

StructureX

- ▮ Project Name : - **StructureX**
- ▮ Name :- **Shiv Shankar kumar**
- ▮ Mentor Name :- **Anika Tibrewala**

● Brief description

JavaScript based Data structure and Algorithm Visualizer is interactive online platform that visualizes algorithms from code, this makes this really helpful to understand some basic algorithms.

● Detailed description

StructureX project is visualizer which helps understand data structure and algorithm,

Tech Stack:- HTML,CSS,JAVASCRIPT

In this website we have worked on three pages.

1. Home page:-

In home page we have some details about our structureX project.

2.Sorting page

In sorting page we have some animated visualizer which has given some basic algorithms like “Bubble sort, Insertion sort, Selection sort” Merge sort, Quick sort, Heap sort” which you can use wisely and see effects changes, also there included options “Number of values” and “speed” which you also use for customization as your requirements.

3.Searching page

In searching page we have searching algorithm, Searching page has two searching two searching algorithm

(a) Binary search

In computer science, binary search, also known as half-interval search, logarithmic search, or binary chop, is a search algorithm that finds the position of a target value within a sorted array. Binary search

compares the target value to the middle element of the array.

(b) Linear search

In computer science, a linear search or sequential search is a method for finding an element within a list. It sequentially checks each element of the list until a match is found or the whole list has been searched.

• Work Description

1. Organized repository. (PR #8)

2. Added styling in Buttons

In all pages (PR #17)

3. Added animation in navbar

*Added in sorting page and searching page
(PR #19)*

4. Added logo

In sorting page and searching page (PR #28)

*5. Created and added Home page / Landing
page in website (PR #30)*

*6. Resolved others bugs and issues (check
cLog.md for more info)*

https://github.com/shivshankar9/Structurex/blob/main/WOC_IITKalyani/cLog.md

• Experience

*I had wonderful experience with this winter
of code program and I have learnt lot of*

things , this is my first open source project so in this total journey I faced lot of difficulty but my teammates (anika, ayush) never let me give up, they always helped me whenever I was facing difficulty they helped me to learn new technologies, with help of them I completed this total journey, I have opened lots of pull request and issues too.....

Github Repository link -

<https://github.com/shivshankar9/Structurex>