

Department of Computer Science COMP2421 (Fall2021/2022) Project #2

Due date 14/11/2021 @ 11:59PM

You are required to build a simple dictionary. Your program should read the words and its relevant meaning from a file named *dectionary.txt*. As well as, the user should be able also to enter new words into the dictionary with their relevant meaning. Please use the following format for words

Word No. Word: meaning

Example

26. Assist: help

To keep track of the dictionary, a computer program based on a Binary Search Tree (BST) data structure should be implemented.

Write a program to help creating the dictionary by implementing the following operations of a **BST tree**:

- Read *dictionary.txt* file and create the dictionary.
- Search for a word and display its meaning.
- Update the meaning of an existing word.
- Insert a new word from the user with its meaning.
- Print all words in the dictionary in an alphabetic order with their associated meanings.
- Print all words that start with a specific character in an alphabetic order.
- Delete a word from the dictionary.
- Delete all words that start with a specific letter.
- Save all words back in file *dictionary.txt*.

General notes on the project:

- All submissions should be through ITC Moodle.
- Late submissions will not be accepted.