……

YOU MANIACS!!! YOU SECRETLY USE LINKED DATA STRUCTURES TO PRETEND ARRAYS ARE EXTENSIBLE!!! DAMN YOU ALL TO HELL!!!!

DUN DUN DUUUUUUUUN......

- Sorry about that... got a big carried away
- But lists (as we've been imagining them) aren't possible
- They're just an ADT
- Underlying implementation = `Linked Lists`