Experimental Study on Wrapper Maintenance And Verification System

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Abstract- *The purpose of this study are wrapper maintenance and verification . Generally wrappers are used to extract data from web pages. As a websites are continuous evolving and changes happen with no any forewarning which results in wrapper extracting wrong data. This paper shows wrapper will extract data from any web page as well as it verifies the current extracted wrapper contents with previously extracted wrapper contents.*

Keywords- Wrapper maintenance, multilevel , extraction.

I. INTRODUCTION

Now a days websites are continuously changes. These changes are happen with no forewarning. Due to this wrapper are extracting errorneous data. To avoid this situation wrapper should be maintain. For achieving this goal wrapper maintenance and verification is very important. In proposed approach multilevel extraction rules are applied. After that we applied tag based rules for extraction of web page which gives better performance than multilevel extraction. Results presented in this paper shows the better performance of tag based wrapper as compare to multilevel wrapper as well as verification part shows the extracted contents from wrapper are matched or not with previous extracted wrapper contents.

II. METHODOLOGY

This project follows the steps given below:

1)Extract Source Code Algorithm :

Input: URL link
Output: Source code

<u>Algorithm:</u>

```
Step 1: Start
Step 2: Read link entered by user
Step 3: Open url link
Step 4: Open source code from link.
Step 5: Copy the source code line by line in a text file.
Step 6: End
```

2)Extract Wrapper Contents Algorithm(Multilevel) :

Input: Source code text file
Output: Wrapper Contents

<u>Algorithm:</u>

```
Step 1: Start
Step 2: Read source code text file in buffered reader
Step 3: Apply wrapper rules:
        • Rule 1: Apply numerical features.
        • Rule 2: Apply categorical features.

Step 4: Save the remaining extracted contents in new text file which are Wrapper contents.
Step 5: End
```

3) Extract Wrapper Contents Algorithm(Tag Based) :

Input: Source code text file
Output: Wrapper Contents

<u>Algorithm:</u>

```
Step 1: Start
Step 2: Read source code text file in buffered reader
    • Step 3: Apply wrapper rules:
    • Rule 1: Remove comment tags from text file
    • Rule 2: Remove words like &nbsp;,&amp;
    • Rule 3: Remove <image> tags
    • Rule 4: Remove <style> tags
    • Rule 5: Remove <script> tags
    • Rule 6: Remove all remaining <html> tags
Step 3: Save the remaining extracted contents in new text file which are Wrapper contents.
Step 4: End
```

4) Algorithm to match present wrappers with past wrappers

Input: Present wrapper file and past wrapper file

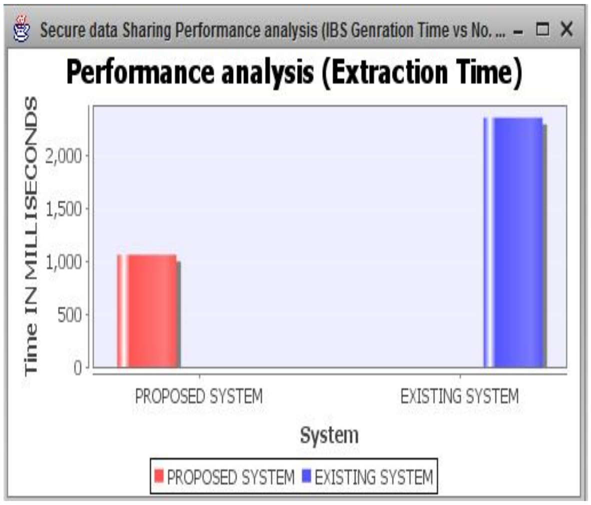
Output: If files matched then present wrapper file will be displayed otherwise it will give error that files are not matching

Algorithm:

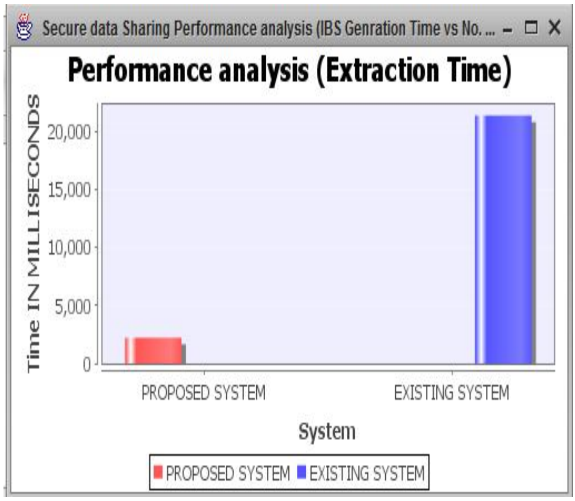
```
Step 1: Start
Step 2: Read present wrapper file in BufferedReader.
Step 3: Read past wrapper file in BufferedReader.
Step 4: Check whether each character in each lines of
        the both file are equal or not.
Step 5: If equal then Display current wrapper file with
        wrappers matched message.
Step 6: Else it will show error message that files are not
matching with each other. Step 7: End
```

III. EXPERIMENTAL RESULTS FOR WRAPPER MAINTENANCE

1) http://www.agorocart.com – Below graph shows the difference between existing and proposed system with respect to response time . Here response time of proposed system is 1000 ms which less than existing system that is 2500 ms.



