Decisions

This page is dedicated to listing important decisions, as well as their outcomes, made by one or more stakeholders in the project.

Table of contents

Communication Tool

Purpose

The document outlines the various communication tools decided by the teams for use to ensure collaboration and effective communication.

Tools

Internal

- Slack -
  - A channel consisting of all teams and supervisor.
  - Each team has its own private channel.
- Zoom -
  - Team meetings are held via zoom.
- Trello -
  - Each team has its own Trello board to keep track of every member's progress.

External

- Slack -
  - A channel consisting of all teams and clients.
- In person meetings with clients
  - Held during the tutorial @Old Arts Building, Room 155.
- Gmail -
  - Meeting invites and task updates are sent via emails to all clients by the teams.

Client Improvements

This document displays all the improvements suggested by the clients.

TASKS		Tasks to be implemented in Sprint 1A (22 Mar 2021 - 29 Mar 2021)	Tasks to be implemented in Sprint 1B (07 Apr 2021 - 16 Apr 2021)	Tasks to be implemented in Sprint 1C(17 Apr 2021 - 27 Apr 2021)	Tasks to be implemented in Sprint 2(04 May 2021 - 24 May 2021)	TEAM
1.	Search and Insert are modes - needs to be specified in all algorithms	☑	☐	☐	☐	Team 1
2.	Speed slider should be labelled as speed	☑	☐	☐	☐	Team 1
3.	Click anywhere on the box to insert/ search parameters rather than just clicking on the word 'INSERT' and 'SEARCH'	☐	☐	☐	☐	
4.	Remove the number of lines of code and have a simple progress bar instead	☑	☐	☐	☐	Team 1
COLOR						
5.	Highlight found nodes in RED in BST	☐	☐	☑	☐	Team 2
PSEUDOCODE						
6.	Recursively close the nested blocks within a parent block and fix the animation too	☑	☐	☐		Team 2
BINARY SEARCH TREE						
7.	Add some basic cases such as balanced tree, reversed tree and random tree to BST	☐	☐	☑	☐	Team 2
8.	Need pointers for t and p when locating the right node for Binary Search Tree	☐	☑	☐	☐	Team 2
9.	Display text "NOT FOUND" when an element is not found in BST	☐	☐	☑	☐	Team 2
10.	Split the tree into left and right as currently the elements fall in a straight line for BST	☐	☑	☐	☐	Team 2
11.	Make all the details of making a "new node" in pseudocode collapsible (lines 8 to 11 inclusive) in BST	☐	☐	☑	☐	Team 2
12.	Highlight the node being investigated, and when you move on, to have the relevant tree edges in color	☐	☑	☐	☐	
13.	Add explanations on the left side of the code like the other algorithms for BST	☐	☑	☐	☐	Team 2
QUICKSORT						

14.	Add alternatives for choosing pivot element in QuickSort • Rightmost (the one there now) • Median of three Display using checkboxes in the parameter panel	☐	☐	☑	☐	Team 1
15.	Highlight the pivot element after its chosen (currently, it is highlighted before being chosen) in QuickSort	☐	☑	☐	☐	Team 1
16.	Add pointers for i and j in Quicksort	☐	☐	☑	☐	Team 1
17.	Display a sorted version of the array at the bottom after the animation is executed completely in Quicksort	☐	☐	☑	☐	Team 1
	HEAPSORT					
18.	Change the labels: • Array view (not just array) • Tree view (not Heap)	☑		☐		Team 1
	GRAPH ALGORITHMS					
19.	The + and – should be labelled Graph Size	☑	☐	☐	☐	Team 2
20.	Change LOAD to "BUILD GRAPH"	☑	☐	☐	☐	Team 2
21.	Once graph is loaded change "BUILD GRAPH" to "RESET"	☑	☐	☐	☐	Team 2
	PRIM'S ALGORITHM					
22.	Add a priority queue at the bottom for Prim's algorithm	☐	☑	☐		Team 2
	TRANSITIVE CLOSURE					
23.	Add the final graph to the animation against the code "find all nodes reachable from i via k" in Transitive closure - such that the user does not need to expand it to view the final result	☐	☑	☐	☐	Team 1
24.	Indicate where i, j and k are in the graph in Transitive Closure and increase the size of the arrow headers	☐	☐	☑	☐	Team 1
25	Add a dynamic matrix to Transitive Closure that changes values from 0 to 1 when a path is found	☐	☐	☐	☑	Team 1
	QUICKSORT - MEDIAN OF THREE					
26	Add pseudocode of "Median of Three" to the right panel.	☐	☐	☐	☑	Team 1
27	Add controller/animation for "Median of Three" to the middle panel.	☐	☐	☐	☑	Team 1
28	Add on-click events to the checkboxes for "Rightmost" and "Median of Three" such that its respective pseudocode is displayed in the right panel.	☐	☐	☐	☑	Team 1
	BRUTE FORCE STRING SEARCH					
29	Add a new algorithm brute force string search to the app	☐	☐	☐	☑	Team 2

GENERAL BUGS						
30	Fix the animation bug - animation is executed to the next line it is actually added to (if added to line 2, implemented in line 3)	☐	☐	☐	☑	Team 2
31	Fix the indentation bug - correct the indentation in the pseudocode of all the algorithms	☐	☐	☐	☑	Team 2

Confluence Structure

This is the CONFLUENCE STRUCTURE FOR COMP90082-2021-SM1-AIA decided by both the teams.

Pages

1. **Home INCEPTION PHASE**
2. **Requirements**
    a. Project Overview
    b. Functional requirements (table form)
    c. Non functional requirements (table form)
    d. Motivational Model
    e. Personas
    f. User stories
    g. Product Backlog
3. **Ceremonies**
4. **Timeline**
    a. Overall Plan
    b. Sprint 1A
        i. Sprint Backlog
        ii. Sprint ceremonies (meeting minutes of planning, review and retrospective)
    c. Sprint 1B
        i. Sprint Backlog
        ii. Sprint ceremonies (meeting minutes of planning, review and retrospective)
5. **Meetings**
    a. Client meetings (meeting minutes)
    b. Team meetings (meeting minutes)
        i. Both teams
        ii. Team 1
        iii. Team 2
6. **System Design**
    a. UI/Component Design of the app
    b. Diagrams
        i. Entity Relationship Diagram
        ii. Use Case Diagram
        iii. Sequence Diagram
        iv. Wireframe Diagram
7. **Development**
    a. Development Manual
    b. User Manual
8. **Quality**
    a. Software Quality Assurance Plan
    b. Coding Standards
9. **Testing**
    a. System testing
    b. User Acceptance testing
10. **Decisions**
    a. Communication tool
    b. Client improvements v1
    c. Confluence Structure
11. **Others**
    a. Resources