survey: which have you heard

left side of room

right side of room

COMP1511 Week 9!

Is it ethical to listen to NewJeans?

My GitHub:

https://github.com/william-o-s/unsw_comp1511_tutoring

The Agenda

Assignment 1+2 Thoughts

Some feedback from Assignment 1

- Use guards!
- Use for loops!
- Use comments!
- Be consistent!
- Run the style checker!
- Try clever ways of iterating over the same cells!
- Use good indentation!
- Use self-explanatory variable names (length of name >= 3)
  - Removes need for comments when code is self-explanatory
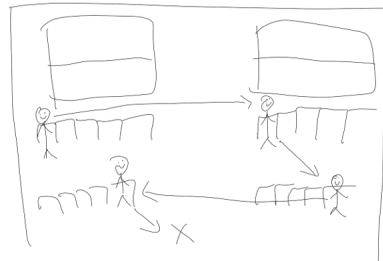- Use constants/enums! And use them cleverly!

VSCode

Let's code!

- Copy
  - Iterates through first linked list
  - Creates second linked list
  - For every node in first list, create node in second list
  - Remember where the head node in the first list is

- Append
  - Use the Copy function
  - Copy the first list
  - Copy the second list
  - Find the tail node in the first list
  - Point the tail node in the first list to the head node of the second list

Free

Free (or as AWS says, $5 per hour)

VSCode

Linked List Visualiser:

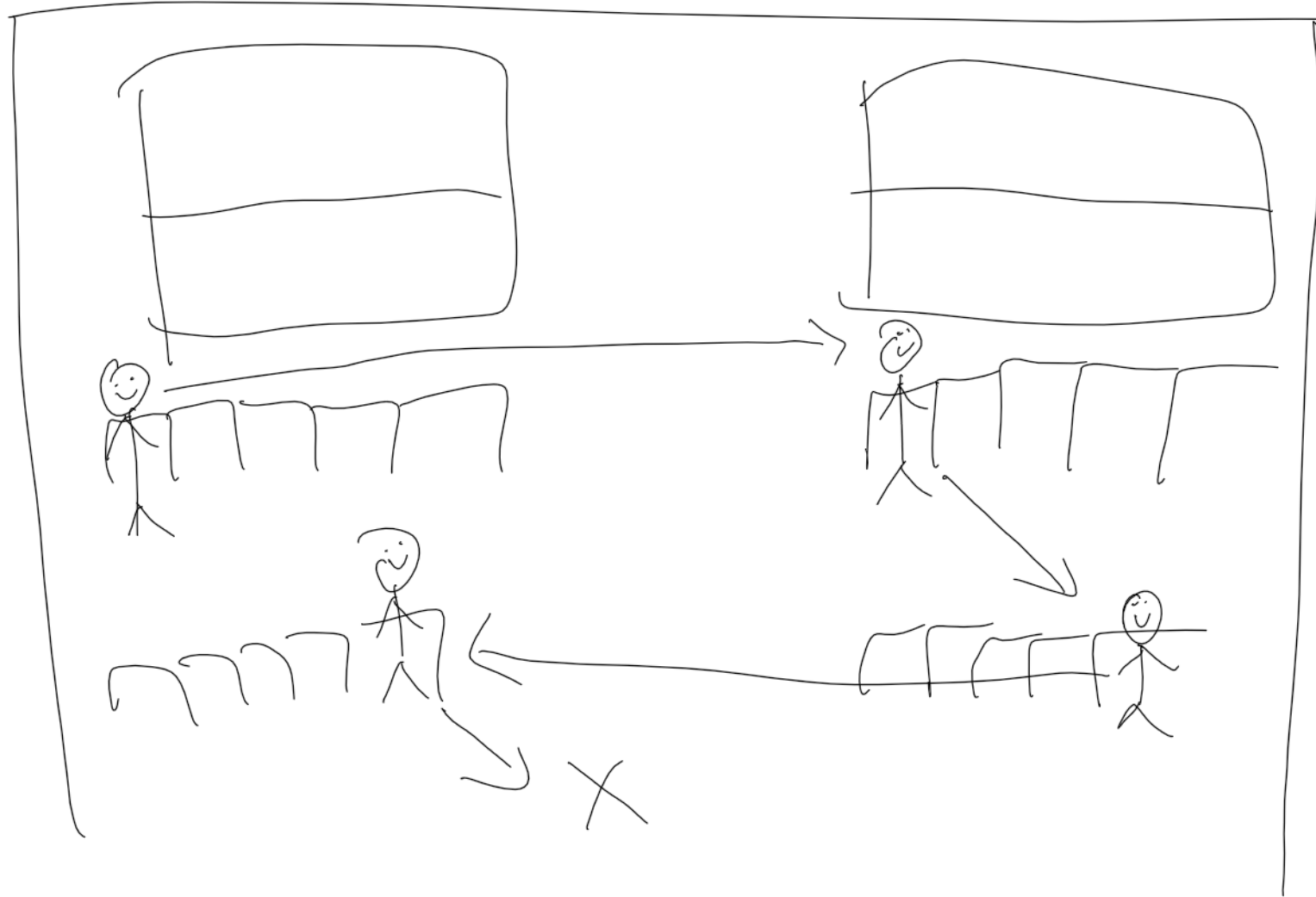https://structs.sh/visualiser/linked-lists

