

Name: pointsorter

Description:

We take an input string say "hello/rutgers/systems.programing.class". We go through the char array and find all the non alphabetic characters and replace them with a generic character that stands for non alphabetic. We chose to use "/" as the generic character. So our string becomes "hello/rutgers/systems/programming/class". This is done by the isAlpha method. This also uses the divider to count the number of words. We then use strtok to break the character array into tokens of words, each word is then saved into a token. The token is then used as a parameter to the createNode method which makes the word a node. Then the root of the list is used as parameter to the sort method. This alphabetically adds new nodes to the correct spot. the number of nodes is determined by NUM_WORDS.

Design:

pointsorter.h

- contains the struct for the node

pointsorter.c

- contains the main method, which uses multiple methods.

freeLL

- frees allocated space for linked lis

createNode

- makes node

isAlpha

- replaces non alphabetical characters in a string with '/'

sort

- adds nodes to Linked List alphabetically

printLL

- prints the Linked List

Example:

```
mihir$ ./main "hello.rutgers.systems/programming"  
hello  
programming  
rutgers  
systems
```