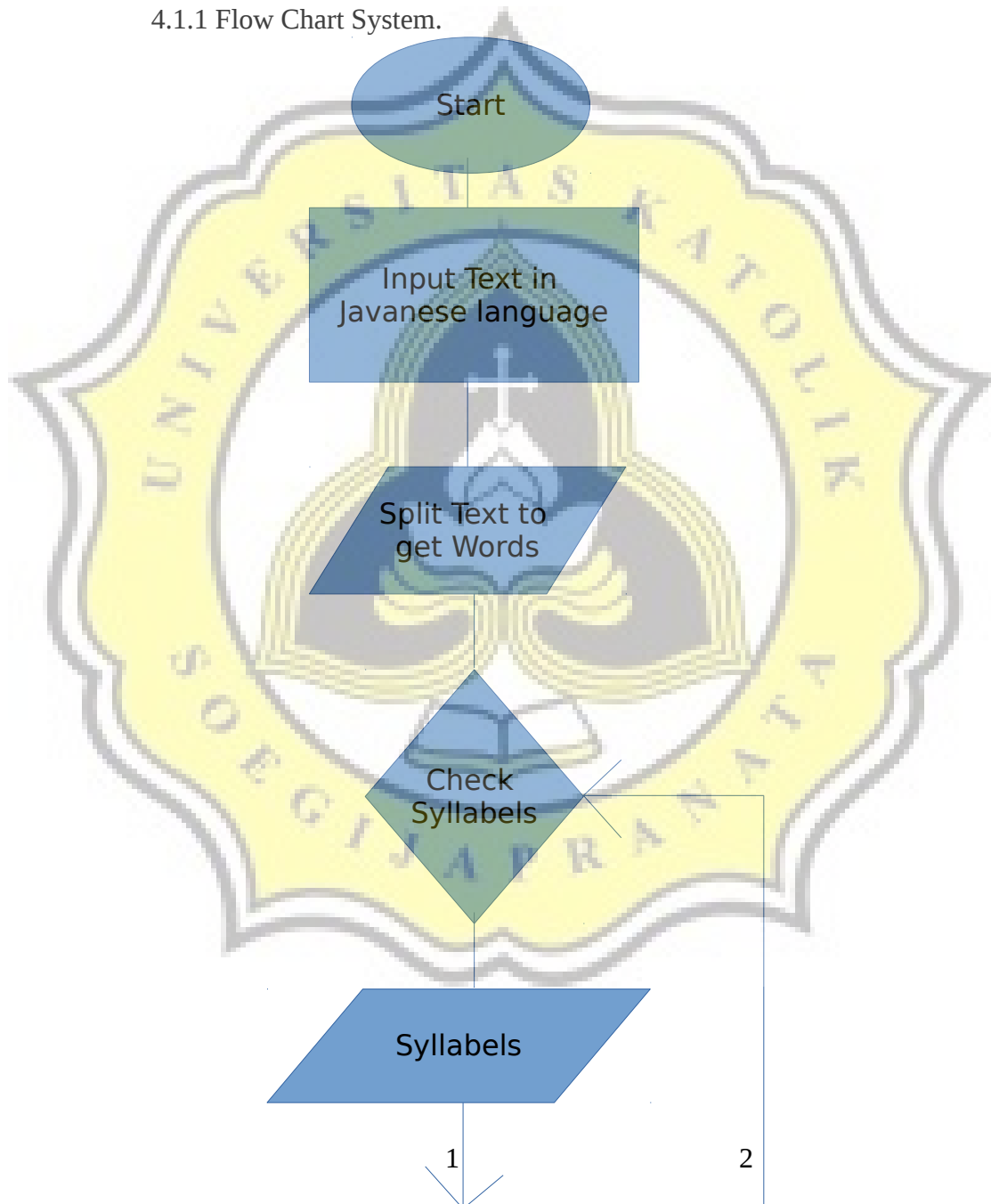


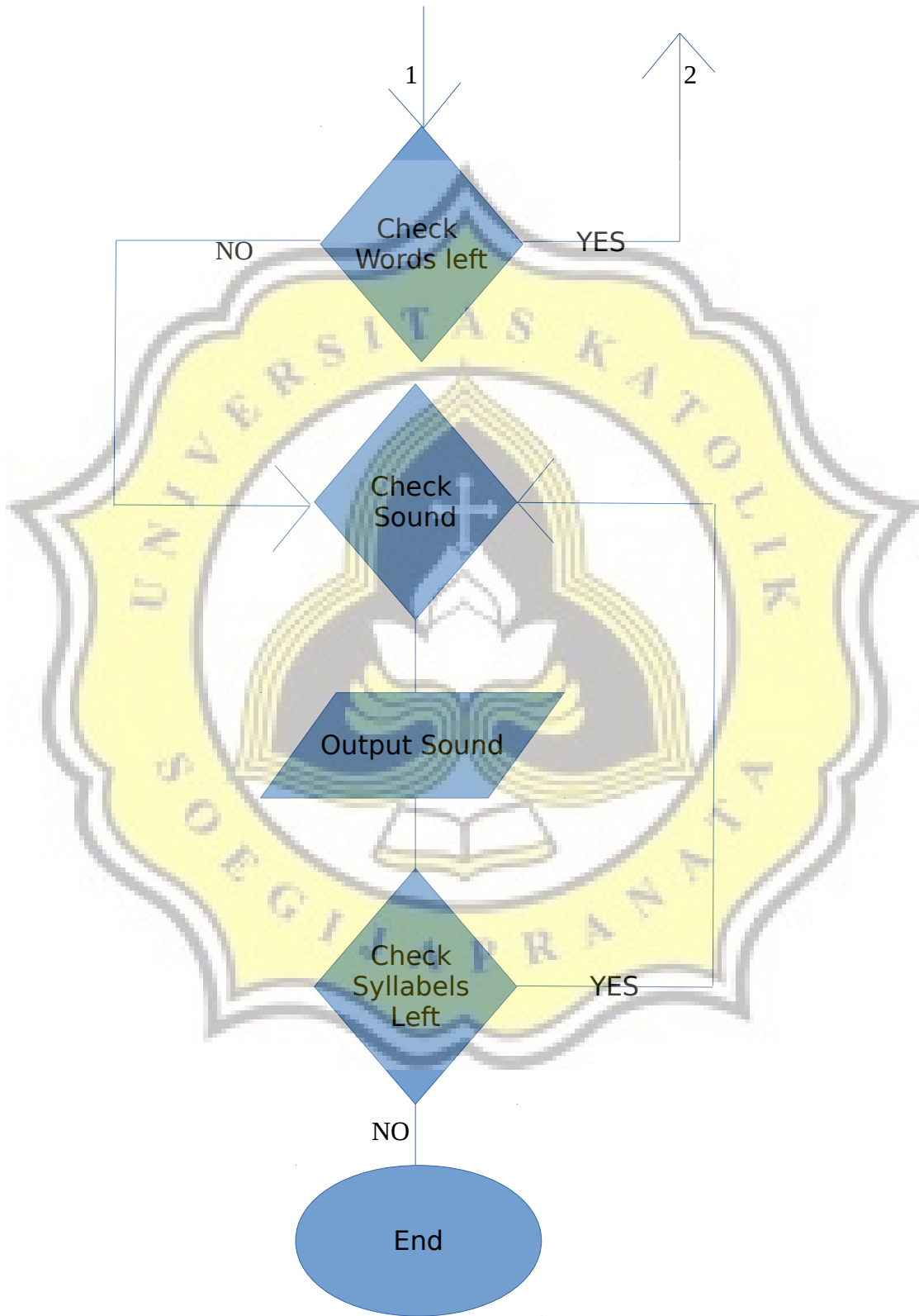
# CHAPTER 4

## ANALYSIS AND DESIGN

### 4.1 Design

#### 4.1.1 Flow Chart System.

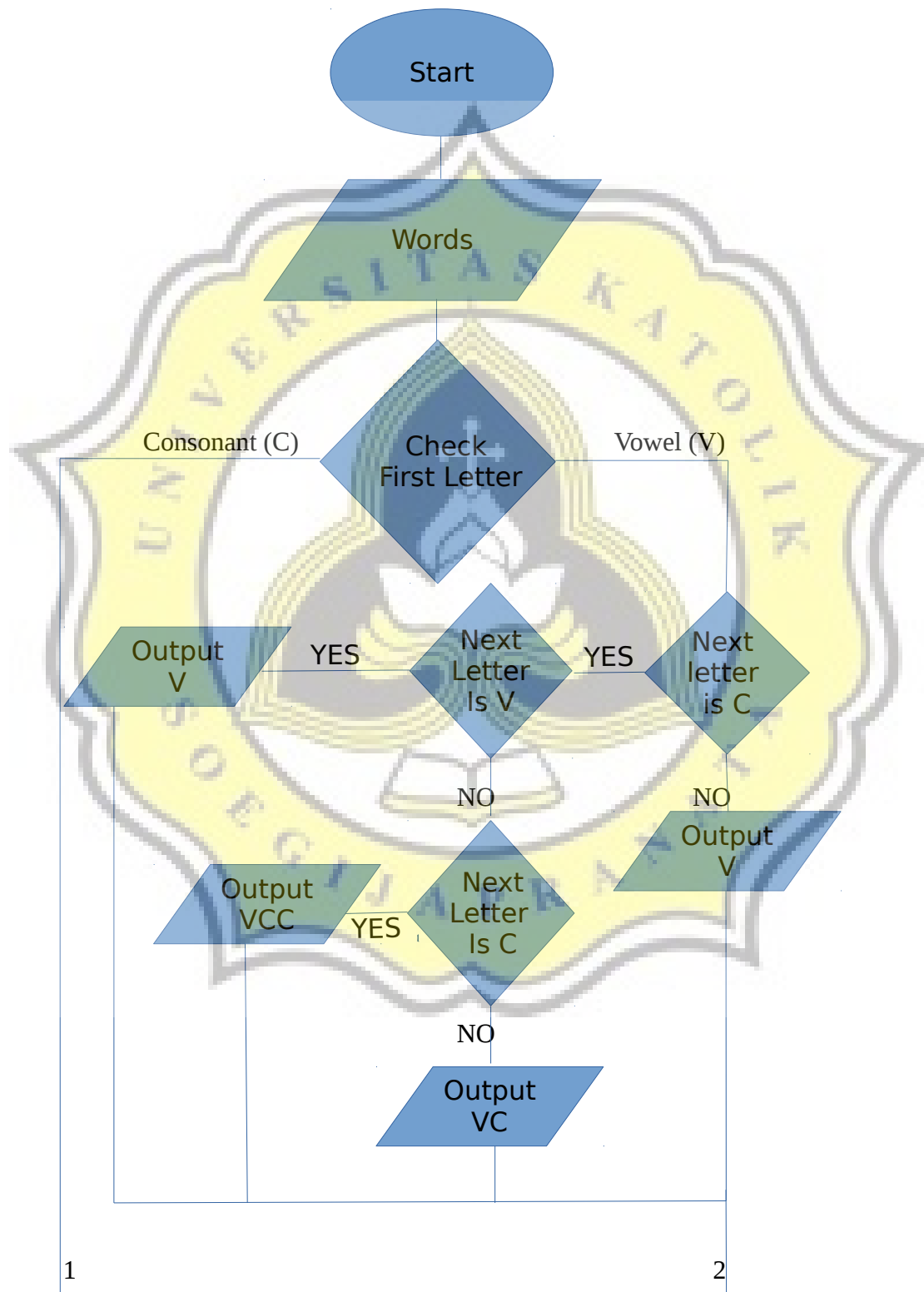


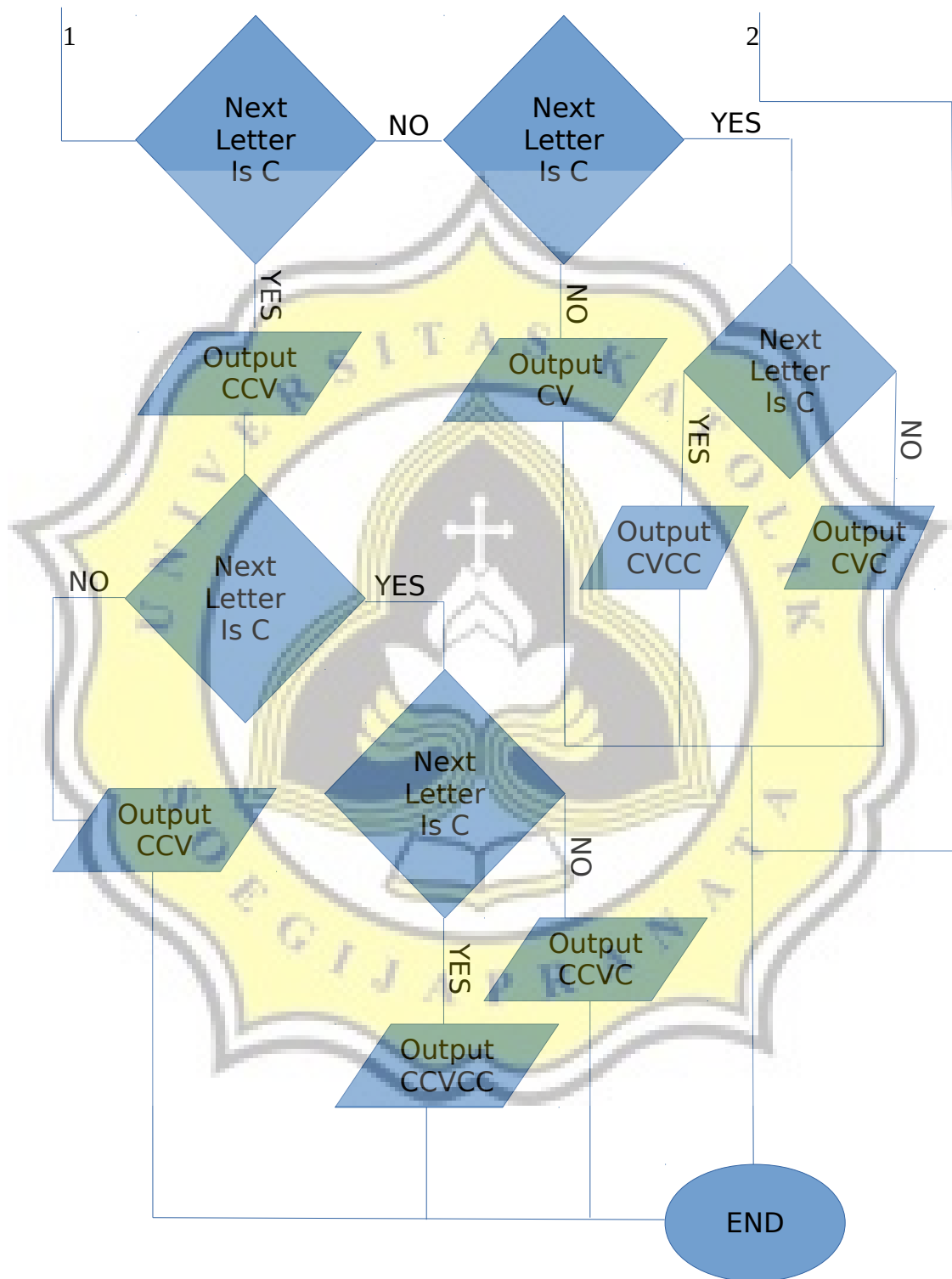


In this system there is 2 big processes, check the syllables and check the sound output. After the user input text, the text will be break into words then these words enter the check syllables process. After getting each syllables from those words, each syllables will show on the output text area. From the output text area, each syllables enter the check sound process which each syllables enter an array to determine what sound to be the output. After all the syllables has its sound, these sound is ready to be play.



## 4.1.2 Check Syllables flow chart





in the check syllables process, the first step is to check the first letter of the word. If the first letter is vowel, the word break in vowels rule, if the first letter is consonant, the word break in consonant rule. In vowels rule there are 3 classification V, VC, VCC. And in the consonant rule there is 8 classification but in javanese language there are no CCCV and CCCVC syllables then only 6 classification left there are CV, CVC, CVCC, CCV, CCVC, CCVCC.



## 4.2 Analysis

To analyze this project, we compare if the word has many syllables, is the word work much slower or not. We compare the text length too to check how much time it take to break a long text. To compare this project, author uses different input to see the time different between short input and long input.

To compare the process time, author uses 100, 500, 1000, and 5000 similar word to see the different time based on word amount. After that, author uses 100, 500, 1000, and 5000 different amount of syllables to see what the effect of different word length to time processes.

