

Project 10 Name: Algorithm Visualization

Group 10 Names: Joshua Swaida, Jason Tralongo, Aidan Shepston, Harleigh Kyle Chua, Bach Luu

Group 10 Manager: Yona Voss-Andreae

Modules:

- Vue Frontend
- Flask(Python) Backend
- PostgreSQL

Work Distribution:

- Joshua
 - Implement run button
 - Implement Algorithm Drop Down
 - Implement Array/Graph toggle
 - Navigation Bar (container for run button, drop down, and toggle)
- Jason
 - Integrate flask backend with vue to pull algorithms
 - Program array algorithms (Bubble sort, Quick Sort, Merge Sort, Selection Sort, Insertion Sort, Binary Search)
 - Program graph algorithms (BFS,DFS)
- Aidan
 - Implement node creation (right click)
 - Implement edge creation (dragging)
 - Create graph view (UI for when in graph visualization mode)
- Harleigh
 - Implement graph coloring for traversal
 - Algorithm speed modifier (Slow, Normal, Fast)
 - Text visualization of Search
- Bach
 - Create array view (UI for when in array visualization mode)
 - Implement rectangle switching for array sorting

Optional Task (if there is time):

- Input Field for Custom Algorithm (saves algorithm and associated data (user's name, algorithm name, type of algorithm) in database)