

CHAPTER 4

ANALYSIS AND DESIGN

4.1 Analysis

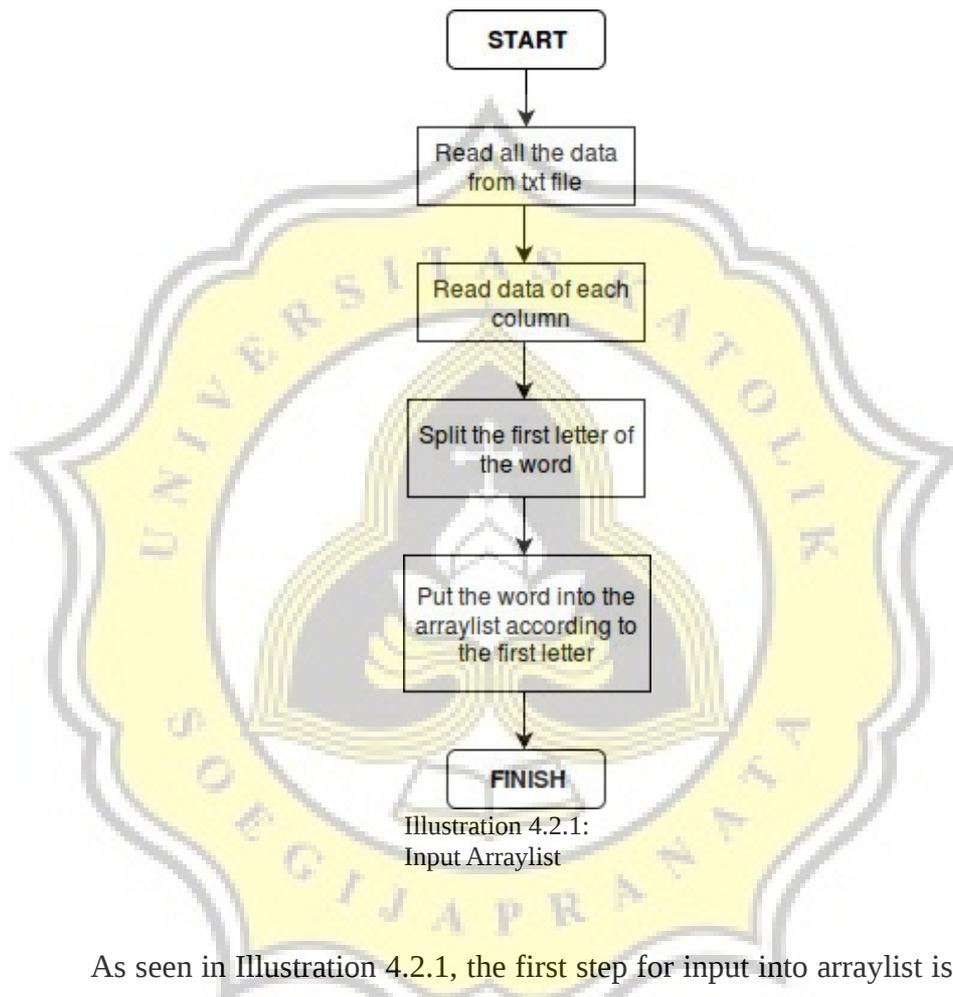
The familiar dictionary is usually a book, but in this modern times the book has begun to be abandoned. Dictionaries in gadgets and online are preferred by people because it is more practical and easy to carry.

Therefore, to facilitate the people in using the dictionary, this project will make Indonesia - English Dictionary using arraylist and C + + programming language. In making this project, it will be necessary to split each column and split each character. Split each column is used to divide columns according to language, while split each character is used to take the first letter of the word to be inserted in arraylist. Arraylist is a combination of array and linked list, where arrays in here to store the letters of a word and a linked list is used to store words according to the first letter. Words stored in linkedlist will be ordered alphabetically (orderedlist).

