**RGASC WDI Write-up: CSC263**

**Author: Daniel G. Dick**

 Overall, the writing in CSC263 was fairly strong, although many of the common issues seen in CSC236 (and other similar courses) were present. In general, student revisions were quite subtle and/or minor, with correspondingly minimal impacts on the quality of writing. However, TA/Instructor feedback seems to have effectively eliminated many of the more obvious grammatical errors seen throughout, resulting in a higher average improvement on this score when compared to other criteria (Table 1).

*Grammar/Word Choice*

 As was seen in CSC236 (and is commonly seen in second-year courses) students consistently struggled with implementing plurals and possessives in their initial submissions. For example, students frequently struggled to distinguish when to use “is” and “are” in relation to a list of objects (e.g., A10: “The hash table contains 3 main functions which is insert(), delete(), and search().”). More frequently, problems with plurals manifested in terms of a singular form of a noun when a plural form was necessary, or *vice* *versa* (B17: “The helper function index helper, and the three built-in function insert, delete and search for hash table”, C8: “The first two condition were…”). Problems related to possessive forms were similar to those seen in other related courses, including CSC236 (e.g., C1: “Next is the search() functions implementation.”, C4: “Furthermore, after the array doubles it size, the indices of the old Nodes will be re-hashed and adjusted to the new capacity.”). Other grammatical issues included difficulties implementing commas (e.g., A7: “The second case is when there is a different key, to the key being inserted, already at the hash location due to the two keys having the same hash number.”, B15: “The significance of decreasing the size of the Hash Table, is to cancel the increased size effect of the table during the recursive call.”, B16: “I then checked if the new assumed size of, self.size + 1, exceeded 75% of the hash table capacity.”). Word choice issues occurred under similar circumstances to what was seen in CSC236 and other similar courses, usually occurring when a student confused two similar-looking words (e.g., B3 [“conducts” vs. “consists”]: “…which conducts of a walk-through of my solution…”, B7: “half” vs. “halve”), or when two words had similar meanings (e.g., B4 [“for” vs. “to”]: “Looking forward for…”, B6 [“be” vs. “is”]: “The index of the slot will be returned if the slot is empty or be occupied by a node with the same key.”). Finally, tense-use issues occurred occasionally, although these seem to be have been related more to proof-reading than a genuine misunderstanding, as the student often used the correct form later in the assignment (e.g., A2 wrote “The node in the bucket being check is None or DELETED.”, and then used “checked” immediately after). When compared to CSC236, a relatively larger proportion of students were successful in fixing these grammatical/word choice issues in their revised submission, presumably due to TA/Instructor feedback (e.g., B17, B20, C1, C4, C8, D5), resulting in the higher average difference score (compare Table 1 [below] with Table 1 in the CSC236 write-up).

*Transition Expressions and Organization*

 The more free-form nature of the email assignment resulted in students occasionally struggling to coherently organize their ideas. This usually manifested as awkward transitions between sentences and different sections. For example, consider A1: “Meaning the code increments the index x by 1 until it finds the node with the same key k.”, B4: “Then starting from the slot given the address for, probe linearly until either a node with k is found…”, B6: “Since insert function uses hash index helper function, so every node inserts to the new hash table by linear probing.”, D2: “And the return value will be changed depending on the hash table’s current capacity.”. In addition to these awkward/confusing transitions, students occasionally made use of repetitive transition elements (e.g., B11 started multiple sentences in a row with “This is because…”, see also B16, B20, C5, C6). A lack of section headings made some submissions difficult to follow, although this was usually improved in the second submission.

*Colloquial/Unprofessional Language*

 In general, the tone and content of the majority of submissions was professional and would have been effective in a job application setting. Where unprofessional language occurred, it usually manifested in terms of overly conversational language. For example, B3 wrote “Let’s get started!’ at the start of their email, while C10 ended theirs by writing “Anyways if you feel like I am fit for this job position, I would love to follow up and schedule a time for an interview. Let me know!”. While this type of friendly language may be appropriate once an individual has been hired, it would likely seem out of place in the scenario presented in the assignment. Colloquial language was also fairly uncommon, although when present it served to both distract from the core content and increase the length of the submission unnecessarily (e.g., B9: “Last case that needs to care about is doubling in size when the hash table reaches 75% of capacity.”, B16: “There’s a little edge case that the helper overcomes.”, C2: “This one is a lot shorter.”).

*LaTeX Errors*

 As was the case in CSC236, student submissions in CSC263 occasionally featured LaTeX errors that, while minor, lowered the overall quality of their work. The errors that did occur were identical to those seen in CSC236 (specifically, backwards quotation marks [e.g., A2, A10, B9, C1, C11, C12, D1, D2, D4, D5] and inadvertent introduction of subscripts [e.g., C12 wrote *“insertupdate*” instead of “*insert\_update*”]).

*Summary*

 Overall, the writing in CSC263 was stronger than what I normally see in a second-year science course, with consistent improvement in terms of grammar and organization across most submissions. Better implementation of transition elements and introductory material would have improved most submissions, as would correcting the minor LaTeX errors.

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| **Table 1:** Average scores across five criteria (on a scale of 1 to 5) for 42 students from CSC263. |
|  | Submission 1 | Submission 2 | Difference |
| Grammar | 3.47619048 | 3.5875 | 0.1025641 |
| Clarity | 3.61904762 | 3.7 | 0.07692308 |
| Organization | 3.5952381 | 3.6875 | 0.08974359 |
| Transition Expressions | 3.61904762 | 3.65 | 0.03846154 |
| Professional Language | 4.73809524 | 4.725 | 0 |