AI PLAYGROUND

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INTRODUCTION

INTRODUCTION

To solve the problem of difficulty in understanding complex and lengthy algorithms, AI Playground is developed to visualize algorithms in an easy to understand manner. It is a web application that will help learners to understand algorithms quickly. Most of the algorithm visualizers are application based. To solve that, our team has developed a web based application which will allow all users to use the platform without downloading any software.

AI PLAYGROUND

OBJECTIVES

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- To make algorithms easy to understand.
- To visualize algorithms.
- To give teachers a platform to teach.
- To give students a platform to learn.
- Everyone can learn through our web based platform.
- To analyze complex and lengthy algorithms easily.
- To help students master their algorithmic foundations.

AI PLAYGROUND

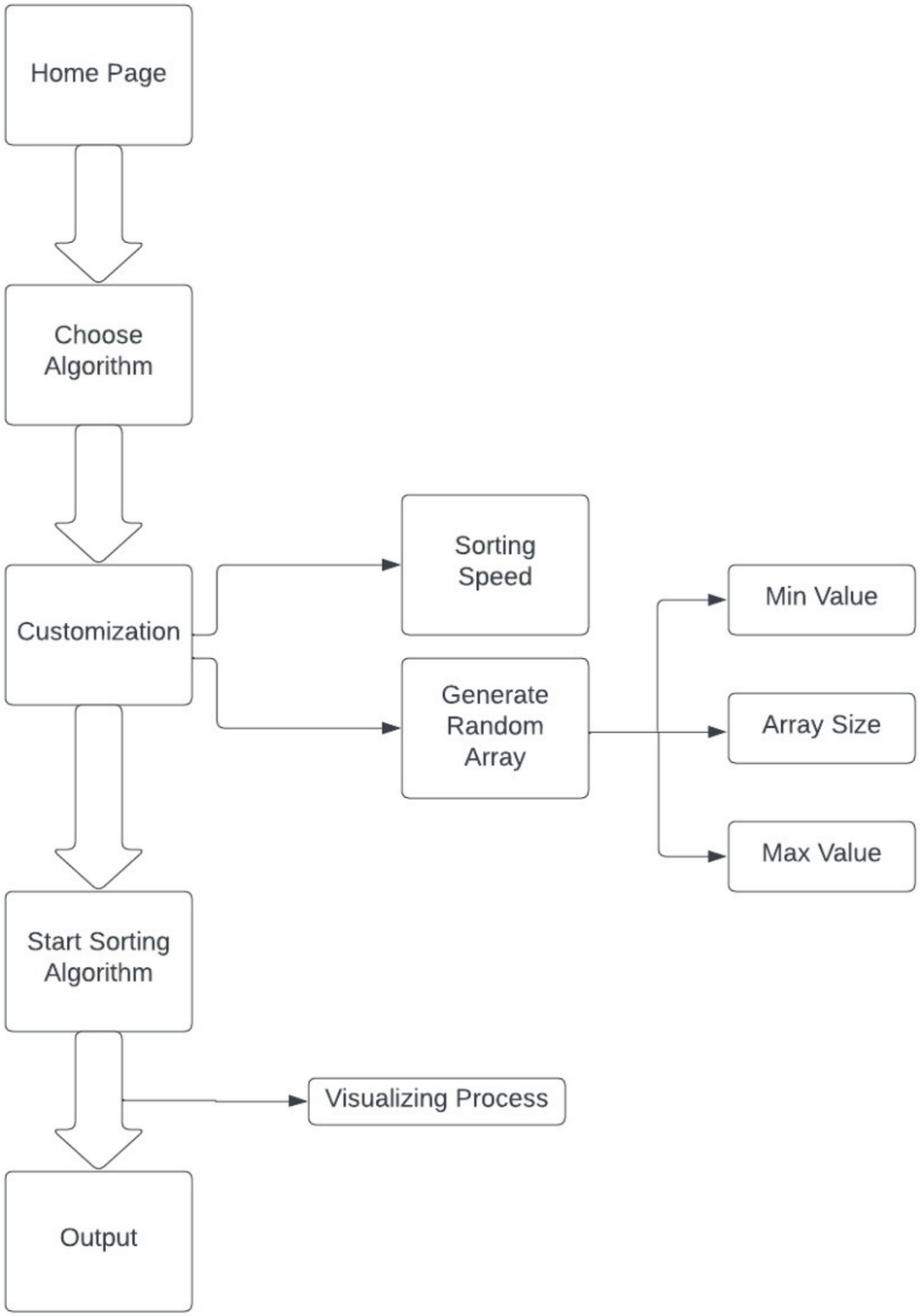
LITERATURE SURVEY

LITERATURE SURVEY

Name of the Paper	Author	Year of Publication	Publication Department	Advantages	Disadvantages
Visualizations of Sorting Algorithms	Mykhailo Klunko	2019	Department of Computer Science, Faculty of Science, Palacky University Olomouc	Better algorithm understanding. Varieties of algorithms included. Application based. No downloads required	Less Downloads. Requirement of Java. Cannot be accessed through mobile phones.
Algorithm Visualizer	Barnani Goswami, Anushka Dhar, Akash Gupta, Antriksh Gupta	2021	Department of Computer Science and Engineering.	Better algorithm understanding. Application based. No internet required	Not Online. Updates needed repetitively. Less Users
The Development of System for Algorithms, Visualization using SimJava	Jamil Abedalrahim, Jamil Alsayaydeh, Azwan Aziz, Maslan Zainon, A. Oliinyk	2020	ARPN Journal of Engineering and Applied Sciences	Good Algorithm Understanding Application based No internet required	Not Web Based Less Users Updating Software repetitively.

