

# Object-oriented Programming

## Section J,K Fall 2020

### Assignment 3

**Due Date: Friday, November 20, 2020**

Use Object-oriented approach to implement Paraphrasing Application (Assignment-1).

#### Paraphrasing Application

Paraphrasing is the process of rewording a text, often done for simplification or clarity. Implement a simple C++ console-based application for paraphrasing purposes, in the following manner.

1. Create a class **Dictionary** that contains a list of words represented by class **Word**.
2. A **Word** has a text (of type String, implemented in Assignment-2) and a list of synonyms, where each synonym is also represented as a (pointer to) **Word**.
3. **Dictionary** shall load its list of words from a file that contains a list of words and synonyms, where each synonym is separated by a single white space character, as in the following example:

```
abandon discontinue vacate  
absent missing unavailable  
cable wire  
calculate compute determine measure  
safety security refuge
```

4. Create a class **Paraphraser** that:
  1. takes a text as input from the user and tokenize it into words.
  2. For each word, look it up in the **Dictionary** and replace it with a corresponding synonym (selected randomly in case of multiple options)
  3. Produce the output as paraphrased text