2) http://www.bookmooch.com – Below graph shows the difference between existing and proposed system with respect to response time . Here response time of proposed system is 2500 ms which less than existing system that is 20000 ms.



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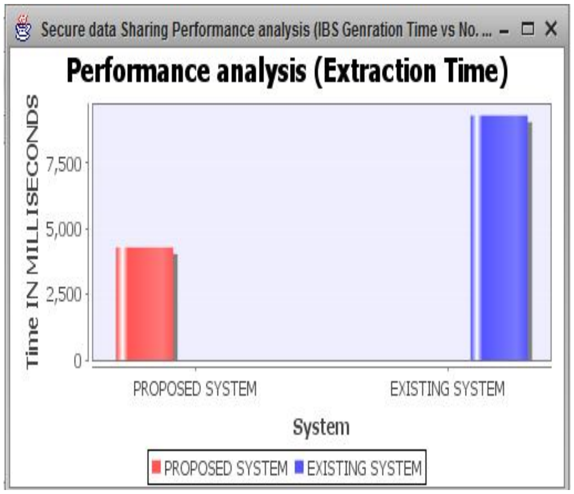
3) http://javapoint.com– Below graph shows the difference between existing and proposed system with respect to response time . Here response time of proposed system is 2500 ms which less than existing system that is 20000 ms.



4) http://www.tutorialspoint.com/cprogrammingindex.html – Below graph shows the difference between existing and proposed system with respect to response time Here response time of proposed system is 4800 ms which less than existing system that is 12600 ms.

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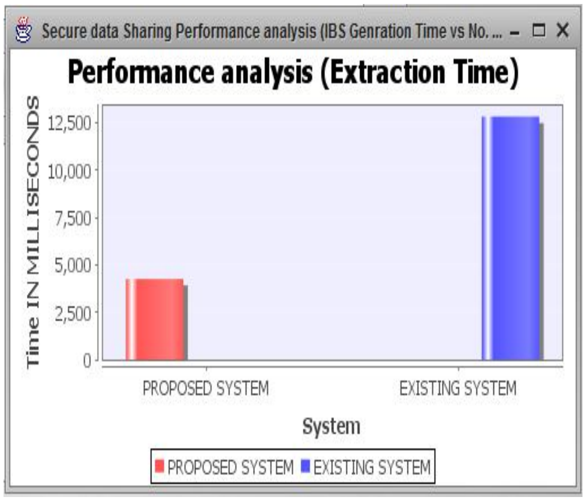
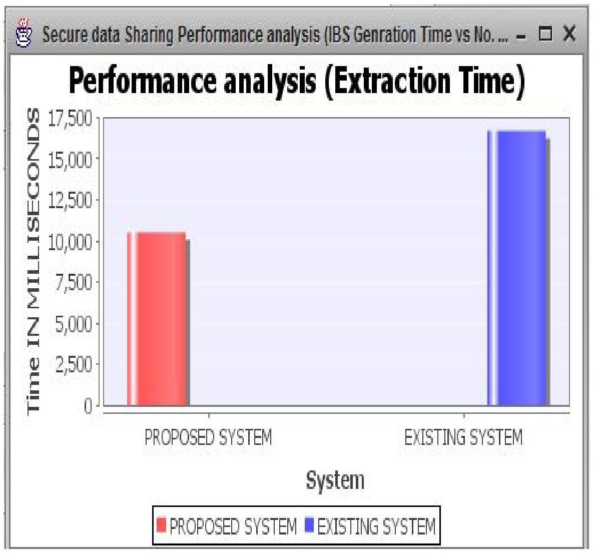


5) http://www.ijircce.com– Below graph shows the difference between existing and proposed system with respect to response time . Here response time of proposed system is 10500 ms which less than existing system that is 16500 ms.



VI .CONCLUSION

A novel multilevel wrapper verification system to verify wrapper-extracted information is presented in this paper. This approach, named as MAVE, makes use of categorical and numerical features in two different levels of verification. Then, the idea of dealing with categorical and numerical features independently is proven to improve the verification process. Instead of extracting data using categorical and numerical features data is extracted applying rules on html tags directly. Finally, MAVE's gives better performance as compared to existing system.

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