PROPOSED SYSTEM

PROPOSED SYSTEM



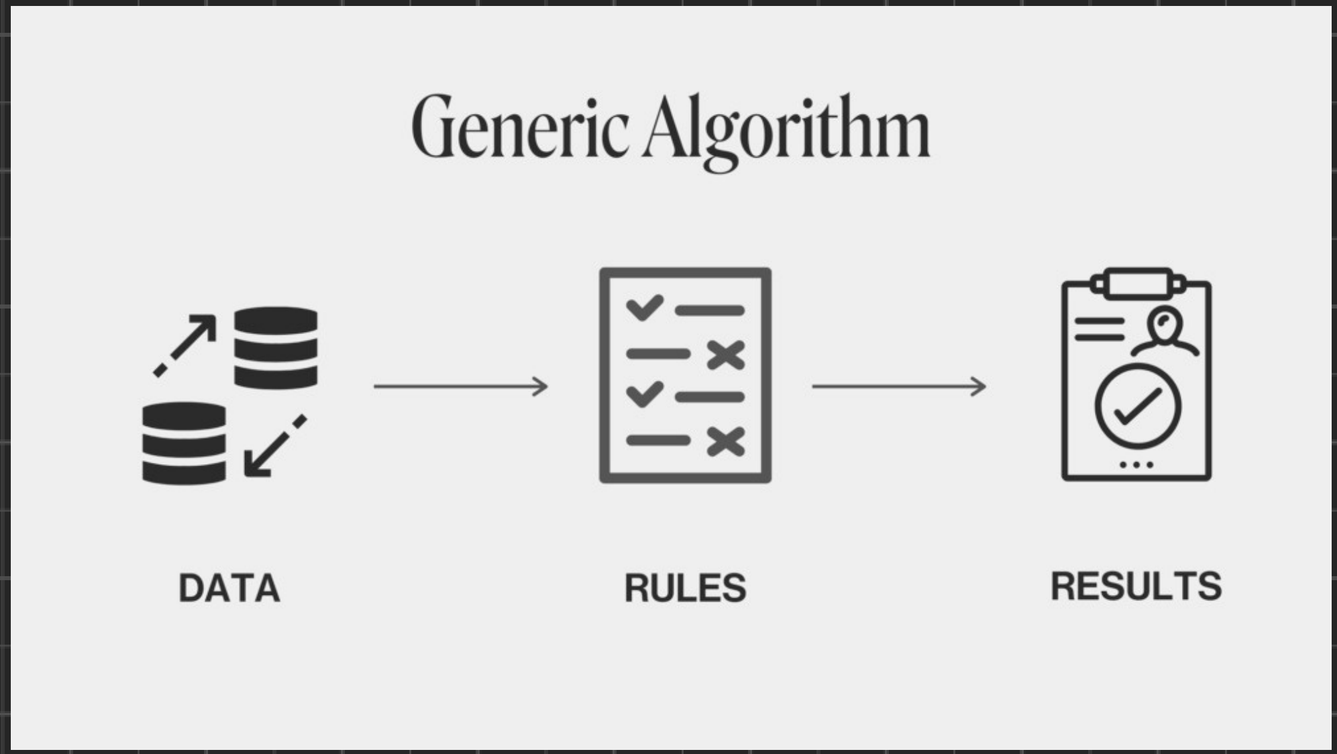
AI PLAYGROUND

ALGORITHMS

ALGORITHMS

- Linear Search
- Binary Search
- Heap Sort
- Insertion Sort
- Quick Sort
- Merge Sort
- Selection Sort
- Bubble Sort
- Sudoku Algorithm
- N-Queen's Problem
- Knights Tour Problem

