# **Assignment 1: KWIC-index system**

Code Repository URL: <a href="https://github.com/Pingxia/CS3213\_KWIC">https://github.com/Pingxia/CS3213\_KWIC</a>

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Implemented	Logic, Storage	UI	

### 1. Introduction

KWIC index system is a search mechanism for information in a long list of lines. The input includes a list of 'words to ignore' and a list of 'titles to process'. For each input, it will be repeatedly removing the first word and appending it at the end of the line. The output will be a list of circularly shifted lines in ascending alphabetical order.

#### 2. User Guide

Below is the list of supported functions:

1.

Below is the user interface of the program. A sample user interaction is shown below.

# 3. Design and Architecture

Figure 3.1 illustrates the architecture design of this KWIC system.

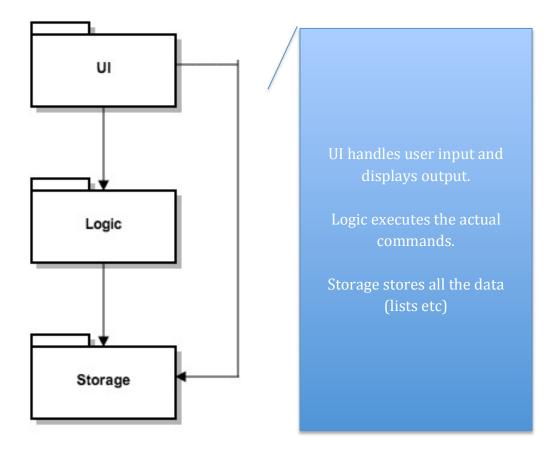


Figure 3.1

UI is in charge of taking in user inputs and displaying outputs to screen. UI will set the storage component and then call logic component to calculate the actual circular shifts and sort the list. Figure 3.2 is a sequence diagram showing

### 4. Implementation

UI component includes a MainUI class, an InputPanel class and an OutputPanel class.

Logic component includes a Manager class, a CircularShifter class and a

Storage component includes a Data class.

The classes' functions and their respective responsibilities are included below.