

## CHAPTER 5

### IMPLEMENTATION AND TESTING

#### 5.1 Implementation

The Brute Force Algorithm project was implemented at Stored Procedure in the database for matching words so the search suggestion word that user want to can find a result, here is the code that contains the Brute Force Algorithm into the implemented Stored Procedure :

```
1. DELIMITER |
drop procedure if exists showdata;
create procedure showdata(pattern varchar(50))
Begin

DECLARE i int;
DECLARE j int;
DECLARE k int;
DECLARE cek int;
DECLARE hitung int;
DECLARE cnt int;
DECLARE hasil varchar(50);
DECLARE text varchar(50);

drop table if exists tblHasilkata;
create table tblHasilkata(
    katafix varchar(225)
);
/* Implementasi algoritma brute force store procedure */
select count(kata) into cnt from tblKata;
set k = 1;
set hitung = 0;
while k <= cnt DO
set cek = 0;
set i = 0;
set j = 1;

    select kata into text from tblKata where id = k;
    /* looping sebanyak jumlah karakter di variable text di
    kurangi pattern(hasil input user) */
    while i <= CHAR_LENGTH(text) - CHAR_LENGTH(pattern) DO
        while j <= CHAR_LENGTH(pattern) && SUBSTRING(text,i
+ j,1) = SUBSTRING(pattern,j,1) DO
            set j = j + 1;
        end while;
        if(j-1 = CHAR_LENGTH(pattern)) then
            set cek = cek + 1;
        end if;

```

```

        set j=1;
set i = i + 1;
end while;
    if (cek > 0) then
        set hitung = hitung + 1;
        insert into `tblHasilkata` values(text);

    end IF;
    set k = k + 1;
end while;
    if(hitung = 0) then
        select concat('Kata yang mengandung keyword
',pattern, ' tidak ditemukan.') as 'Hasil Pencarian';
    end if;
end
|
DELIMITER ;

```

From the code above the Brute Force algorithm that is implemented into the Stored Procedure will work as follows: take one word from the tblkata table and enter into the variable text and then looping it as much as the number of characters in the variable text in the decrease pattern (result user input), the Brute Force algorithm would work (doing the matching words in the letter from left to right). If the match is found then the results will be stored into the tblhasilkata for later when you're done checking on all the words in the database, if it does not find the results then will display "the keyword is not found".

## 5.2 Testing

The result of the experiment the Brute Force algorithm implements into a Stored Procedure as follows:

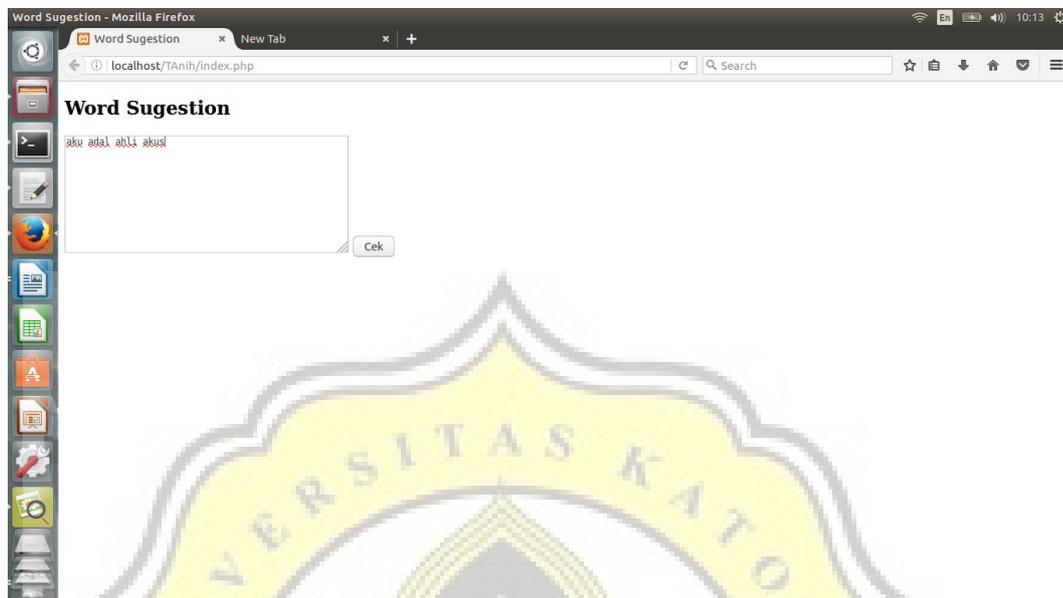


Illustration 5.1 Inputing Word

First display the form text area used to place the user inputing other search term recommendations and if the input is already in the database are not shown.

