

Knight Foundation School of Computing and Information Sciences

Spring 2023 Capstone II Project

Vocabulary In Reading Studies (VIRS)

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INTRODUCTION

Vocabulary in Reading Studies (VIRS), is a service for new English speakers that gives them a basis for rating English words potentially crucial in their learning of the English language.

The main feature allows learners to input paragraphs of English text, which returns a categorizing of the words based on the words' frequency rate in various text, on the difficulty to learn them, and on the words' educational grade level.

PROBLEM

- Lack of categorization of words by grade level.
- Lack of search option to sort through words by grade level.

REQUIREMENTS

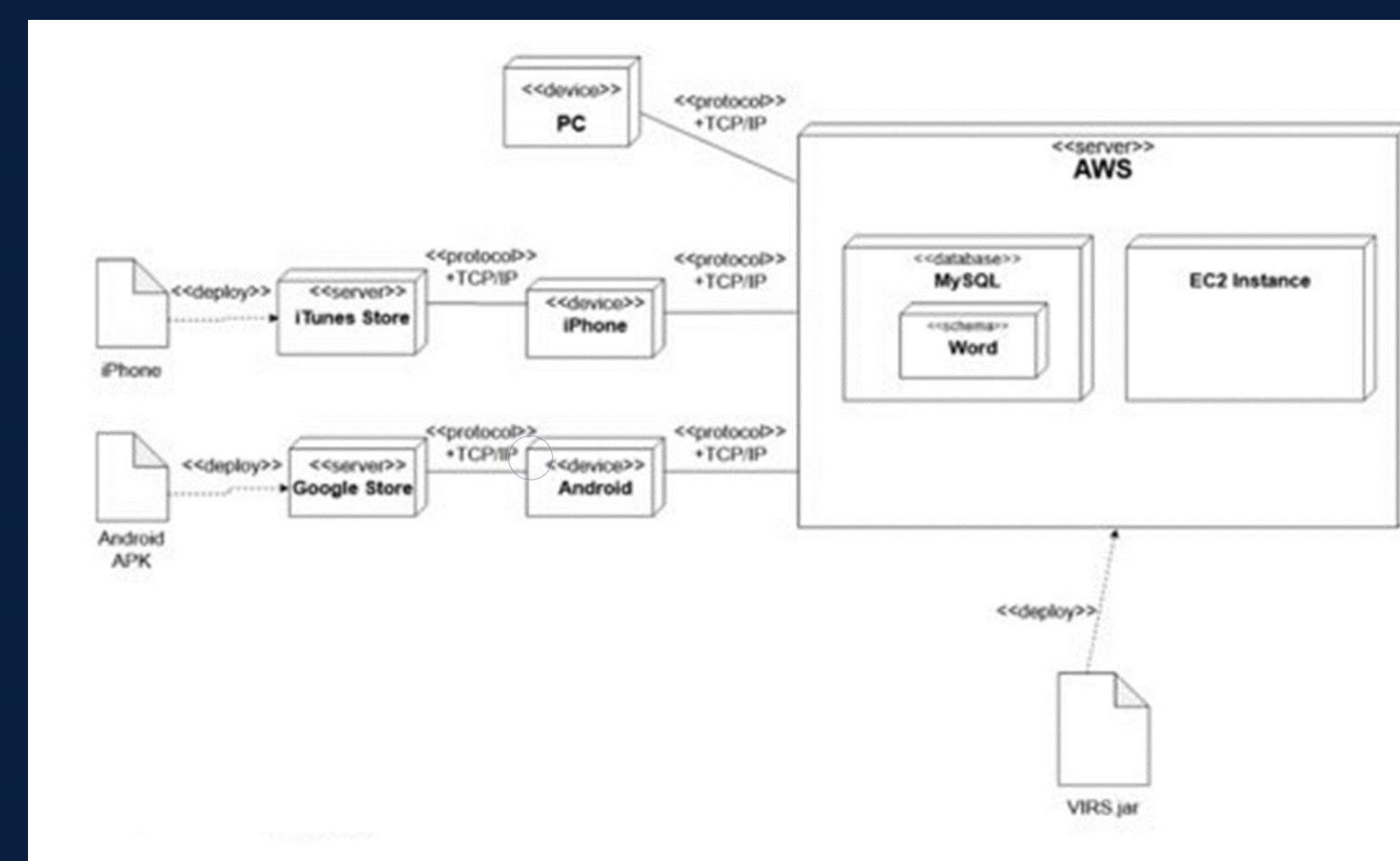
- Users should be able to see a word's expected grade level for the K-12 grades
- Users should be able to choose to sort through words by frequency or by grade level

SYSTEM DESIGN

The site is hosted on AWS.

