

Homework4: Lesson Word Dictionary Manager

In this project, your goal is to develop a program for MIS department to manage words and their meanings in MIS Lessons.

User starts program with dictionary file parameter. (args in the main method)

The program provides some commands to user. **add, update, delete, list, search, save.**

Program Flow:

Program gets dictionary file name as command line arguments.

Program loads the lessons, words and meanings from the file.

Program asks for the command.

For **add** command, program will get the following data. If the word already exists in the dictionary for the specified lesson, program will generate exception. If the word for the lesson does not exist in the dictionary, lesson, word and meaning will be added to dictionary.

Lesson: ---

Word: ----

Meaning: ----

Dictionary

MIS201 – credit – Credit is for MIS201.

User enters

MIS201 – credit – credit is test (You will create an exception.)

User enters

MIS101 – credit – Credit is for MIS101. (You will add this data to dictionary.)

For **update** command, program will get the word. If the word does not exist in the dictionary, program will generate exception. If the word exists in the dictionary, program will display lesson, word and meaning and ask for new meaning. Program will update meaning only.

For **delete** command, program will get the word. If the word does not exist in the dictionary, program will generate exception. If the word exists in the dictionary, program will display word, lesson and meaning and ask if user is sure for delete operation, if user enters Y (YES), program will delete the word from dictionary.

For **list** command, program will print all the words, lessons and meanings.

Lesson: Word: Meaning

For **search** command, program will get the word. If the word does not exist in the dictionary, program will generate exception. If the word exists in the dictionary, program will display lesson, word and meaning.

For **save** command, program will save the content of the dictionary to file. Program should use the file that gets from command line.

Directions

Construct the Java program according to standards

Project Name = MIS103AProjects

Package Name = homework4

Class Name = LessonDictionary + Your Student Number

Write a comment to your program that describes the flow and structure of your program. Comment must be more than 50 words.

You are expected to implement a method for each command.

You should use exceptions to alert for errors.

Grading

10% Naming and Comments. (Write your code according to Java Naming Convention)

10% Algorithm Design

10% Exception Usage in program.

10% File Usage, Command Line Arguments

60% Output Validation (10% for each command)

10% Bonus Point. Sort command implementation. If you implement sort command, user can sort dictionary according to lesson and word. If user sort dictionary and save the dictionary, dictionary file data will be sorted.