Another utility from this project are add or retranslate, and delete word. Add or retranslate is one fuction, if word already exist it will be retranslate. But if the word does not exist it will be add new word. While to delete word, this project will search in the arraylist. If the word exist, it will be deleted.

4.2 Desain

4.2.1 Flowchart Input Arraylist



As seen in Illustration 4.2.1, the first step for input into arraylist is read all the data from txt file. After that, read data of each column. Third step is split the first letter of the word in column. After split, put the word into arraylist according to the first letter. If the step for input into arraylist done, continue step below for searching process.

4.2.2 Flowchart Translate

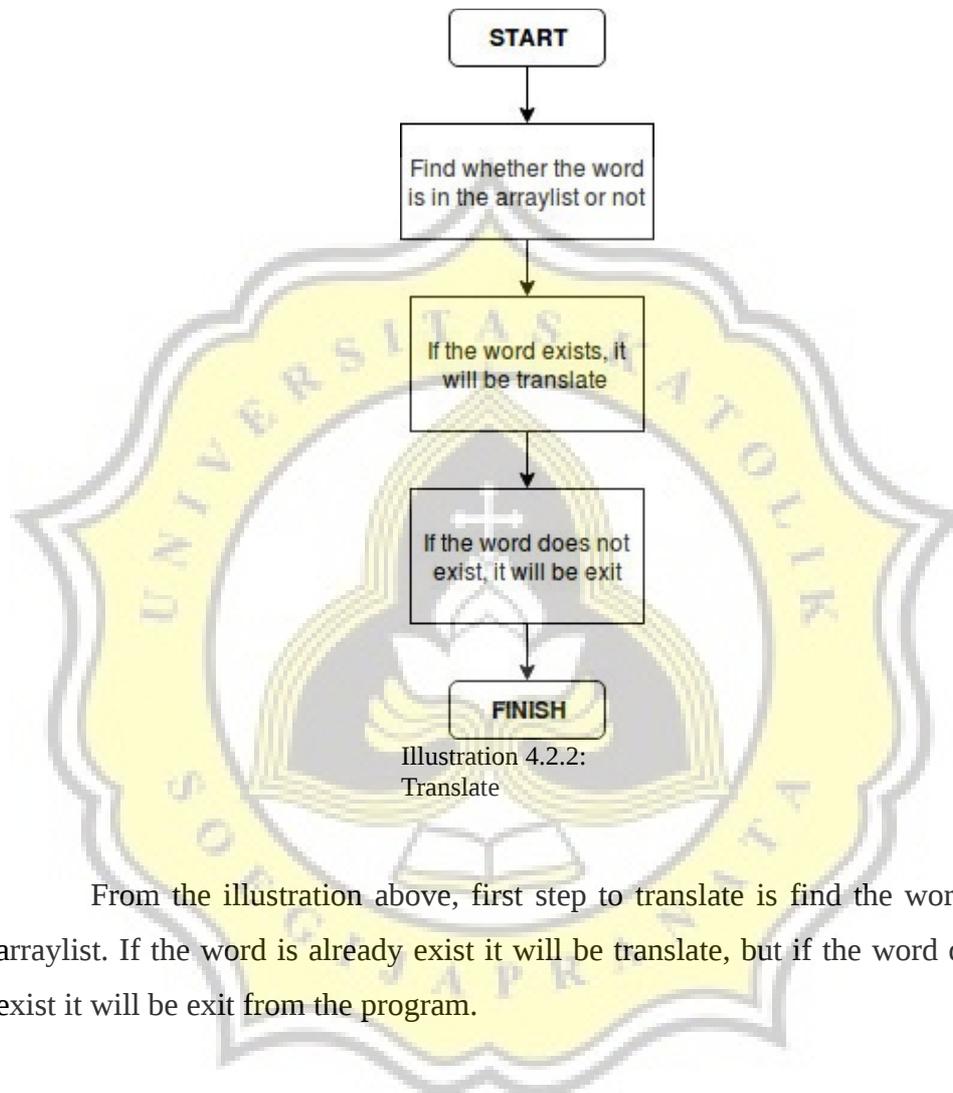


Illustration 4.2.2:
Translate

From the illustration above, first step to translate is find the word in the arraylist. If the word is already exist it will be translate, but if the word does not exist it will be exit from the program.

