ASSIGNMENT INSTRUCTIONS

1. Assignment 05:   **75 points w/ 15 E.C. points**
2. Due Date & Time: **05-07-2020 at 11:55 PM**

WHAT TO SUBMIT
1. Assignment Report
2. Code

HOW TO SUBMIT AND THE RULES TO FOLLOW
- Submit via iLearn, the Assignment Submission section
- Please refer to Assignment 01 for the Assignment Guidelines
- Please follow the Assignment Report Template
- Please follow the Course Policy on Student Conduct and Academic Honesty

PERFORMANCE TRACKER		
ASMT	**GRADE**	**YOUR GRADE**
ZOOM	05	
01	20	
02-PREPARATION	25	
02	75	
03	75	
MIDTERM EXAM 01	25	
04	75	
MIDTERM EXAM 02	25	
05	75	
TOTAL	**400**	

A: 90-100%   **B**: 80-89%   **C**: 70-79%   **D**: 60-69%   **F**: 0-60%
The course grader provides feedback to your assignments on iLearn.

ABOUT

This assignment aims to add Google Guava Dictionary to our set of skills.

- How to add Google Guava to our IDEs: URL: http://csc220.ducta.net/WEEK-14/dictionaryGoogleGuava-00-HowToImport/index.php

- This assignment is our last assignment for this semester. Congratulations and Thank you!

PART A: GOOGLE GUAVA – Importing Google Guava, **25 points**

Please follow the instructions posted on File Manager and the demonstration in class to import Google Guava into our IDE. It is OK to use either NetBeans or IntelliJ.
- NetBeans version: http://csc220.ducta.net/WEEK-14/dictionaryGoogleGuava-00-HowToImport/GoogleGuava_import_NetBeans.pdf
- IntelliJ version: http://csc220.ducta.net/WEEK-14/dictionaryGoogleGuava-00-HowToImport/GoogleGuava_import_IntelliJ.pdf
- More resources:
  - URL: http://csc220.ducta.net/WEEK-14/dictionaryGoogleGuava-00-HowToImport/index.php
  - URL, the dictionaryGoogleGuava directories: http://csc220.ducta.net/WEEK-14/

In our assignment report, please clearly show the steps and demonstrate Google Guava imported successful.

PART B AND PART C: GOOGLE GUAVA – Mastering Google Guava, **65 points**

Please implement an interactive dictionary. Our dictionary takes input from users and use the input as search key to look up value(s) associated with the key.
1. This assignment does not require following any given skeleton code.
2. We are required to use **Enum** and **Google Guava Multimap** in our implementation.
3. Please state clearly in our report if we implement both versions.
4. Please keep the two version separate: Part B - The Standard version vs. Part C - The Professional version.

PART B – Standard Version, **50 points**

     Our program's output must be identical to the output on the **2ⁿᵈ** page.

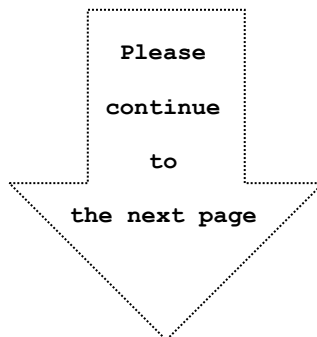**PART C** – Professional Version, **15 Extra Credit points**

     Our program's output must be identical to the output on the **3ʳᵈ** page.

I am going to volunteer additional office hours. Please see me if I can assist you with this assignment or anything else including a casual chat. See you.

Thank you and Happy learning!

PART A's OUTPUT - Standard Version

```
- DICTIONARY 220 JAVA Standard -----
-----         powered by Google Guava -

Search: book
    |
     Book: A written work published in printed or electronic form.
     Book: To arrange for someone to have a seat on a plane.
    |
Search: boOK
    |
     Book: A written work published in printed or electronic form.
     Book: To arrange for someone to have a seat on a plane.
    |
Search: bookable
    |
     Bookable: Can be ordered in advance.
    |
Search: bookcase
    |
     Bookcase: A piece of furniture with shelves.
    |
Search: bookbinder
    |
     Bookbinder: A person who fastens the pages of books.
    |
Search: cSc220
    |
     CSC220: Data Structures.
     CSC220: Ready to create complex data structures.
     CSC220: To create data structures.
    |
Search: Facebook
    |
     <Not found>
    |
Search: !q

-----THANK YOU-----
```

PART C's OUTPUT - Professional Version

```
- DICTIONARY 220 JAVA Professional -----
-----            powered by Google Guava -

Search: boOK
    |
    Book [noun] : A written work published in printed or electronic form.
    Book [verb] : To arrange for someone to have a seat on a plane.
    |
Search: BooK noun
    |
    Book [noun] : A written work published in printed or electronic form.
    |
Search: book verb
    |
    Book [verb] : To arrange for someone to have a seat on a plane.
    |
Search: bOOk oops
    |
    <2nd argument must be a part of speech or "distinct">
    |
Search: Facebook
    |
    <Not found>
    |
Search: cSc220
    |
    CSC220 [adjective] : Ready to create complex data structures.
    CSC220 [noun] : Data Structures.
    CSC220 [verb] : To create data structures.
    |
Search: csC220 adjective
    |
    CSC220 [adjective] : Ready to create complex data structures.
    |
Search: bookcaSE
    |
    Bookcase [noun] : A piece of furniture with shelves.
    |
Search: bookable verb
    |
    <Not found>
    |
Search: bookable adjective
    |
    Bookable [adjective] : Can be ordered in advance.
    |
Search: bookBINDER v
    |
    <2nd argument must be a part of speech or "distinct">
    |
Search: !Q

-----THANK YOU-----
```