Project 10 Name: Algorithm Visualization
Assignment: Software Metrics Group Submission
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Function Points for Algorithm Visualization Project:

A. Implement Search/Sort Toggle

- **Internal Logical Files (ILF):**.
  - **ILFs in this project:**
    1. **Array Data:** Internal storage of arrays for sorting.
    2. **Algorithm Data:** Internal data structures for the sorting and traversal algorithms.
  - **Count:** 2
  - **Complexity: Average**
  - **Weighting Factor (Average):** 10
- **External Inputs (EI):**
  - **Specific Inputs for the Project:**
    1. **Algorithm Selection:** Users choose from a list of sorting or graph algorithms (e.g., QuickSort, MergeSort, BFS, DFS).
    2. **User Trigger for Algorithm Execution:** Users click "Run" to start the selected algorithm on the array or graph.
  - **Count:** 2
  - **Complexity: Average**
  - **Weighting Factor (Average):** 4

B. Implement Graph Coloring for Traversal

- **Internal Logical Files (ILF):**.
  - **ILFs in this project:**
    1. **Graph Data:** Internal storage of graph nodes and edges.
    2. **Algorithm Data:** Internal data structures for the sorting and traversal algorithms.
  - **Count:** 2
  - **Complexity: Average**
  - **Weighting Factor (Average):** 10
- **External Inputs (EI):**
  - **Specific Inputs for the Project:**
    1. **User Input for Graph Initialization:** Users provide graph data manually or via file upload.
    2. **User Trigger for Algorithm Execution:** Users click "Run" to start the graph traversal algorithm.
  - **Count:** 2

- **Complexity: Average**
- **Weighting Factor (Average):** 4

Total Function Points: **28**