4.2.3 Flowchart Add or Retranslate Word

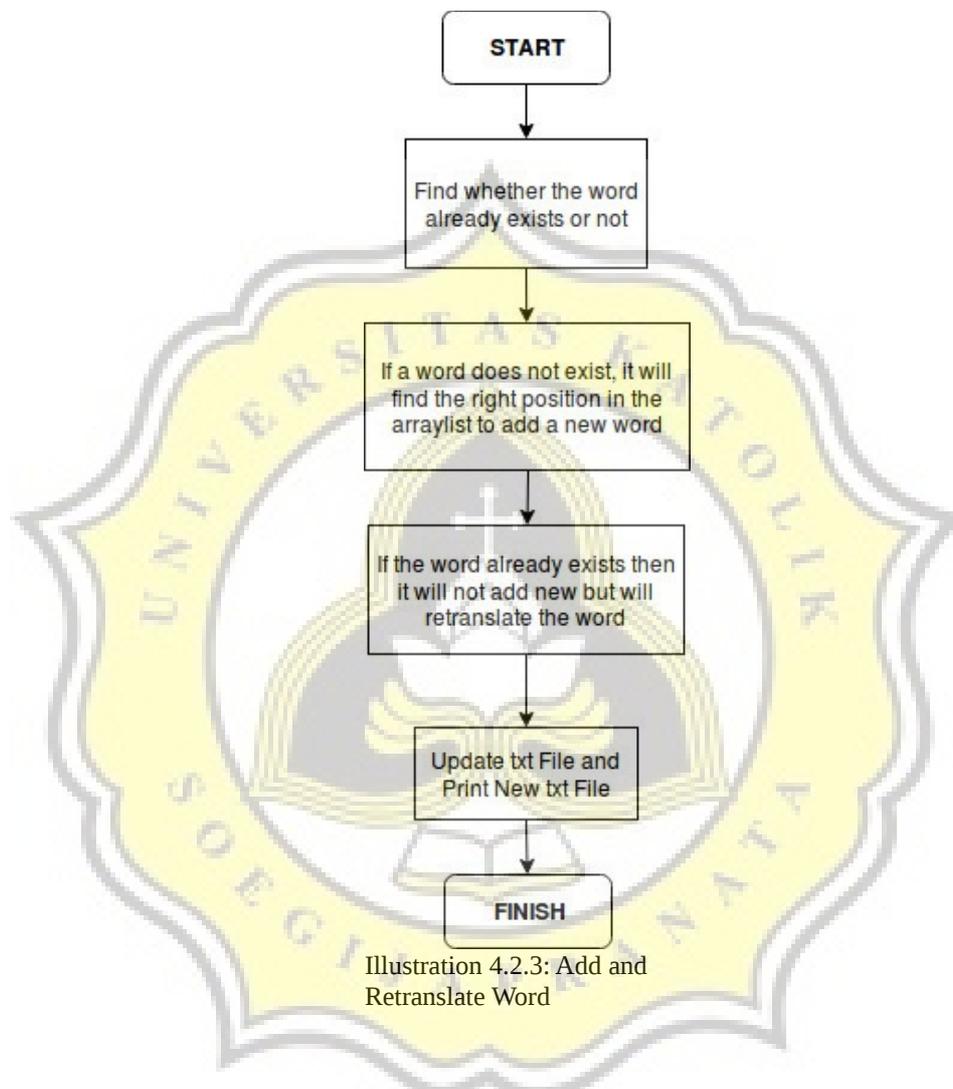


Illustration 4.2.3: Add and Retranslate Word

First step to add and retranslate word as seen in Illustration 4.2.3 is find the word is already exists or not, after that if word does not exists it will find the right position in the arraylist to add new wor. But, if word already exists then it will retranslate the word. Last step are update the txt file and print new txt file.

