

Grading Rubric, Fall 2016  
Homework 3: Context Free Grammars

The parts of the report submission:

1. The final S1 and Vocab grammars are complete and are either pasted into the final report or included in the submission as files S1.gr and Vocab.gr. The grammar rules, nonterminal symbols and sections are clear and are not unduly complicated.
2. The grammar rules can parse all the sentences. Sentences, parse trees and associated changes in the grammars S1 and Vocab are included in the report. Sufficient information and explanation as to why new rules have been added are also included for each sentence during the development process. The explanations will demonstrate your understanding of how individual CFG rules contribute to shaping the phrase structure of the language, demonstrated by the resulting parse trees.
3. At least two challenge sentences are also included and described in the same way as the other sentences.

The report and submission will be graded according to the following rubric:

|   | Level of Achievement  |  |  |
|---|---|--|--|
|   | 1<br>(50%)  | 2<br>(75%)   | 3<br>(100%)  |
| <b>reproducibility<br/>20%</b>                            | Grammars are not provided in such a way as to allow the parsing to be run. Or the development process is not clear with critical processes missing. Exemplar sentences are not done.  | Grammars are provided to allow parsing to be run. The development process is clear in general with some details missing. Exemplar sentences are given.   | Grammars are provided to allow parsing to be run. Development process is clear. Exemplar sentences are given.  |
| <b>correct analysis<br/>40%</b>                           | The final grammar rules are not complete and cannot parse all the sentences. The parsing and associated grammar rules need overhaul for main noun, verb, preposition and sentence level phrase structures. Rules may be either too specific or too general. Exemplar sentences do not demonstrate some syntactic structure that the grammar cannot parse and some overgeneralization. | Grammar rules can parse all the sentences. The resulting parse trees conform to norms for the main noun, verb, preposition and sentence levels. Rules may be either too specialized to fit particular sentences or overly general in allowing combinations of words within the main phrases. Exemplar sentences only partially demonstrate some syntactic structure that the grammar cannot parse and some overgeneralization. | Grammar rules can parse all the sentences. The resulting parse trees conform to norms for the main noun, verb, preposition and sentence levels. Care has been taken to write clear and general rules without undue complications. Exemplar sentences demonstrate some syntactic structure that the grammar cannot parse and some overgeneralization. |
| <b>writing clarity and convincing conclusions<br/>40%</b> | The report is confusing with important information missing. Understanding of how CFG rules determine overall phrase structure is not demonstrated.  | The report is clear in general with some missing information as to why new rules have been added. But without significant problems in demonstrating how CFG rules determine overall phrase structure.  | The report is clear with no confusion. Sufficient information and explanation as to why new rules have been added, demonstrating how CFG rules determine overall phrase structure.   |

Interpretation of numeric grades as letter grades:

90 – 100 A

85 – 89.9 A-

80 – 84.9 B+

75 – 79.9 B

70 – 74.9 B-

below 70 has similar interpretation in the C and lower range.

Late assignment submissions will be accepted, but will be penalized in a sliding scale with these interpolation points:

1 day late – 3 points taken off

1 Week late- 7 points taken off (1/2 letter grade)

More than 1 week late- 14 points taken off (1 letter grade)