School of Computer Science
Carnegie Mellon University
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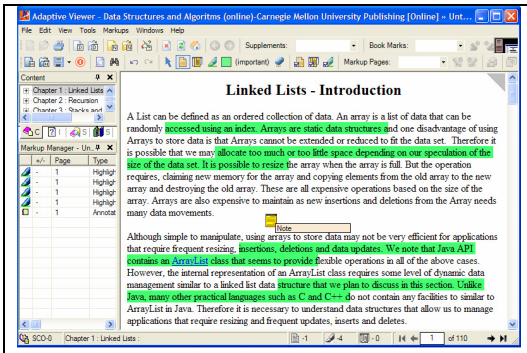
Measuring Reading Comprehension through Markup Analysis
An interactive reading program

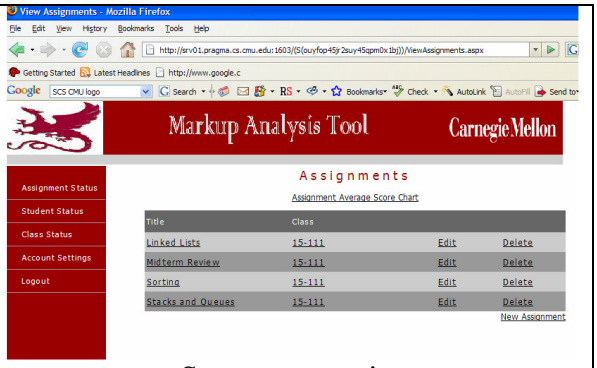
FEATURES

- Teachers Role in Setting up a reading Exercise
  - Teachers set up reading assignment for the class
  - Reading Assignment contains recommended sections/chapters
  - Reading Assignment contains recommended reading strategies
  - Teacher creates an expert markup of the assignment and submit to online Markup Analysis Tool
- Student's Role in Completing the Exercise
  - Students read the recommended sections/chapters
  - Students may follow the reading comprehension strategies to increase the success of the program
  - Students create a "markup" of the content they read
  - A markup consists of highlighted sections and sticky notes
  - Students save the markup and submit to the online Markup Analysis tool
  - Students gets a "comparison" score and a feedback to improve the score
  - Comparison score is based on how "similar" students markup to the teachers markup
  - Similarity score is calculated based on an intelligent algorithm that estimate students thinking process compared to an expert thinking process

IMAGES



Markup the document



Setup an exercise

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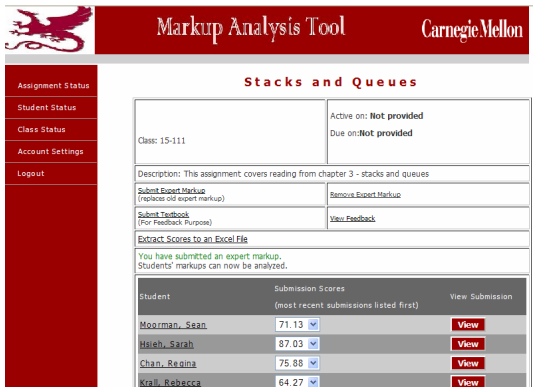
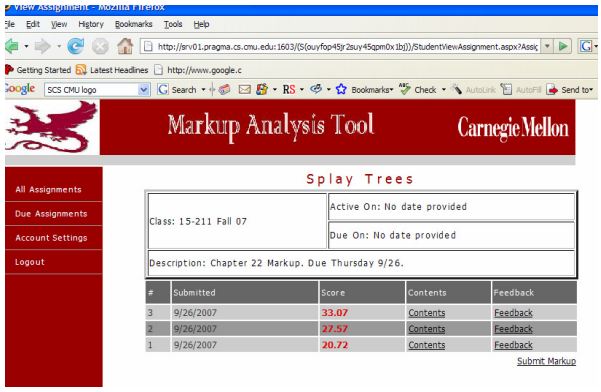


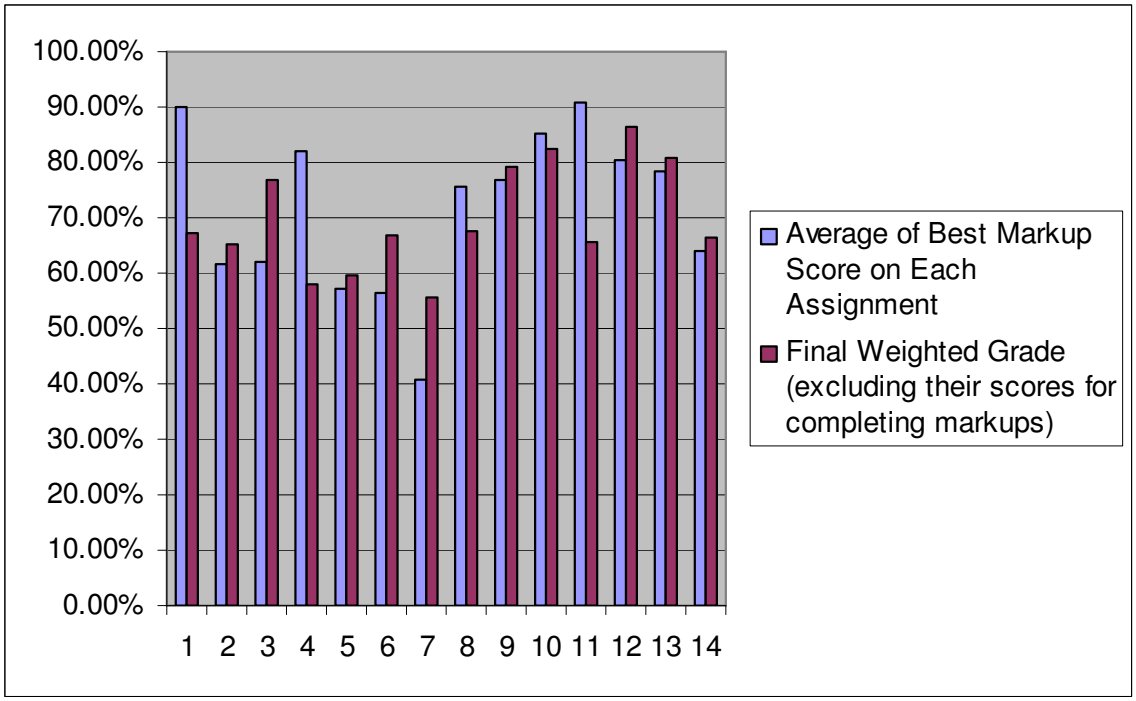
Get a Score



Iteratively improve the score

RESULTS

- **Used by Carnegie Mellon University(Pittsburgh) – 90 students**
- **Carnegie Mellon University (Qatar) – 20 students**
- **The Ellis School (Pittsburgh) – 15 students**
- **Grove City College (Pennsylvania) – 300+ students**



- **Strong correlation** between reading score and course performance
- Fun to use
- Highly interactive
- Interested in a pilot?
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