

Animated Algorithms Team Project - Patrick Prosser

Team Meeting 1:

Tuesday Oct 7th 12.05pm

Project:

Hash Table Demonstrator For Level 2 Students

General:

Our team project is to initially build one working demonstrator together, showcasing Hash Tables, which we will then use as a template to individually develop further demonstrators showcasing different sorting algorithms.

Work is to progress using a rapid prototyping approach.

No date has been set for the first one but should probably be within a few weeks? Thoughts?

Patrick initially suggested using student records data as the dataset for the hash tables but then suggested that a wordlist might be better.

Functional Requirements:

Add/Find/Delete From Table capabilities

Drop Down Menu Options:

- menu of hashing functions
- menu of table size

Graphic Requirements:

The GUI should be very immediate, easy to use and interactive although Patrick has expressed no real preferences beyond that.

The animations should highlight collisions (Dog/God etc), wrapping and deletions

Other Requirements:

User Manual.

Testing:

Depending on timetables we will possibly be testing the demonstrator on the 2nd semester ADS class, but it is more likely we will be testing will be it on fellow 3rd year students.

The Next Steps:

Investigate Hash Tables and Functions

Investigate Swing/2D Drawing Tools

Develop ideas for visualising hash tables/functions

Sketch idea's and save as photo's for use in documentation

Produce mockup in Powerpoint/Flash illustrating functionality

Next Meeting: Tuesday 15th October 12.05pm.

Can everyone make sure they have been to the toilet beforehand?

Further Algorithms To Consider:

Quicksort

MergeSort

Enter own data

Shortest Path Algorithm (Breadth First/ Depth First Algorithms)

Spanning Tree's