AI PLAYGROUND



TECHNOLOGIES

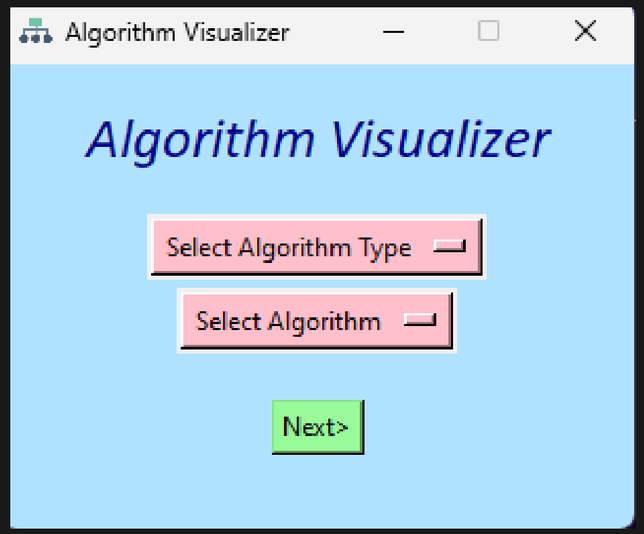
TECHNOLOGIES

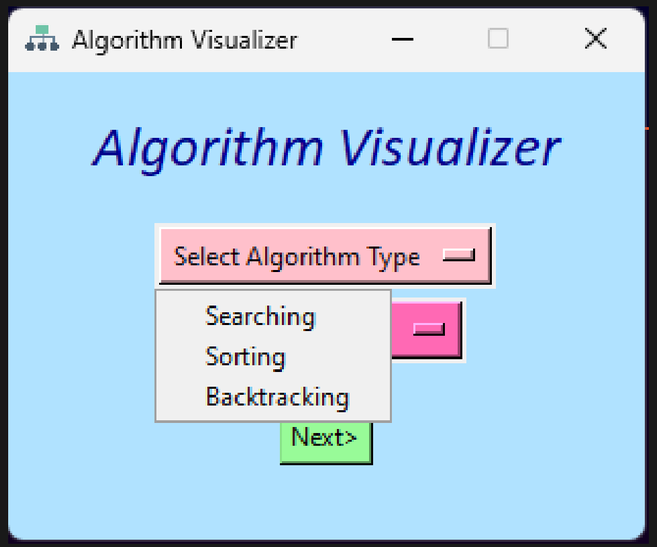
