**SYNOPSIS ON**

**Sorting Algorithm Visualizer**

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# INTRODUCTION

We have learnt sorting algorithms like bubble sort, selection sort, insertion sort, quick sort. But often we fail to understand the core idea of a particular algorithm, maybe because we are unable to visualize how they work.

So the most important thing to understand about these algorithms is visualization.

That's why we are making this project to let everyone understand how these algorithms work and through this project you also will get a deep understanding of such sorting algorithms.

# USE OF THE PROJECT

The main use of this project is to learn Sorting algorithms. This project is a Web Visualization tool for sorting algorithms.

As we know that we learnt various algorithms but sometimes we're not able to visualize it so this is one of the best ways to learn or know the key concepts behind algorithms by visualizing it.

# FUNCTIONAL SPECIFICATIONS

• First we have a landing Page where people gets to know about the website and its functionality.

• On landing page it have multiple options for various algorithms. If they choose any particular algorithm then they'll redirected to that particular visualization of the algorithm.

• People can visualize the working of their chosen sorting technique by give the values of their choice.

• The Users can also control the Speed of the visualization.

• This way users can understand key-concepts of each algorithm in an interesting way with ease. Users can access it anywhere.

# SOFTWARE SPECIFICATION

• Technology Implemented: HTML, CSS, JAVASCRIPT

• Language Used: JAVASCRIPT

• Database: NO

• User Interface Design: YES

• Web Browser: Chrome and Firefox

# HARDWARE REQUIREMENTS

• Processor: Intel i3 and above

• Operating System: Windows 7/8/10/11

• RAM: 4+GB

• Hardware Devices: Computer System

• Hard disk: 64 GB

# FUTURE SCOPE

This project will actually help a lot of students and other interested people to understand the working behind the algorithms by visualizing it.

This way people can easily memorize it in an interesting way and will do better wherever the need it.

As students of the current and upcoming generations are more inclined towards gadgets and they also loves to study from various online sources so, by the help of this project we also contributing in education industry to make it better, effective and easily reachable.