

PROBLEM

Vocabulary In Reading Study (VIRS) is a vocabulary website which aims to enhance user's language skills by using powerful vocabulary analyzing tools.

Some of the problems worked on include:

- Reducing the overall cost of the website.
- Make words in this text list more organized and readable.
- Getting the setup of the project to work.
- Researching mobile application issue.
- Looking into Git LFS complication.

SYSTEM DESIGN

The site is hosted on AWS and the mobile apps display the site through WebView object.

The Frontend consists of Angular Typescript, Bootstrap, CSS and HTML 5. The backend is MySQL and Java Spring Boot.

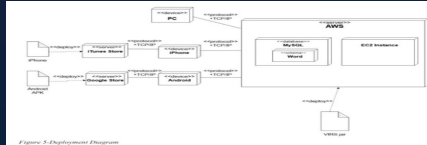


Figure 2 – Deployment Diagram

CONTRIBUTION

- Reduced cost of website by 86% by investigating the cost analytics in Amazon Web Services and removing extraneous features which had been previously been running for over 2 years.
- Removed duplicates and cleaned words in list for better readability.
- Added needed dependency to get project running and helped teammates download software that was specifically needed.
- Identified issue in mobile accounts that caused app problems.
- Managed Git billing system to enable Git LFS.

OBJECT DESIGN



Figure 3 - UML Diagram

OLD SYSTEM



Figure 5 - Old Design with duplicates and unclean words

REQUIREMENTS

Hardware:

- Windows

Software:

- Java
- Spring Boot
- Angular
- MySQL

Version control:

- Git-Hub



IMPLEMENTATION

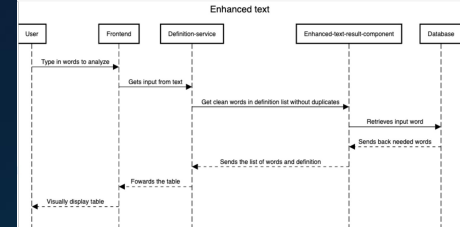


Figure 4 – Sequence Diagram

SUMMARY

Several improvements were made to the website in order to improve the user's overall experience. These range from changing the interface of the website to making the website more efficient to run in the future. We are confident that the improvements will enhance user's language skills and learning goals. However, there is still room for future developers to positively impact the website.

ACKNOWLEDGEMENT

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