- PYTHON
- HTML
- CSS
- JAVASCRIPT

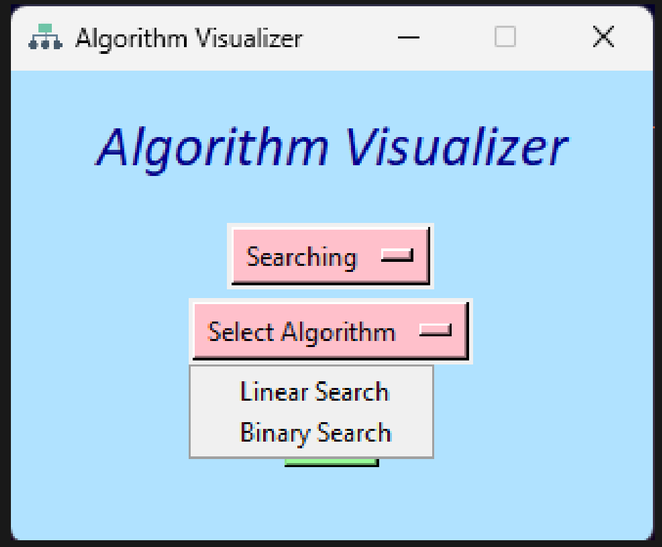
AI PLAYGROUND

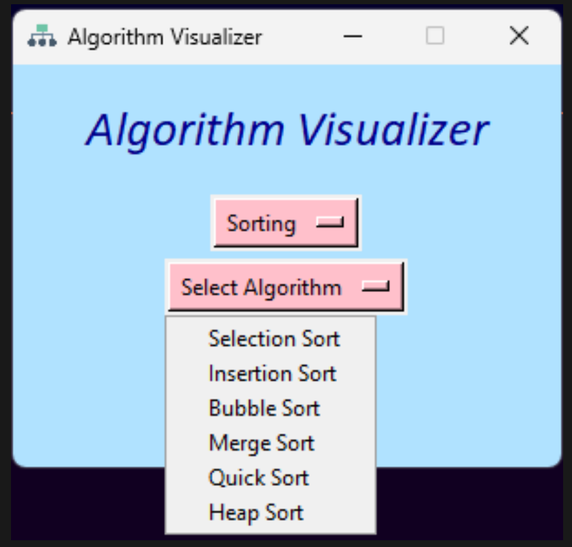
