## **Word Chaining**

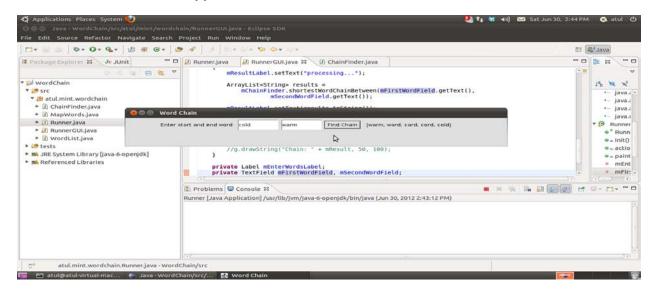
Specs - Eclipse Europa project with applet to run the program.

Testing - JUnit 4 (Takes some time to run the test)

Running - Starting the applet may take some time as it loads the dictionary and creates the map. Once loaded the results are computed pretty fast

- 1. Enter the first word in first text box and second word in second box
- 2. Click on the button

Results - Here is how the applet looks like



How it works - Uses minimum path algorithm (Dijkstra's)

- Step 1 Load the dictionary
- Step 2 Group the words with respect to their length
- Step 3 Create a map of key value where keys are the words and value is a list of words which differ by one character
- Step 4 For the first word, get the value from the map and add these to the list of words
- Step 5 For all the values of word one, get corresponding values for these keys from the map
- Step 6 Use list of words to get the corresponding minimum path

**Thanks**