



Home



My Network



Jobs



ziya mahammad • 2nd
Software Development Engineer
7h • 🌐

New posts

[+ Follow](#)

Where have you seen Data structures in real-time applications?

Stack:

- 1) UNDO option
- 2) Text editor: you push letter by letter to the stack so you erase back.
- 3) Recursion(inbuilt stack)

Queue:

- 1) Your browser deletes the history past one month.
- 2) If you delete a picture on your phone, it will be the "recently delete" folder which says "the images will be deleted permanently after one week".
Here all the images are stored in the queue so it's easier to pop from the rear based on the image deletion date.
- 3) Waiting list: during online registrations, sometimes you'll be put on the waiting list. basically, all the requests will be stored in the queue.

Linked list:

- 1) Browser's Next and Previous Button: a linked list of URLs
- 2) music player where you can play the next or previous song. (Doubly linked list).
- 3) In the ludo game, It has to pass the chance to each player in a circular fashion (circular linked list).

Trees:

- 1) File system: Folders and subfolders (N-ary tree).
- 2) e-commerce websites : category -> subcategories -> products
- 3) Auto-suggestion when you google (Trie)

Graphs:

- 1) Uber, Ola cab booking: show nearest available cars (BFS)
- 2) Maven dependencies build order (Topological sorting (DFS))
- 3) While booking bus/flights, you get a list of available routes.
- 4) In Facebook, users are considered to be the vertices and if they are friends then there is an edge running between them. Facebook's Friend suggestion algorithm uses graph theory. Facebook is an example of an undirected graph.

Follow [ziya mahammad](#) for more useful content ❤️👍.

Happy learning :)

Some of them might not be true in real-time applications, but I hope this can give you a better idea about the applications of DSA.

Ps: reposting again from my old post for wider reach as most of the students are