Some feedback from Assignment 1

- Use guards!
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- Try clever ways of iterating over the same cells!
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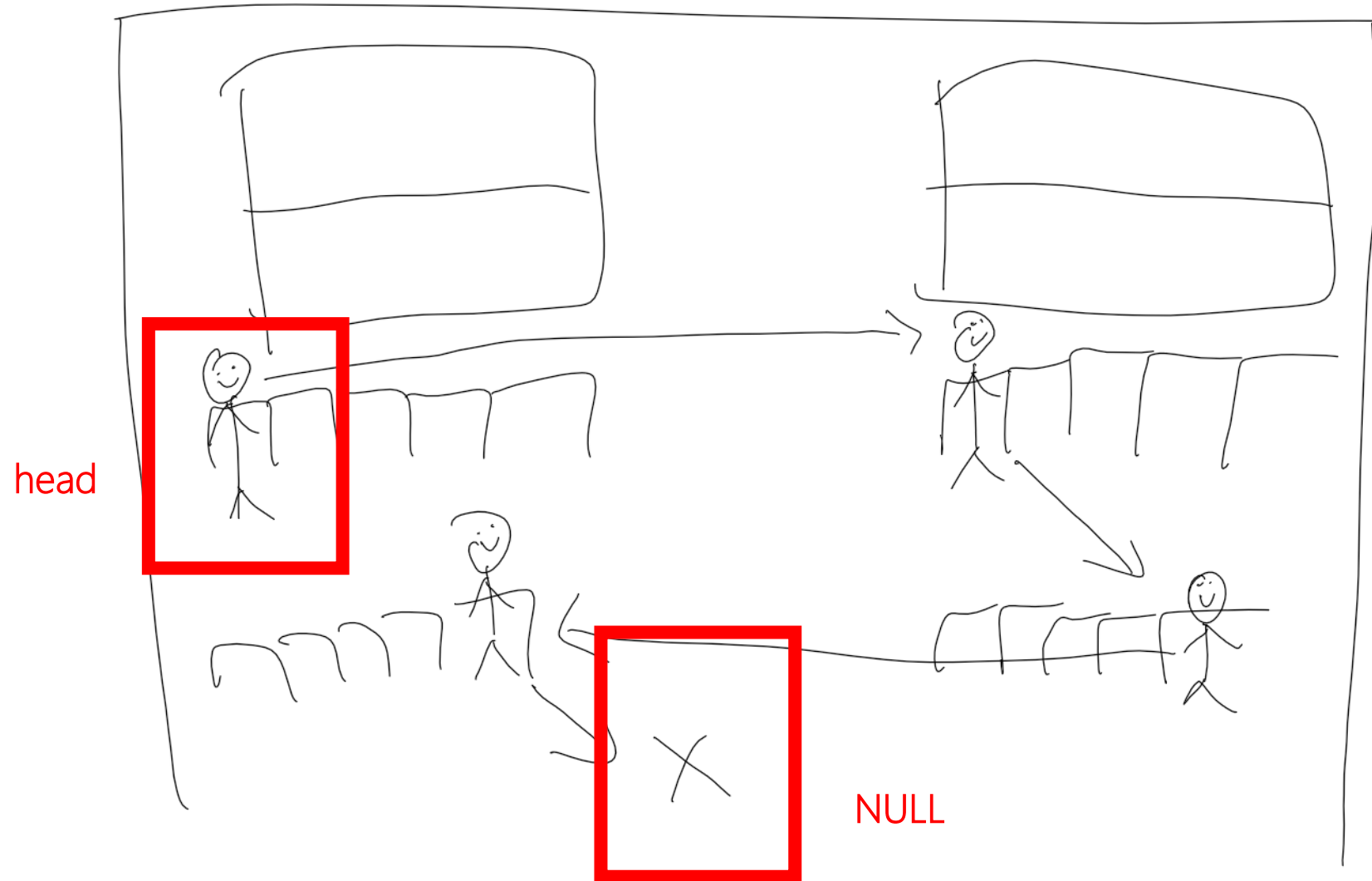- Use constants/enums! And use them cleverly!

