

## Problem

- The Text Enhancement tool that groups words from a input text based in their category does not work properly
- Category Based Statistics are not being displayed to the user correctly
- Essential Word List dictionary needed to be added

## Solution

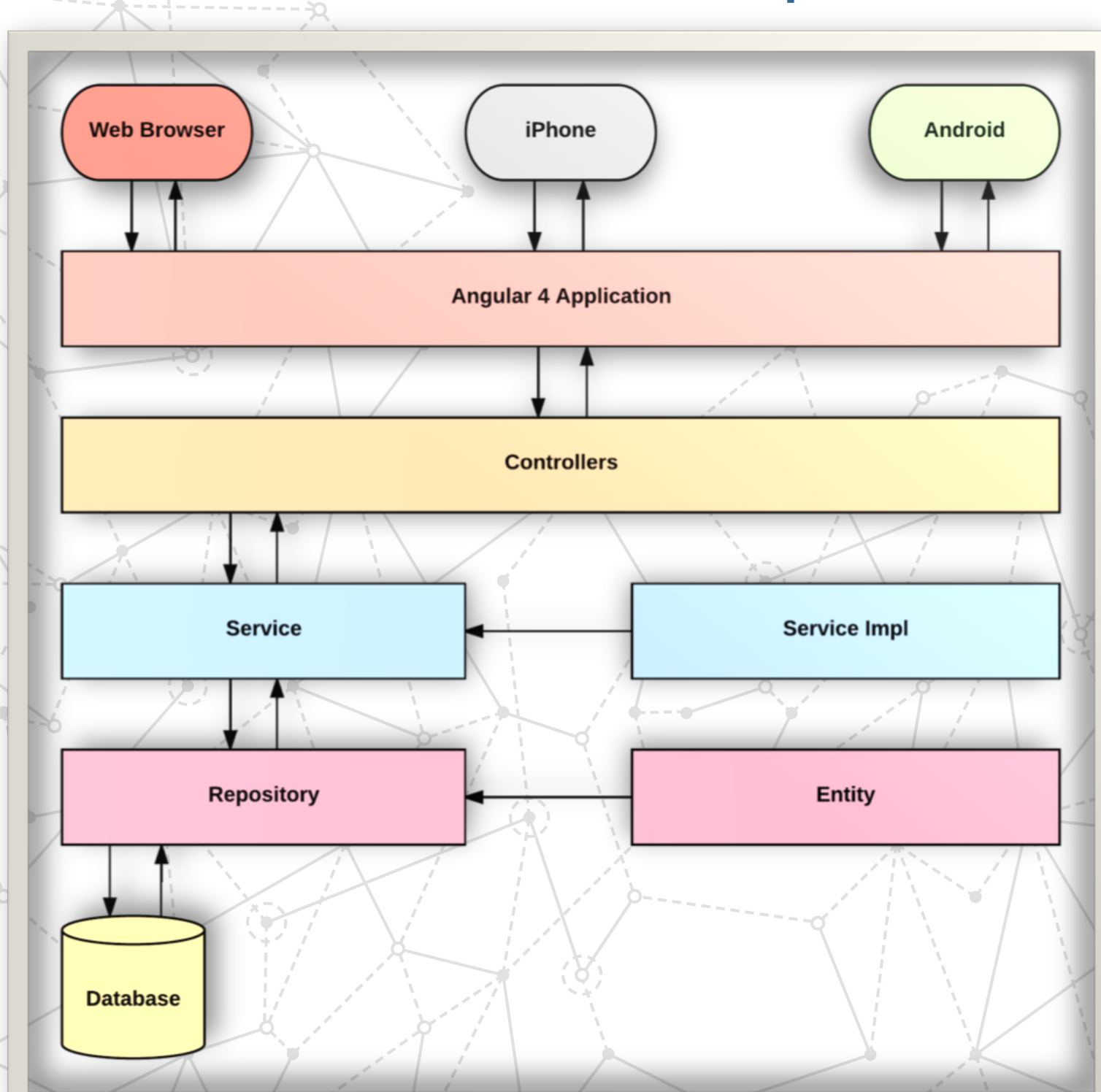
- Added the words categorized as Essential Word List to the VIRS database.
- Added K1 and K2 categories into the statistics and enhanced-text tools.
- Corrected the percentage formula and included new categories.
- Assigned colors as per project owner specifications to statistics and enhanced text tools.

