Algorithm Visualization Release 1

Group 10

Algorithm Visualization - Group 10 Recap

Group Members: Joshua Swaida, Jason Tralongo, Aidan Shepston, Harleigh Kyle Chua, Bach Luu

Manager: Yona Voss-Andreae

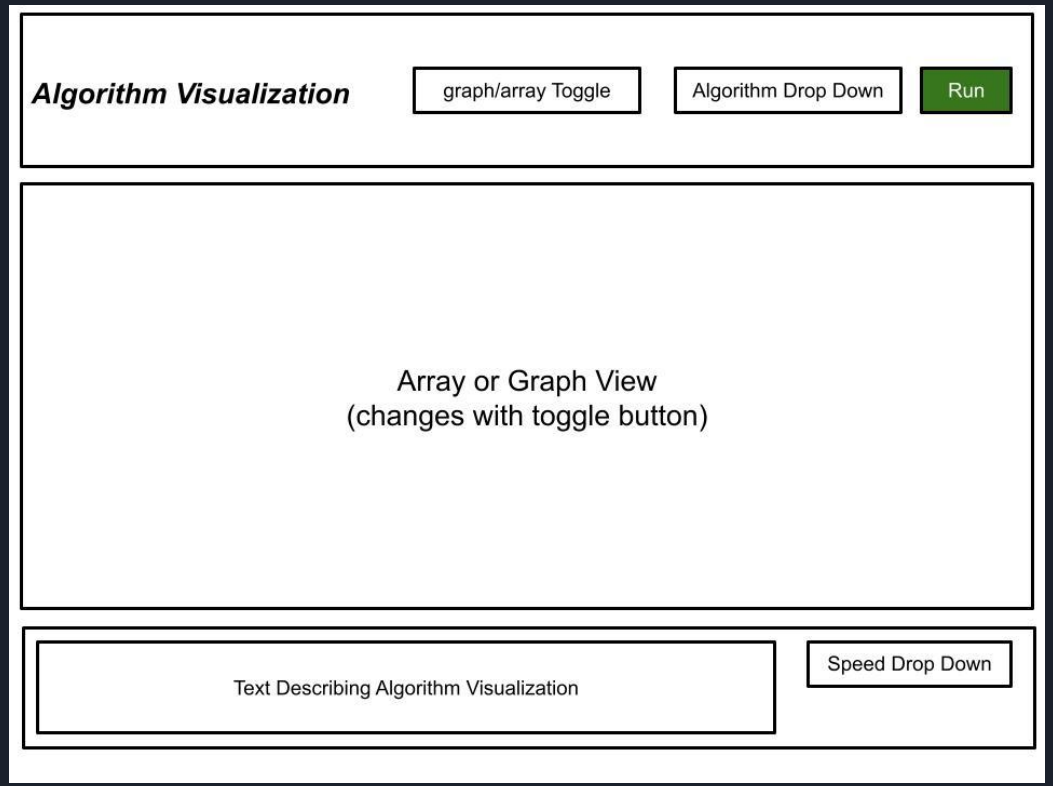
Project Idea:

- Purpose: Visualize search algorithms (BFS, DFS) on node graphs and sorting algorithms (bubble sort) on an array representation
- Goal: Enhance User understanding and learning of algorithms
- Features:
    - Modify or create custom graphs/arrays
    - Interactive web app interface

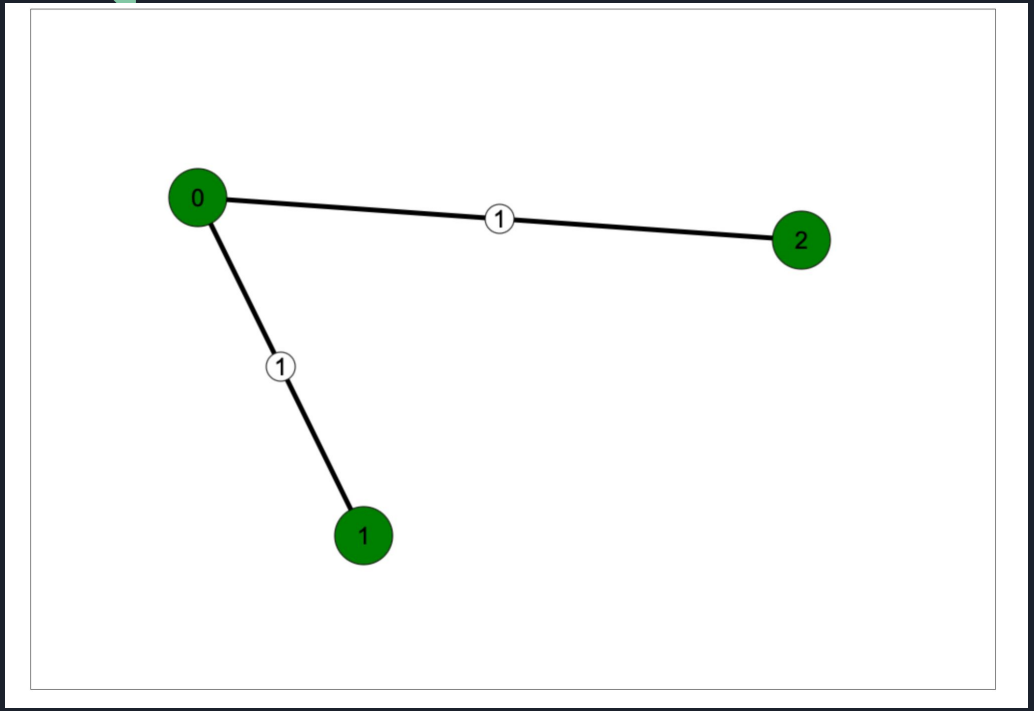
What is our goal for release 1?

- To be able to visualize graph traversals using the web app
- To be able to visualize bubble sort on a user inputted array
- Complete initial version of graph view and array view
- Create a few graph traversal algorithms that are compatible with the frontend
- Have a functional navigation bar and interactive canvas using a Vue frontend

Application Layout



Demo


0
1
2
1
1


Array Sorting
Enter number
Add
Clear
Sort
2
6
8
10
12
Array so far: [2, 6, 8, 10, 12]
Sorted Array: [2, 6, 8, 10, 12]

Goals Moving Forward

-Implement navigation bar and be able to toggle between array view and graph view

-Implement speed modifier to set the speed of the visualization

-Implement a text visualization of the algorithms (text describing the visualization as it progresses)

Thank You!