

Sorting Visualizer Documentation:

Introduction:

- The Sorting Visualizer is an interactive web application that demonstrates the step-by-step process of various sorting algorithms through visual representation. This educational tool helps users understand how different sorting algorithms work by displaying real-time animations of the sorting process. The application currently implements two fundamental sorting algorithms: Bubble Sort and Selection Sort, making it an excellent resource for students and developers learning about sorting algorithms.

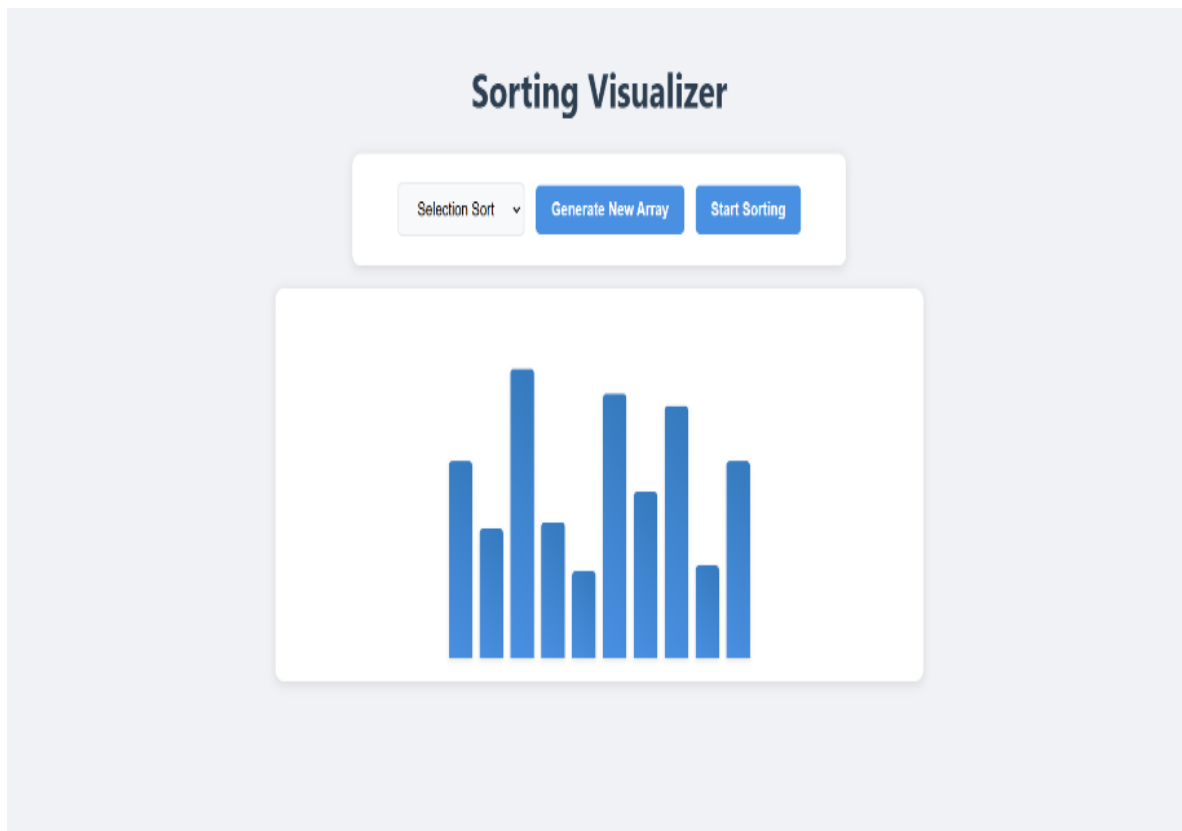
Requirements:

- Python 3.7 or higher
- Web browser with JavaScript enabled

Technologies:

- Python, Html, CSS, JavaScript

Screenshot:

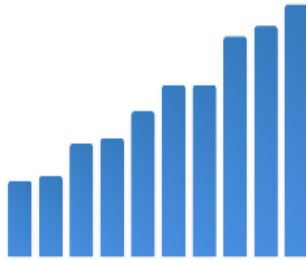


Sorting Visualizer

Selection Sort ▾

Generate New Array

Start Sorting

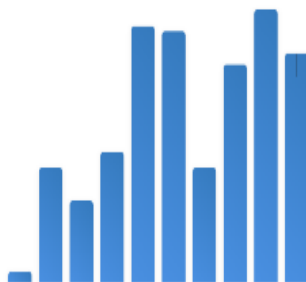


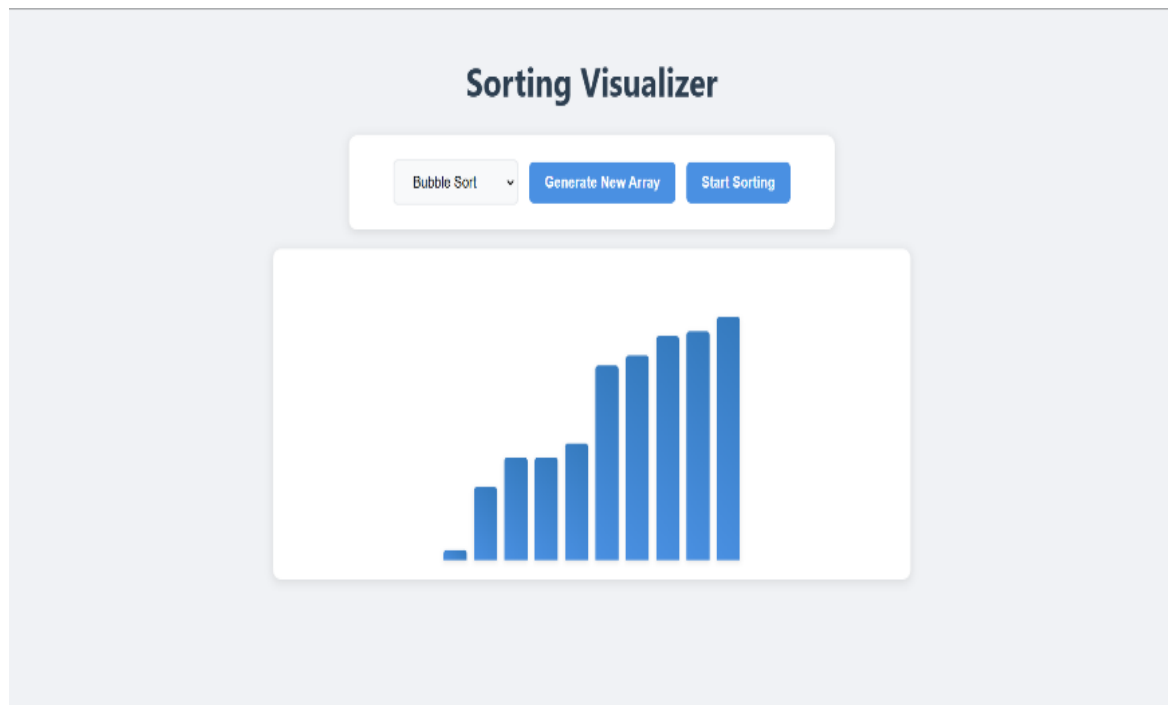
Sorting Visualizer

Bubble Sort ▾

Generate New Array

Start Sorting





Conclusion:

The Sorting Visualizer project successfully demonstrates the implementation of sorting algorithms through an interactive and visually appealing interface. The combination of Flask backend and vanilla JavaScript frontend provides a lightweight yet powerful solution for algorithm visualization. The project serves as both an educational tool and a demonstration of modern web development practices.