Stacked

*A CCC solution*

Stacked is an educational application that proposes to visually teach basic data structure concepts to young aspiring Computer Scientists. The application will use smooth and graphically appealing puzzles to illustrate and test concepts common in many programming paradigms. Upon completion of administrator specified problem sets, the students will have practiced and visualized many fundamentals of data organization. This newly acquired knowledge could include many topics such as use of “stacks” and “priority queues” in common programming problems. Through the use of the Stacked application students and an administrator will be able to monitor educational progress through various analytic reports and aggregated data analysis of the class as a whole. Students will enjoy several different levels of animated and interactive puzzles that will stimulate the visual learning process. An administrator will be able to adjust the difficulty of puzzles and access metrics through a web browser. Students will be able to create their own accounts to save and progress through the application. Stacked will be compatible with multiple platforms to maximize accessibility. Administrators will find Stacked to be an effective introduction to fundamental data structures in the Computer Science discipline for their students.