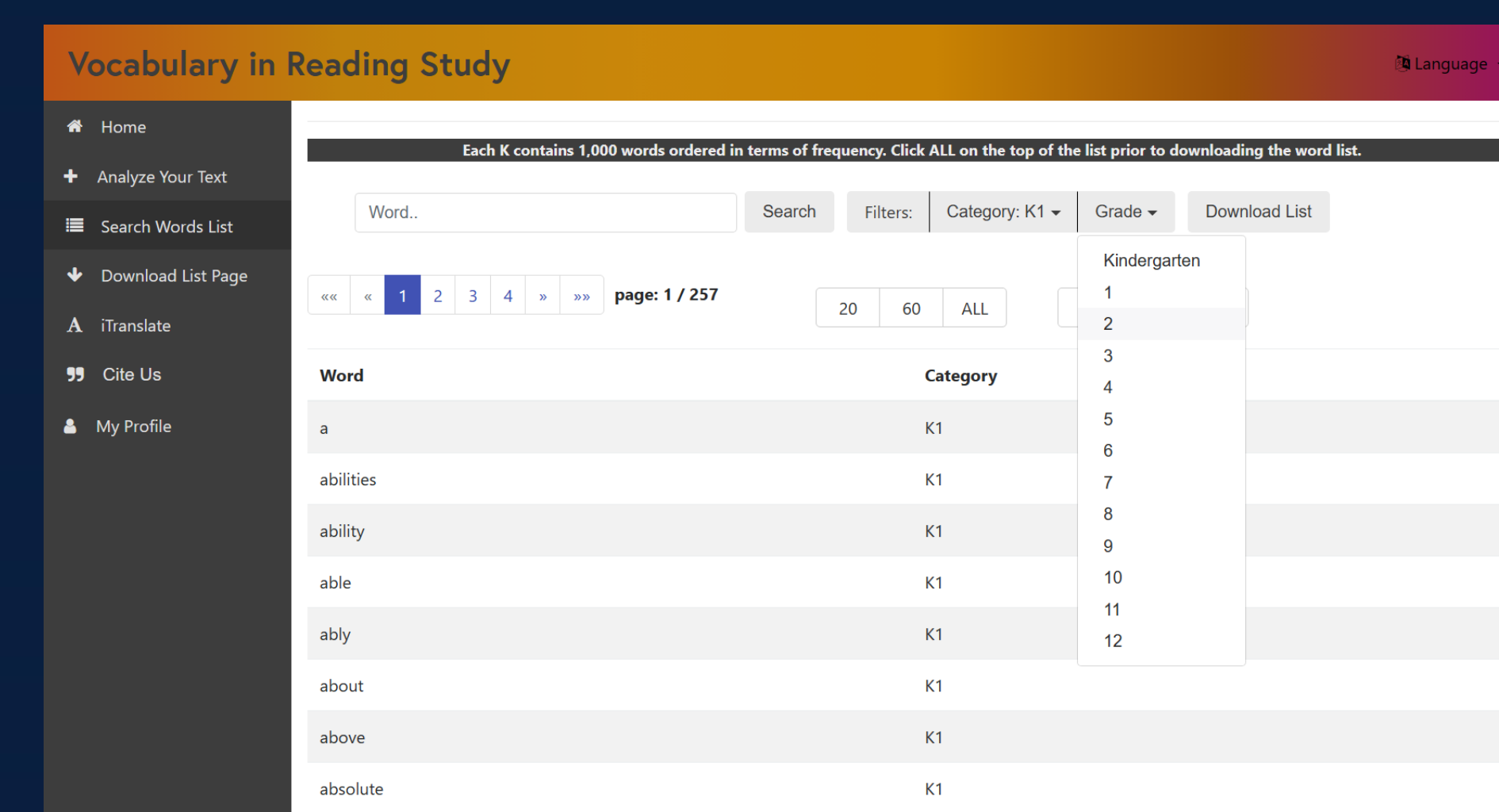
The frontend consists of Angular Typescript, Bootstrap, CSS and HTML 5.

The backend consists of Java Spring Boot and MySQL.