IMPLEMENTATION

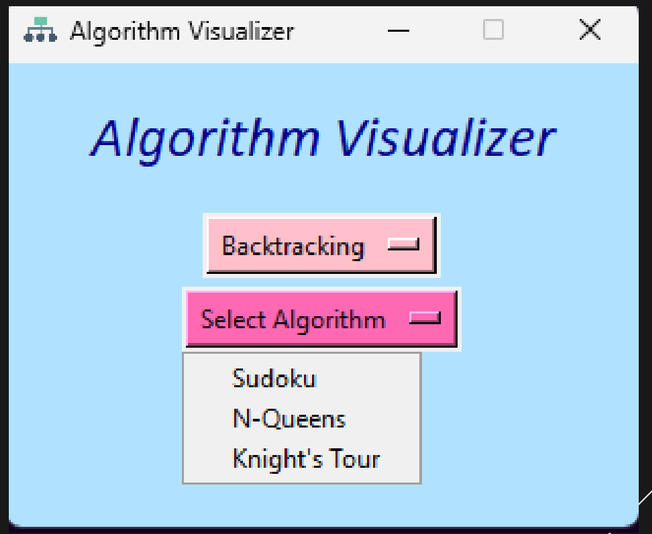
Landing Page



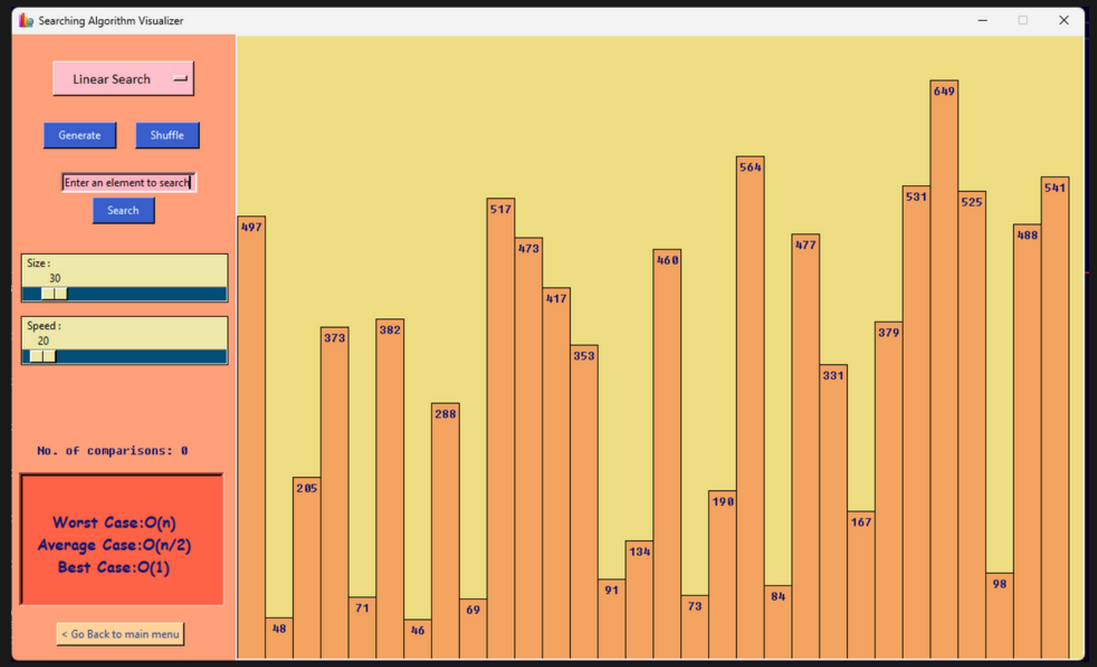