## Current System

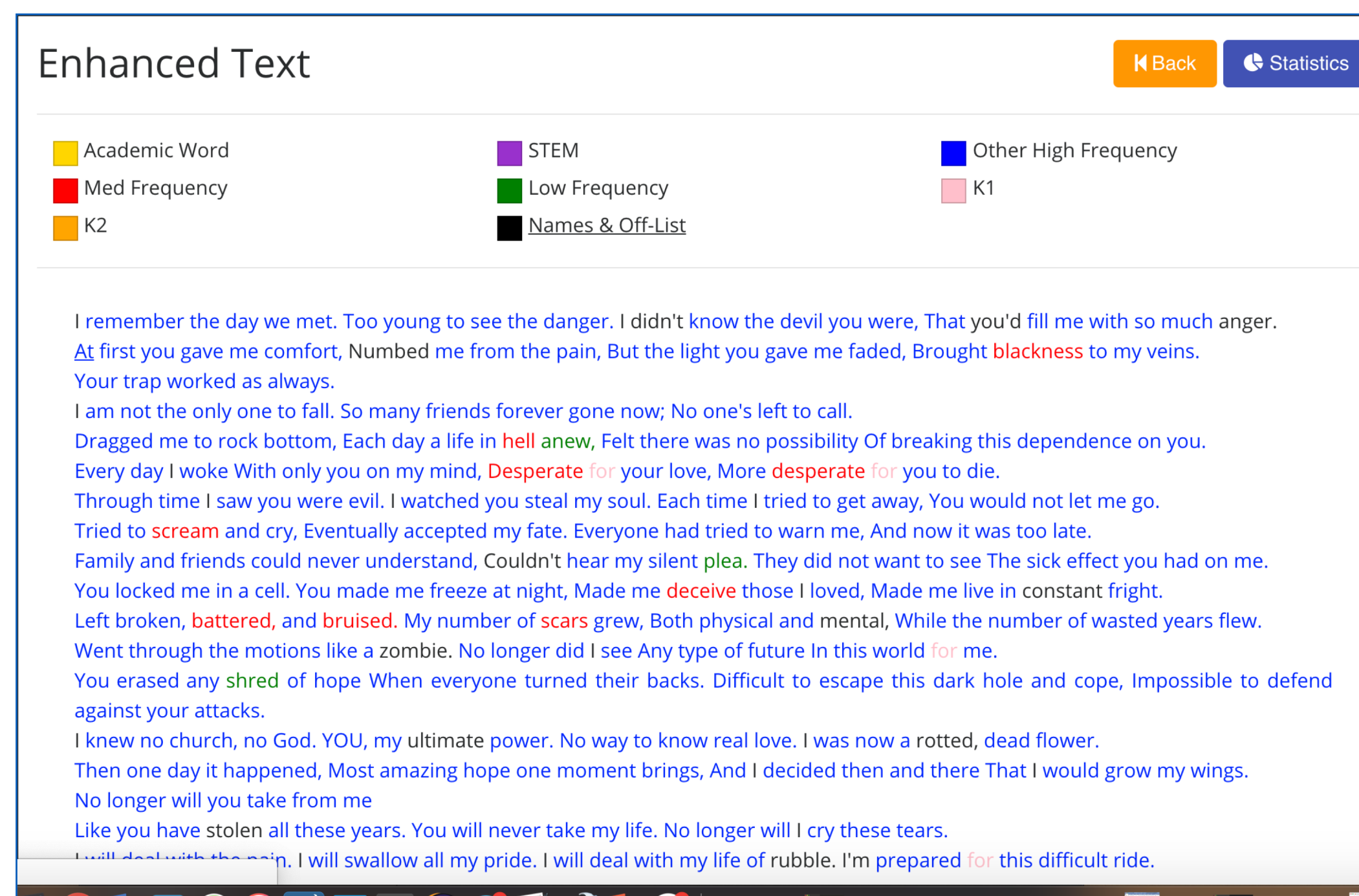
- Vocabulary in Reading Study (VIRS) is a web app that was created with the objective of facilitating the learning of a new language through the analysis of text.
- The web app presents a simple design that facilitates an easier user interaction, and EWL dictionary to broad the user diction.
- It also present categories based statistics.