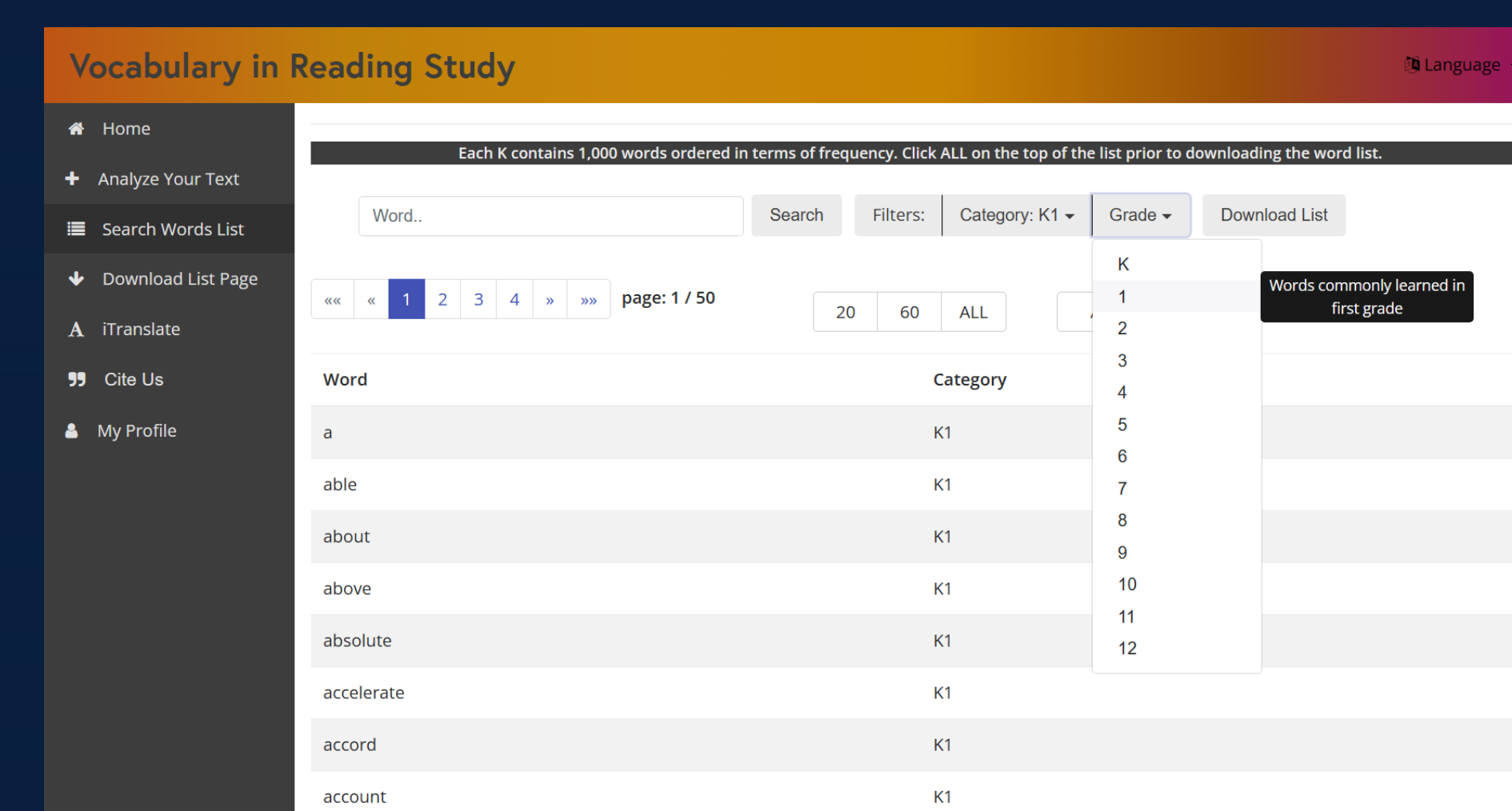


SCREENSHOTS

Old Search Words List page without pop-ups



Search Words List page with pop-ups



SUMMARY

The beginning of the project had a slow start, with debugging the set up of the website and figuring out how the code works. Once the set up was done, I got to work on how to add grade levels to the database, as well as link a new word database, containing the grade levels, to the website. The task proved too difficult in keeping track of every necessary file and eventually the team leader took over for the task. Other work attempted was figuring out how to create a new page, add a test word to the database, make a pop-up for the grade drop-down list, and update the page for selecting an option for the grade drop-down list.

ACKNOWLEDGEMENT

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