Some feedback from Assignment 1

- Don't prematurely optimise, e.g. declaring loop counters outside loops to be reused later, or passing variables declared in the main function into helper functions!
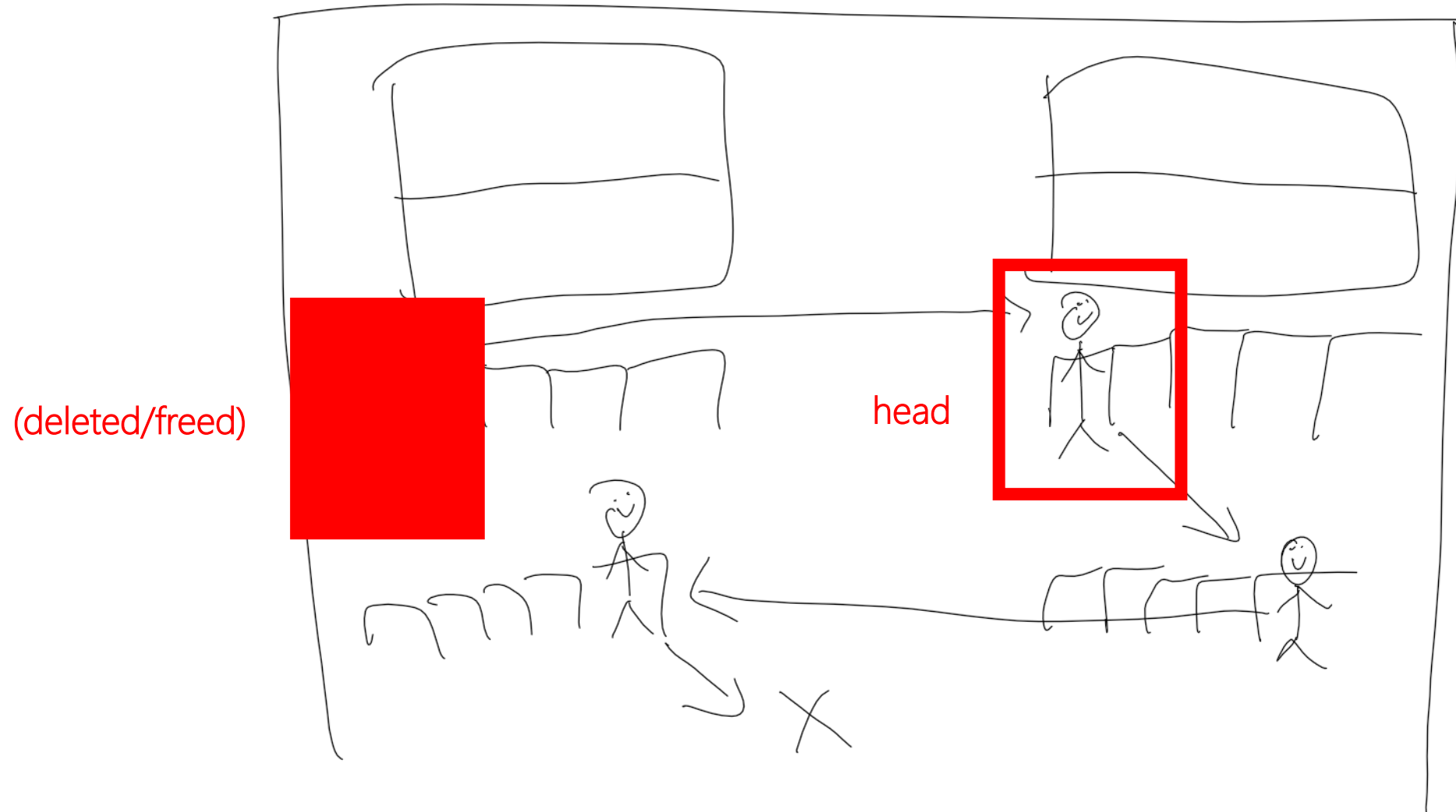 - This is the compiler's job!