4.2.4 Flowchart Delete Word

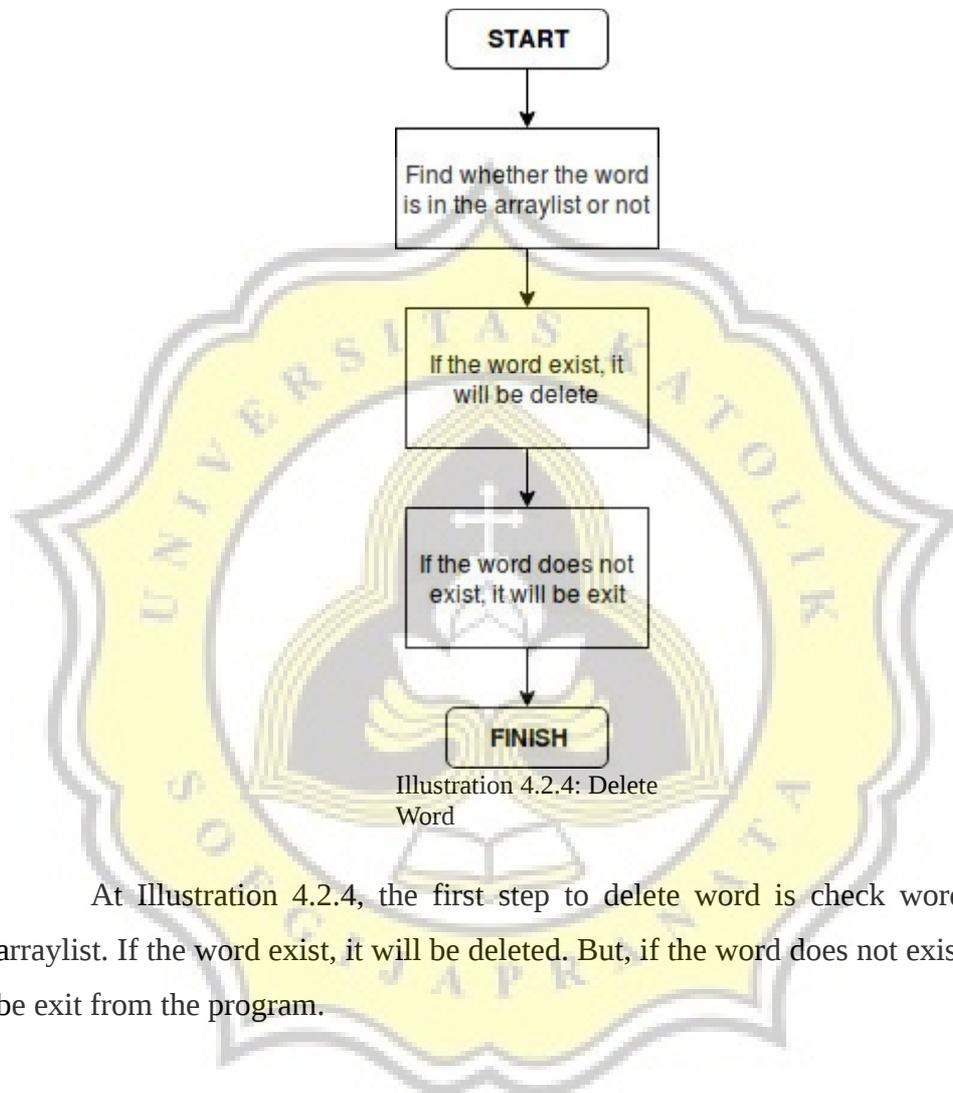


Illustration 4.2.4: Delete Word

At Illustration 4.2.4, the first step to delete word is check word in the arraylist. If the word exist, it will be deleted. But, if the word does not exist, it will be exit from the program.