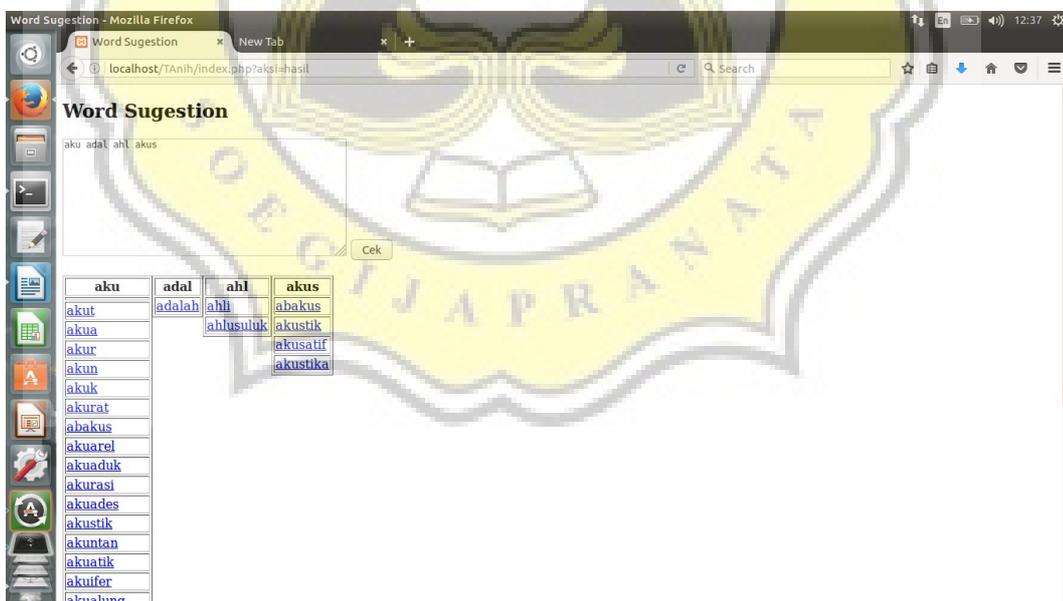


Illustration 5.2 Result Process Sugestion of Word

The result of the search words are displayed after the process of matching words by Brute Force algorithm.

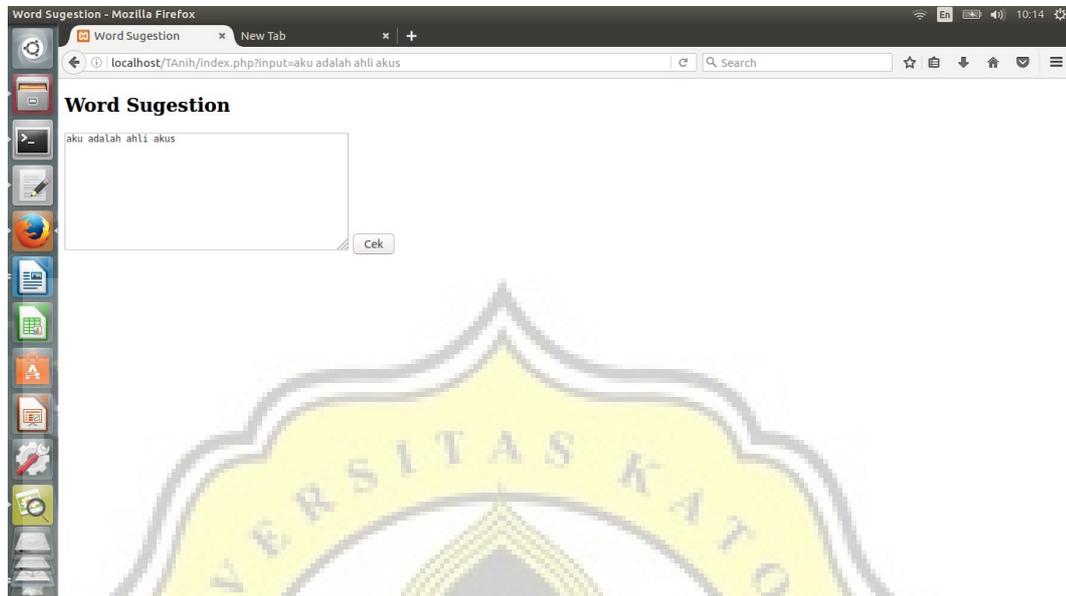


Illustration 5.3 Replace Word

Different than figure 1 because the wrong words in the input the user has been replaced by the word selected user (according to the user right).