

**Assignment 1**  
Due Sept 8 in class

Produce code with the following functionality:

1. Implements a trie using a linked structure (See <http://en.wikipedia.org/wiki/Trie>).
2. Be able to add words and find words.
3. Find all words in the trie that contain the letters "ar". The letters must be contiguous in the word. For example, "hardware" does contain the letters "ar" contiguously but the word "batter" does not.
4. Print out all words in the trie.
- 5.

You are to write your own trie code. Do not use any existing library or code to implement the trie or related code.

**Grading**

	Percent of Grade
Working Code	30%
Comments	20%
Quality of Code	25%
Object-oriented code	25%

**Working Code.** How well your code meets the functional requirements listed above accounts for 30% of the grade for the assignment.

**Comments.** Having the appropriate comments in your code will count for 20% of the grade.

**Quality of Code.** Having good quality code counts for 25% of the grade. Quality of code includes formatting, names, and appropriateness of code constructs.

**Object-Oriented Code.** How object-oriented your code is will determine 25% of your grade.

For more information about comments and quality of code, see the lecture notes of past CS535 courses. For even more information, see Code Complete, McConnell, Microsoft Press, 1993. What to Turn in

Turn in the hard copy of your code.

Note to C++ people. C++ classes are have a header and an implementation. Place the header and implementation in separate files. Do not include any implementation in the header file.

### **Late Policy**

An assignment turned in 1-7 days late, will lose 5% of the total value of the assignment per day late. The eight-day late penalty will be 40% of the assignment, the ninth-day late penalty will be 60%, and after the ninth day late, the penalty will be 90%. Once a solution to an assignment has been posted or discussed in class, the assignment will no longer be accepted. Late penalties are always rounded up to the next integer value.