Animation Environment for Linked Data Structure

Outline – AKA Problem Statement

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Ideal

Data structure is orderly arranged framework which is used to maintain data. Abstract data types (ADT), which is high level organisable data structures, allows programmers to manipulate data with algorithms. Correctness and efficiency are two main focuses when learning data structures and algorithms. Being able use data structure correctly showcases one’s ability in problem solving.

Reality

Beginner programmers may try to visualise data structures in a hand drawn diagram to understand how each step in a manipulation works. However, the code might behave differently to what is expected when the algorithm was implemented incorrectly. Instead of reflecting how the algorithm is actually executed, a hand drawn graph is technically a presentation of what the programmer would have expected. It does not have the capability of showing how and where the algorithm may possibly has gone wrong.

Consequences

Proposal