

CS Prep

A Computer Science Preparation Application

Background

Info

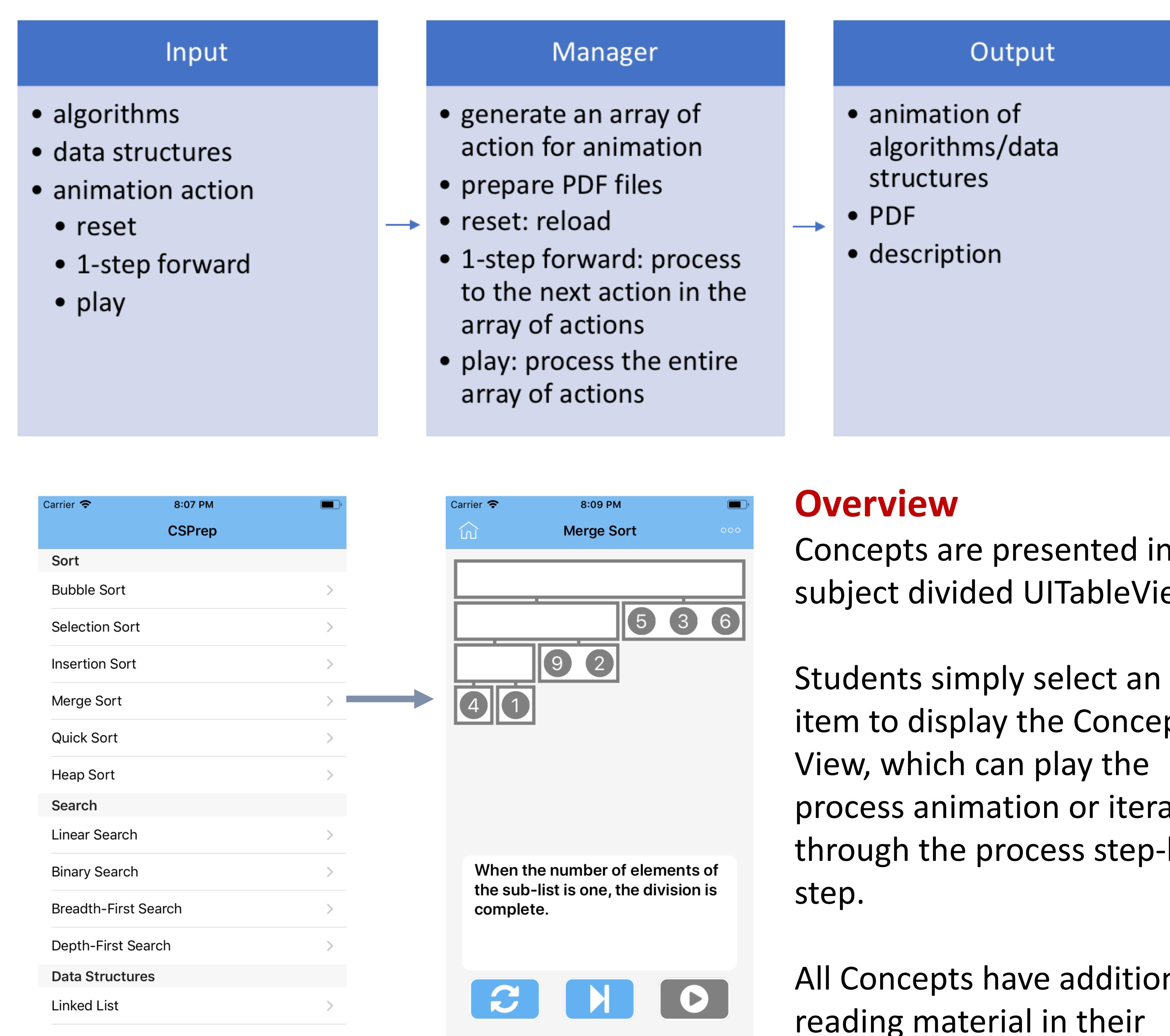
Computer Science (CS) can be a daunting undertaking. It's a challenging subject and that is exactly why it has one of the highest dropout rates among universities [1]. That's why we created CSPrep.

CSPrep is an iOS Application that aims to simplify complex, but foundational CS concepts. Our application illustrates and describes these concepts simply and intuitively to the student for an enjoyable and unintimidating experience.

Goals

- Build an iOS Application that can be used in a teaching or learning context.
- Implement animations for varying sorting and searching algorithms as well as common Data Structure visualizations.
- Use simple and easy to understand language to describe processes, but also provide detailed documentations and mathematical formulae.

Design



Results

- A fully functioning iOS Application covering iOS device 8.0 and higher
- Sorting algorithms covering Bubble, Insertion, Selection, Quick, Merge, and Heap Sort
- Searching algorithms covering Linear, Binary, Depth-First, and Breadth-First Search
- Data Structures Linked List, Stack, and Queue

Next

- Publish to App Store
- Open-source the project
- Promote as a Computer Science preparation tool for the AP and/or College level student.

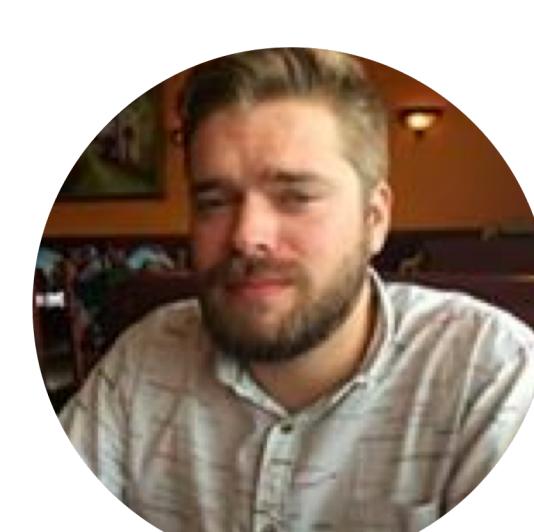
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