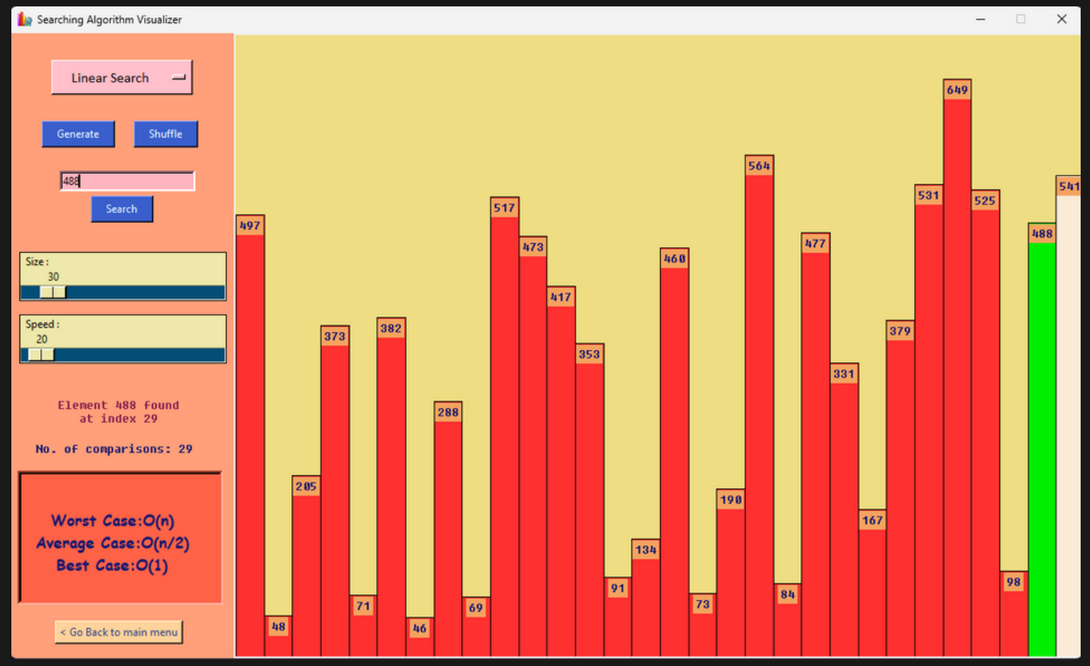






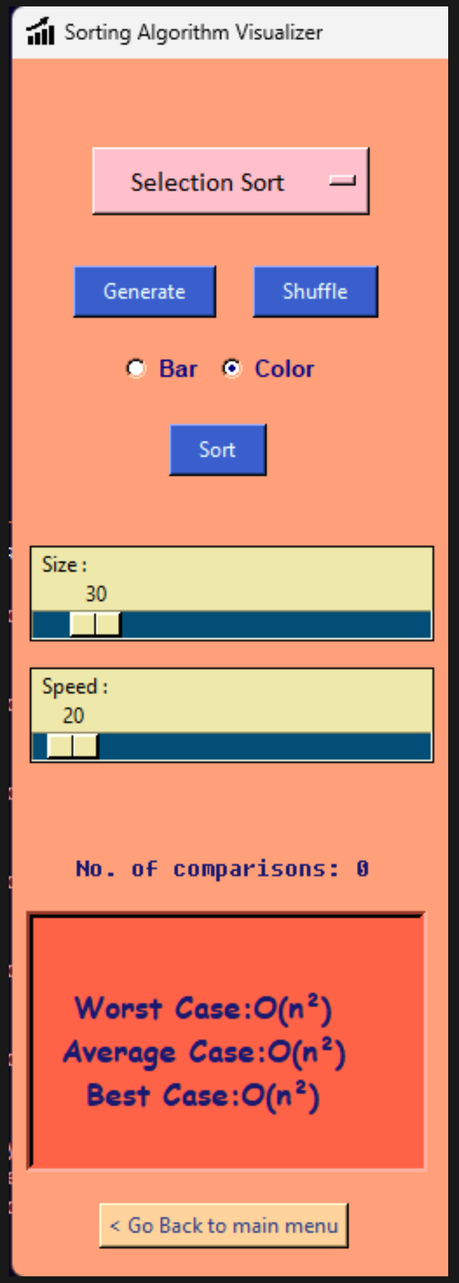
Searching Algo's



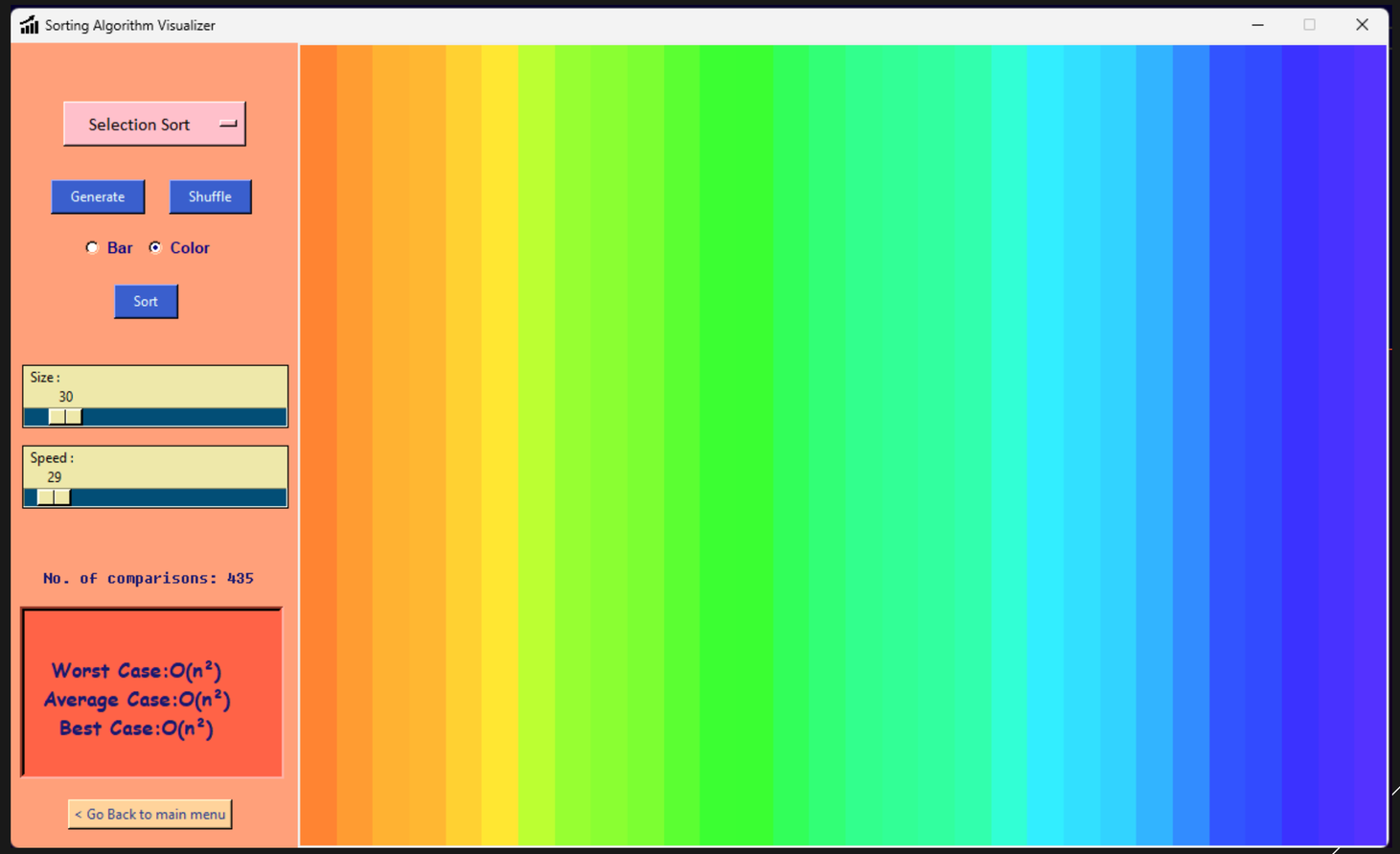


OUTPUT

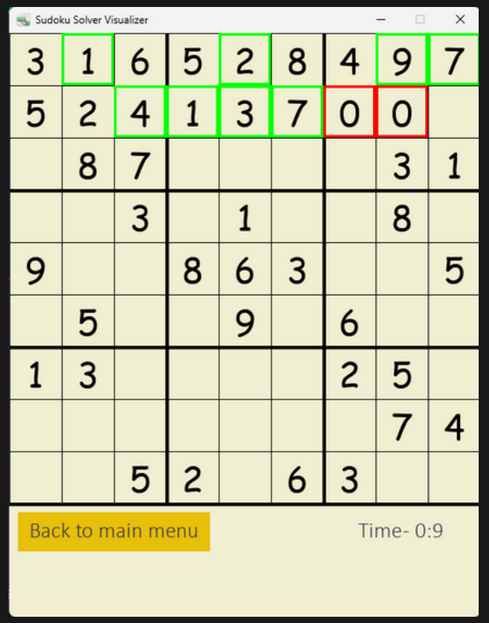
Control Panel



Customized Sorting



Sudoku's Output



N-Queens Output