What if my question isn't answered today?

Doubly Linked Lists

Quick(ish) Specific Questions

Past Exam Questions

COMP2521 25T3

Revision Lecture (Based on Requests)

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What if my question isn't answered today?

Doubly Linked Lists (optional)

Quick(ish) Specific Questions

Past Exam Questions

What if my question isn't answered today?

Doubly Linked Lists

Quick(ish) Specific Questions

Questions

Past Exam Ouestions ▶ Poll Results Here

What if my question isn't answered today?

Poll Results

What if my question isn't answered today?

Doubly Linked Lists

Quick(ish) Specific Questions

Past Exam Questions

- Lots of great questions were asked in the poll
- We won't have time to answer all of them
- For the most general questions, I will produce a reference guide indicating where in the lectures you can find your answers
- For the more specific questions (and if you have some after watching the lectures), I recommend organising a consultation time with me. That way I'll be able to answer your question(s).

Alternatively, if there is high enough demand (eg at least 10 students committing to attending live, online), I'll gladly conduct a follow-on lecture in the same or similar format early next week.

Doubly Linked Lists - Benefits

Poll Results

What if my question isn't answered today?

Doubly Linked Lists

Benefits

Implementati Inserting Deleting

Quick(ish) Specific Questions

Past Exam Ouestions Why might we want doubly linked lists?

- It allows us to move forwards and backwards within a list.
- Depending on the implementation, it can allow easier access to items towards the end of the list.
- Inserting and deleting from the middle of the list (eg ordered lists) in particular can be considered "less fiddly"

Doubly Linked Lists - Implementation

Poll Results

What if my question isn't answered today?

Doubly Linked Lists

Benefits

Implementation

Inserting

Quick(ish)
Specific

Past Exam

```
struct node {
    Item data;
    struct node *prev;
    struct node *next;
};

struct list {
    struct node *head;
    struct node *tail;
};
```

Doubly Linked Lists - Inserting

Poll Results

What if my question isn't answered today?

Doubly Linked Lists

Benefits

Implement

Inserting

Deleting

Quick(ish)
Specific

Questions

Past Exam

- At the start
- At the end
- In the middle

Doubly Linked Lists - Deleting

Poll Results

What if my question isn't answered today?

Doubly Linked Lists

Benefits Implementation

Inserting

Deleting

Quick(ish)
Specific

Past Exam

- From the start
- From the end
- From the middle

What if my question isn't answered today?

Doubly Linked

Quick(ish) Specific Questions

Past Exam

(246) BST coding questions where they ask you to traverse a tree and find the sum/difference of opposing nodes

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Doubly Linked Lists

Quick(ish) Specific Questions

Past Exam

(241) Regular hasCycle check vs the hasCycle check for Kruskal's

What if my question isn't answered today?

Doubly Linked Lists

Quick(ish) Specific Questions

Past Exam

(241) How to apply dfs and bfs in a tree question

What if my question isn't answered today?

Doubly Linked Lists

Quick(ish) Specific Questions

Past Exam

(240) Is it possible to search for all different cycles in a graph?

What if my question isn't answered today?

Doubly Linked Lists

Quick(ish) Specific Questions

Past Exam

(238) How to compare 2 trees

What kinds of things could we compare 2 trees on? How would we go about doing that?

What if my question isn't answered today?

Doubly Linked Lists

Quick(ish) Specific Questions

Past Exam Questions

Things to consider:

- Past exam questions (292)
- Practice exam-style questions. Coding questions involving graph traversals such as BFS, DFS and algorithms like Kruskal's etc (297)
- Go through 1 or 2 past exam papers. No need to code just some ideas on how to tackle the questions and explain how the marking for that paper works. (255)

What if my question isn't answered today?

Doubly Linked Lists

Quick(ish)
Specific
Ouestions

Past Exam Questions Deriving time complexity from written code. Let's look at Q1c in

https://cgi.cse.unsw.edu.au/~cs2521/25T2/past-exam/22T1.

What if my question isn't answered today?

Doubly Linked Lists

Quick(ish)
Specific
Ouestions

Past Exam Questions More theory exam questions: Let's look at Q3a,b, Q4, Q5b in https://cgi.cse.unsw.edu.au/~cs2521/25T2/past-exam/22T1.

What if my question isn't answered today?

Doubly Linked Lists

Quick(ish)
Specific
Questions

Past Exam Questions Programming exam question(s): Let's look at Q9 or Q10 in https://cgi.cse.unsw.edu.au/~cs2521/25T2/past-exam/22T1.

What if my question isn't answered today?

Doubly Linked Lists

Quick(ish)
Specific
Ouestions

Past Exam Questions Cheapest Flights Within K Stops leetcode:
https://leetcode.com/problems/
cheapest-flights-within-k-stops/description/