

# Comparing UCWISE and Online Universities

## Project Proposal

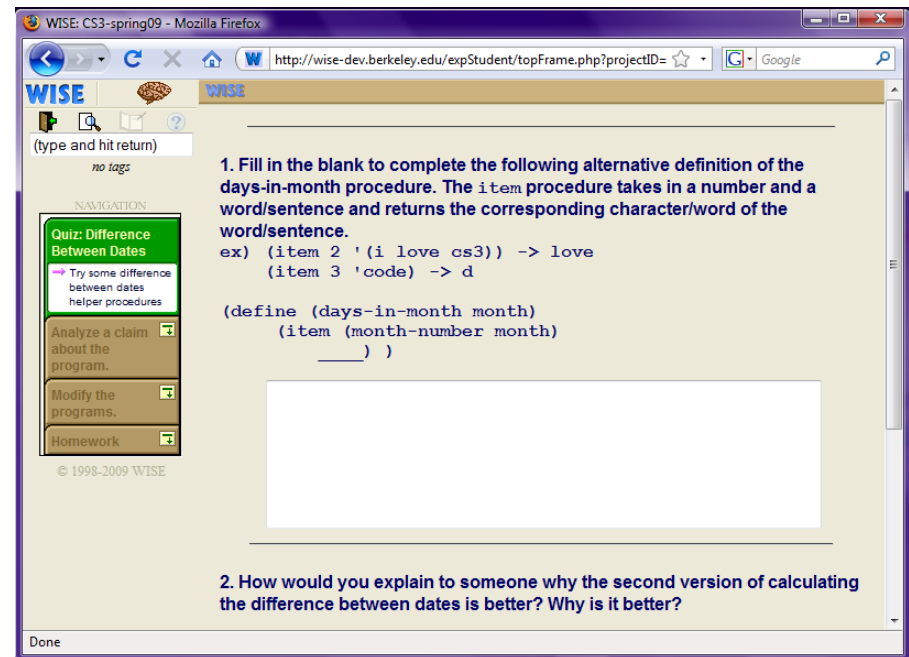
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CS260: Human-Centered Computing

2/11/2009

# What is UCWISE?

- ◆ UCWISE is a web-based learning system
- ◆ Ongoing education research project
- ◆ Currently used to teach lab-based lower-division CS courses (CS3, CS61B)



The screenshot shows a web browser window titled "WISE: CS3-spring09 - Mozilla Firefox". The address bar shows the URL "http://wise-dev.berkeley.edu/expStudent/topFrame.php?projectID=". The page content includes a search bar with the text "(type and hit return)" and "no tags". Below the search bar is a "NAVIGATION" section with a green button labeled "Quiz: Difference Between Dates" and three other buttons: "Analyze a claim about the program.", "Modify the programs.", and "Homework". The main content area contains a quiz question: "1. Fill in the blank to complete the following alternative definition of the days-in-month procedure. The item procedure takes in a number and a word/sentence and returns the corresponding character/word of the word/sentence." followed by examples: "ex) (item 2 '(i love cs3)) -> love" and "(item 3 'code) -> d". Below the examples is a code block: "(define (days-in-month month) (item (month-number month) \_\_\_\_\_) )". A large white rectangular area is provided for the user to enter their answer. At the bottom of the page, question 2 is partially visible: "2. How would you explain to someone why the second version of calculating the difference between dates is better? Why is it better?". The footer of the page shows "© 1998-2009 WISE" and "Done".

# Higher Education Online

- ◆ Examples: University of Phoenix, Regis University
- ◆ Systems are developed professionally
- ◆ While UCWISE may exemplify education research, these are commercially proven to work



# The Approach

- ◆ Compare and contrast UCWISE to computer science courses offered by specific online universities
  - Examining user reviews
  - User interface analysis
- ◆ Tie-ins with the course
  - Human learning in computer science education
  - Vygotsky and Piaget's theories on learning
  - Activity theory



# Learning Expectations



- ◆ Explore principles behind both systems
- ◆ Determine strengths and limitations of both UCWISE and online universities
- ◆ Discover possible improvements that can be made to UCWISE
- ◆ Project success could be assessed by the knowledge obtained from the comparison