

BINARY SEARCH VISUALIZATION

- This project explores the visualization of the Binary search algorithm, a fundamental method for arranging elements in order, commonly in ascending to descending order. The focus is on building an interactive webpage where users can input numbers, and the sorting process is demonstrated visually in real-time. HTML is used to structure the webpage, while CSS is applied to design the interface, ensuring it is both professional and user-friendly. JavaScript handles the core logic, allowing for step-by-step comparisons . This visual representation helps users see exactly how the algorithm works, making it easier to understand.

- Binary search is a fundamental operation in data structures, essential for efficiently organizing and locating data. However, understanding and visualizing the sorting process can be challenging for those new to the concept. To address this, our project illustrates the binary search algorithm through a visual representation of the sorting process. The methodology involves demonstrating how a list of elements is divided into two halves, comparing the target element with the midpoint element, and repeating this process until the target is found or the search interval is empty.

TEAM MEMBERS :

1. AKSHAYA J - 23ISR003
2. ASISH KHAN A - 23ISR004
3. BALAMURUGAN M - 23ISR006