# Requirement

Write an application

·         That takes as input: Username, github access token, and the url to a GHE repo

·         Using the GHE API (<https://docs.github.com/en/enterprise-server@3.1/rest/reference/repos>) iterate through all the commits for the GHE repo and for each commit retrieve the commit comment.

·         For each commit comment the program must use an AVL Tree to store the words separately

·         For each word, the program also needs to count the occurrences of each word across all the commit comments.

·         The program must use a Bubble Sort to sort the words in order based on the ASCII codes for the characters (<https://www.asciitable.com/>).

·         The program can then output the words in sort order to screen along with the occurrence count for each word.

·         The solution should also have the option to export the words as a CSV along with the count of occurrences of each word.

# Overview

The application takes user name, personal access token and github repository url as input parameters. The commit comments are fetched for the GHE repository and only words from the comments are store in AVL tree and sorted according to their ASCII value using bubble sort. Also, user gets the count of occurrence of each words across all the comments.

# Technical Details

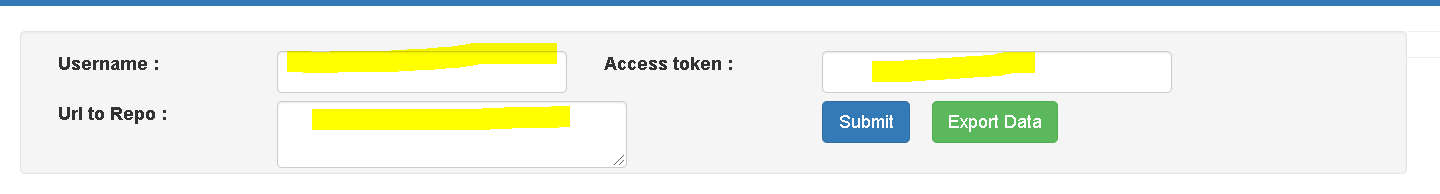
Language used – c#, Javascript, Jquery and HTM/CSS.

Tool – GIT

Architecture - .NET MVC.

# Testing

Goto link - https://{localhost}/CommentWordCount



Insert the credentials and click on submit.

Please note if any of the fields is left blank, the click on submit will give an alert. Also, if the table/any field is empty and user clicks on ‘Export Data’ it will give an alert.

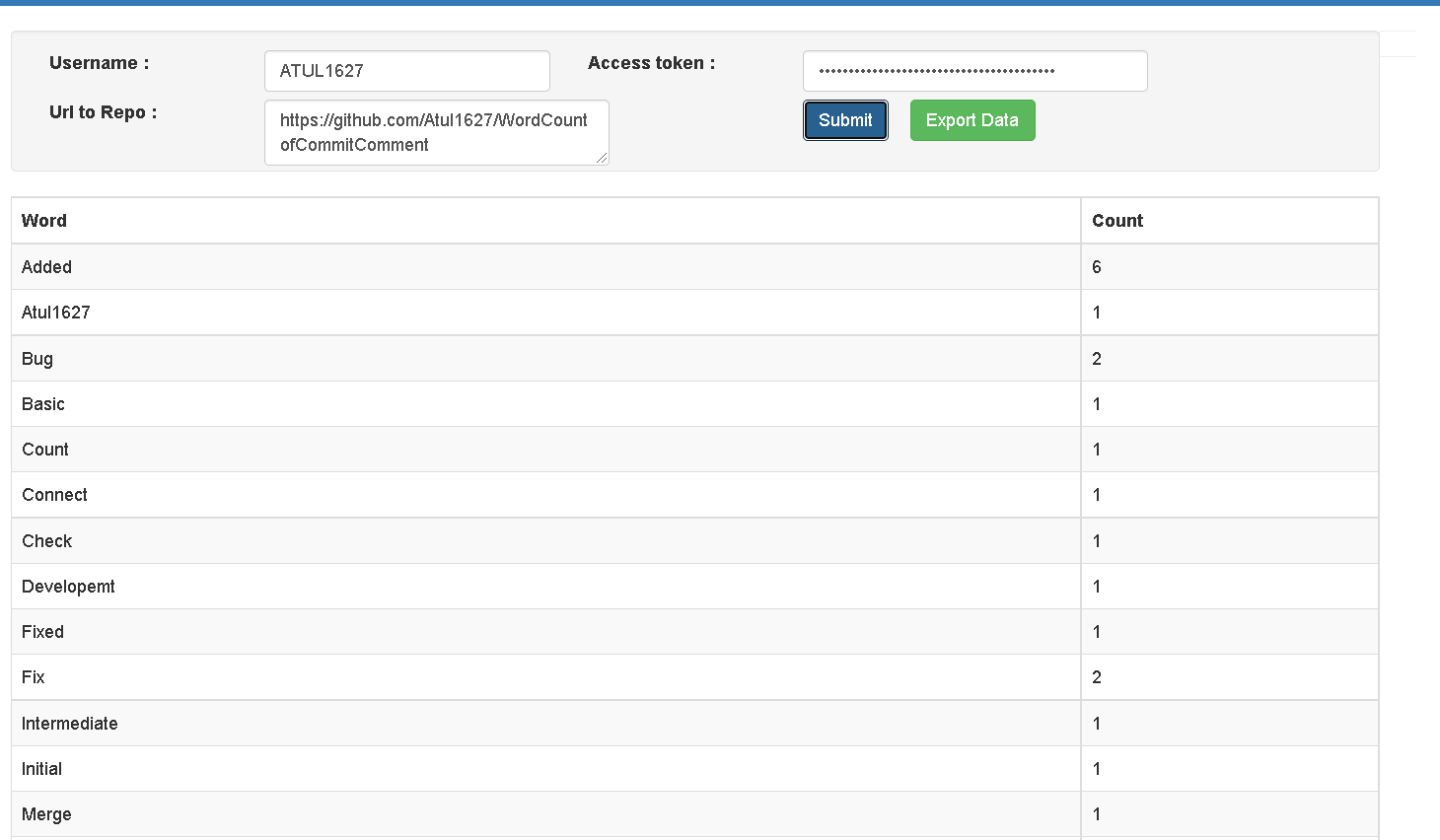
Test parameters: -

userName = "ATUL1627";

token = "ghp\_lhmVTdIK521jngaJADwbQPiWi38f9Z0IqGEg";

repoURL = "https://github.com/Atul1627/WordCountofCommitComment";

Once, the correct parameters are inserted and clicked on submit, the table will get populated like given in screenshot -



Now, click on ‘Export Data’ - a file with extension .csv will get downloaded . The file will contain the words and their counts of occurrence.