

Day 10 : Morning

Complexity

noun

1. the state or quality of being intricate or complicated.

Wikipedia : Space Invader

Space Complexity

Space Complexity

The amount of memory that program,application or functions require.

Time Complexity

Time Complexity

The amount of time it requires for the program,application or functions to compile or run.

Big O notation.

Medium : Algorithm time complexity

Time Complexity of array methods.

Push

Pop

```
for(let i =0; i < arr.length; i++);
```


Time Complexity Continued...

Best case scenario

Worst case scenario

Average case scenario

Search Algorithm

Linear Search

$O(n)$

Binary Search

$O(\log n)$

Stack Class

Queue Class

Sorting Algorithm

Sorting Algorithm

Sorting function with
one array

Quick sort

Bubble sort

Sorting functions with
additional variable

Merge sort

Insertion sort

Youtube : Quicksort

Brilliant : Sorting Algorithms

Errors

Type of Errors

Compilation Error

- Syntax Error
- Type Error
- Reference Error

Runtime Error

- Logic Error
- Range Error
(Warnings)

MDN : Errors

Exceptions

Understand Edge Cases

Exception handling in JS

[MDN : Try...catch](#)