HW4 Write Up

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HW4 was pretty straight forward overall. Stringing the rule set for the base grapheme to phoneme conversion wasn't terribly difficult, since we were given the pronunciation rules. Figuring out rule ordering was pretty straight forward for the base set as well, but the stretch goals presented some challenges, particularly, determining the environment for flaps in the stretch goals data set was a bit of a challenge and how to order rules to encompass the extended data set. I determined that [ɾ] occurs before or after /a e/, when /r/ isn't word initial, but there really didn't seem to be a strong phonological motivation for this pronunciation, so it felt gross creating this rule. It works for this data set, but I don't think it would true if more data was presented. Ordering those rules such that /r/ was converted to the right phoneme took some thought. The most challenging aspect of the assignment was figuring out how to stay DRY while writing the rules, which I'm still not sure I was one hundred percent able to do, and also how to specify certain context for phonological context. The rule that took me the longest to write was the rule that would specific /o/ to [u] and /e/ to [i] when they occur before word final /s/. This only affected word samples from the stretch goals, where if we did not specify /s/ as an acceptor –pynini.accep("s[EOS]")– and only specified the /s/ as a right context marker then a word like /interesse/ was converted [inteisi] instead of it's correct pronunciation [inteesi]. I tried concatenatation first, but obviously, that didn't work, so I had to review the notes where I was reminded of the .accep() method, which did the trick.