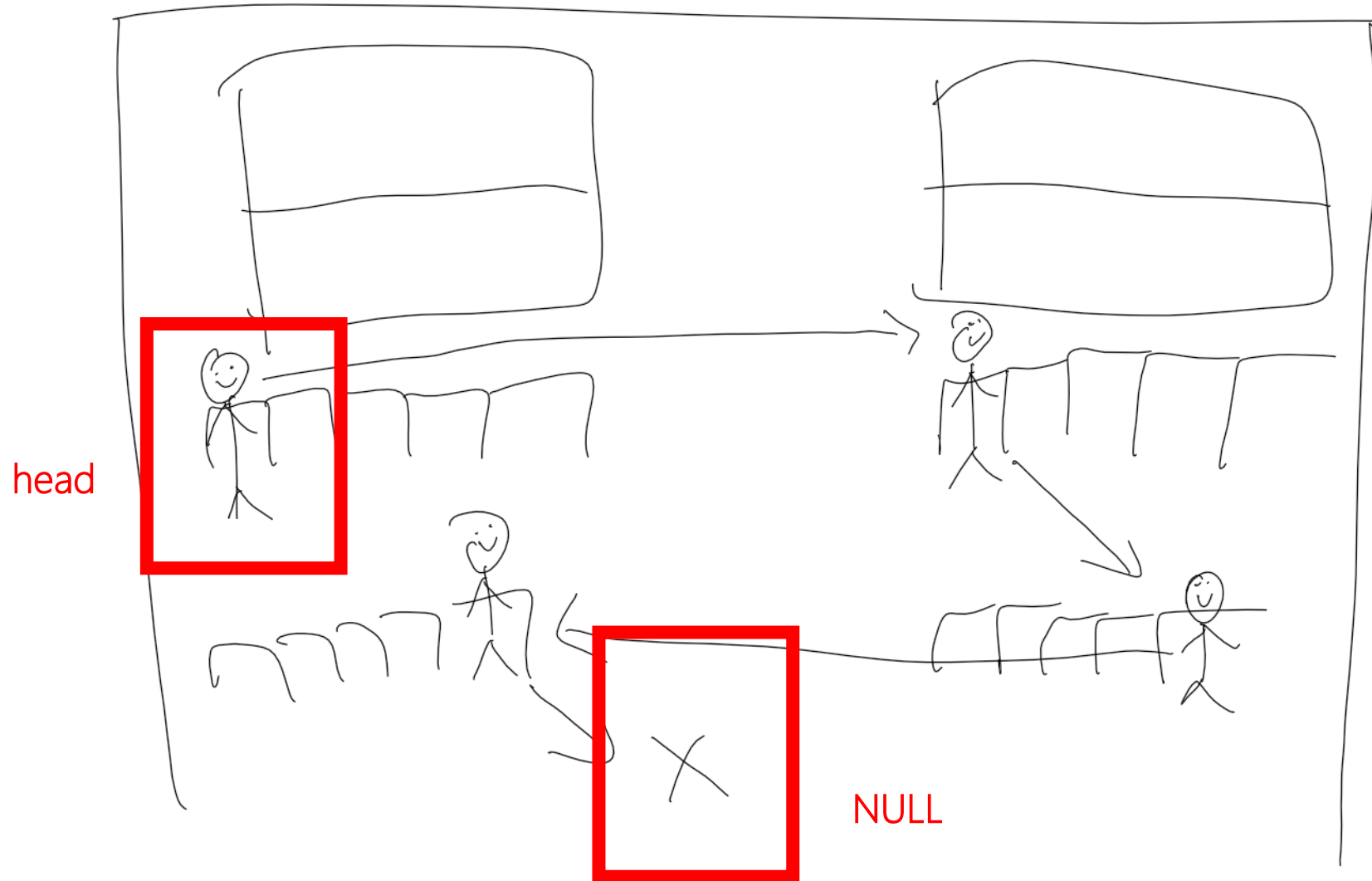
Free (or as AWS says, $5 per hour)
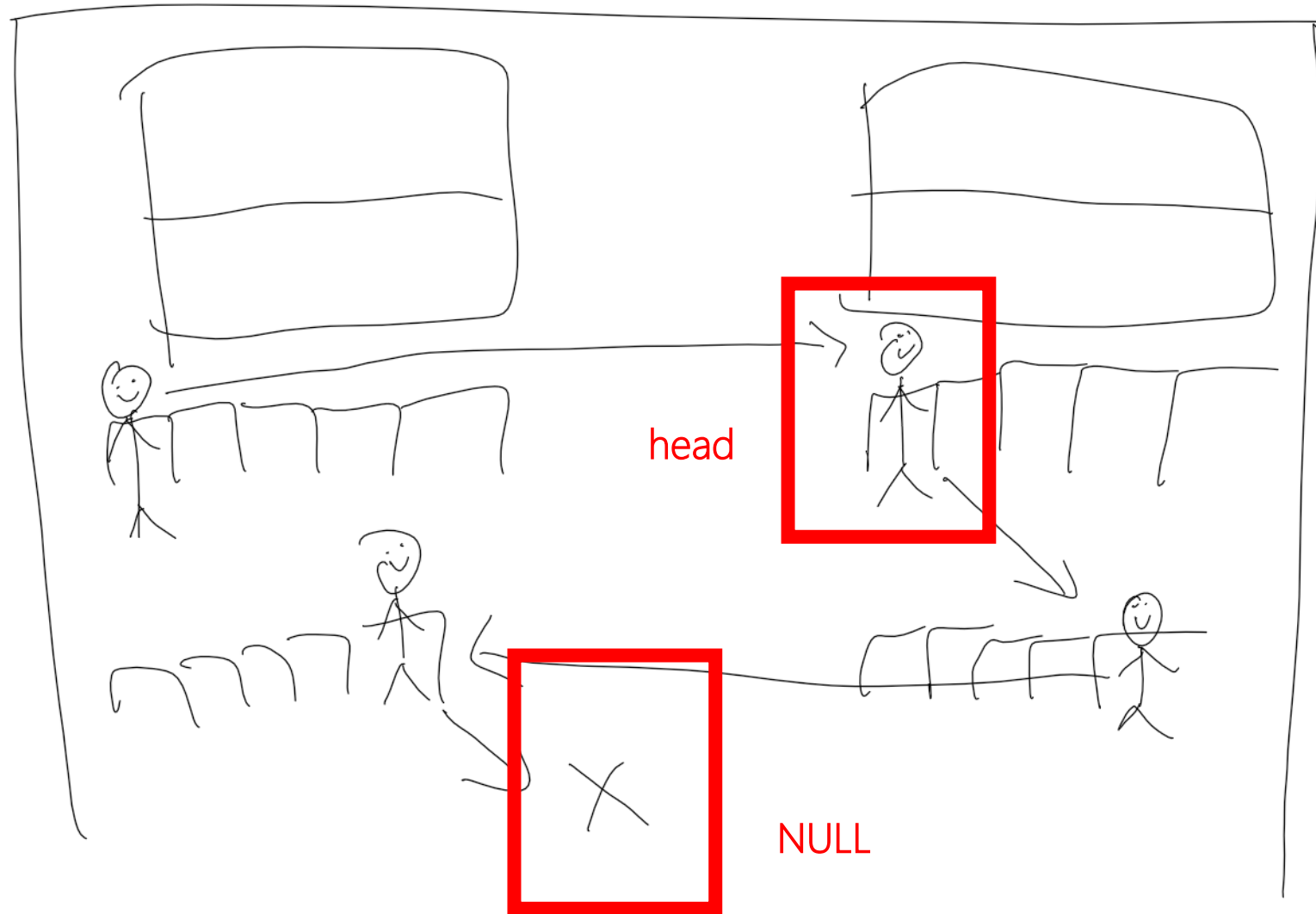
How do we free this list?

Free each node one at a time...
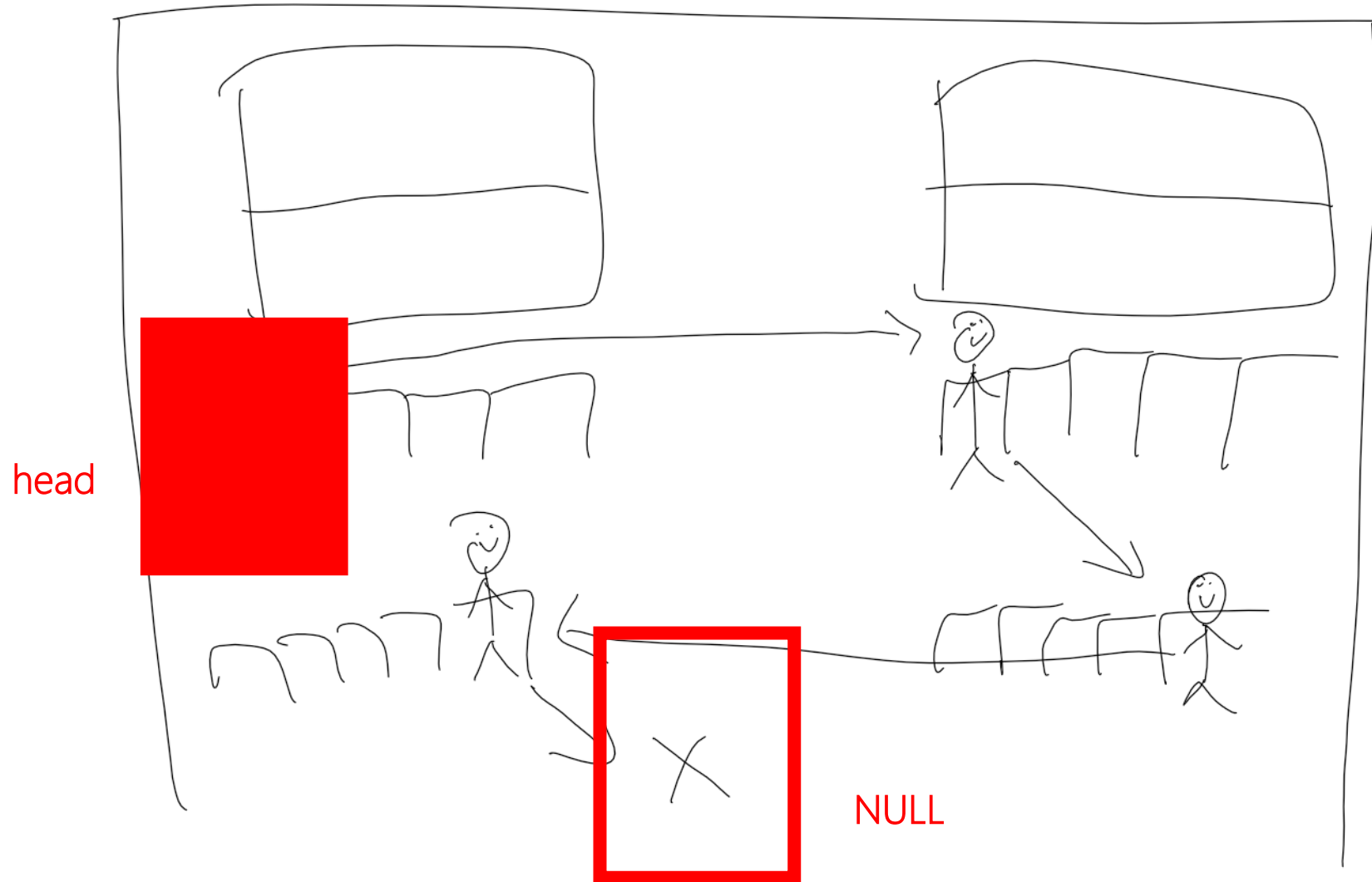

(deleted/freed)

head

What if we had a memory leak?

Where is the memory leak here?

head

NULL

What if we accessed a node after freeing it?

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Linked List Visualiser:

https://structs.sh/visualiser/linked-lists

VSCode Shortcuts

- Start with Ctrl+Shift+P
  - "Toggle Multi-Cursor Editor"
  - "Transform to …"
- Multiple Cursors: Ctrl + Click anywhere
- Duplicate Line: Ctrl + Shift + Alt + Up/Down Arrow
- Move Lines: Alt + Up/Down Arrow
- Change All Occurrences: Ctrl + Shift + L or Ctrl + D
- Indentation: (Highlight line/lines) → Ctrl + Left/Right Square Bracket