## System Design

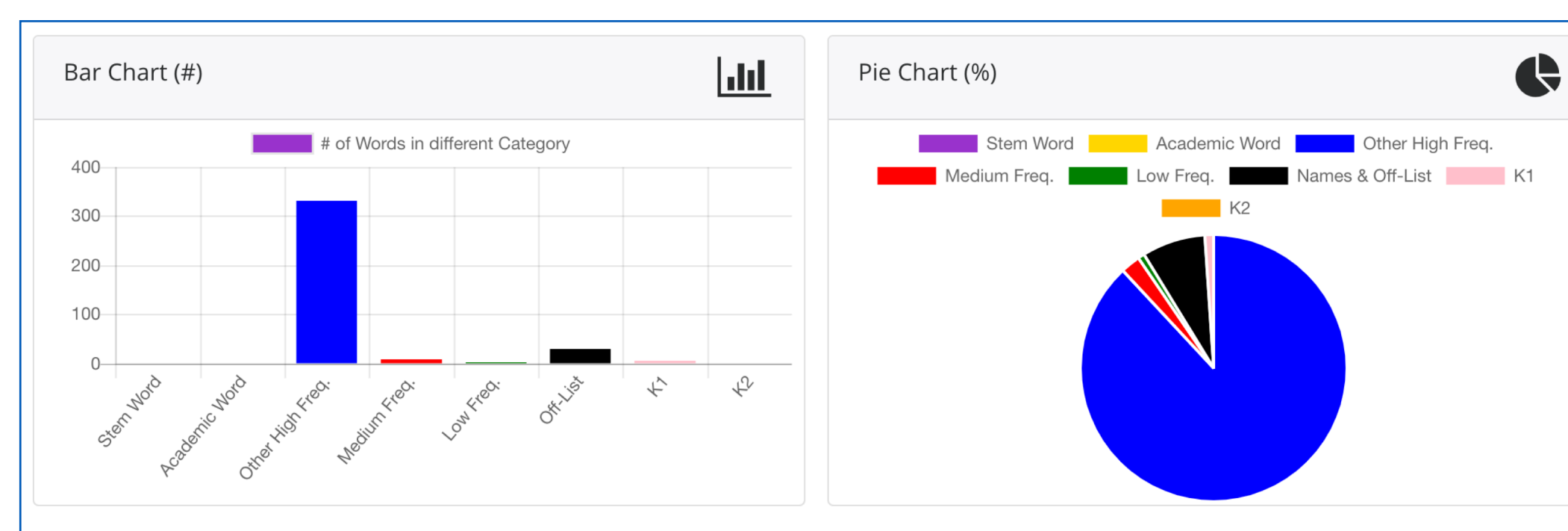
### Model-View-Controller Implementation



## Screenshots



#	Word Count	Percentage
STEM Words	0	0%
Academic Words	0	0%
High Freq.	332	88.06%
Medium Freq.	9	2.39%
Low Freq.	3	0.8%
Names & off-list	29	7.69%
K1	4	1.06%
K2	0	0%



## Requirements

User must be able to see a new category dictionary (Essential Word List).

Categories K1, K2 and Basic Academic Words are present in Essential Word List Dictionary.

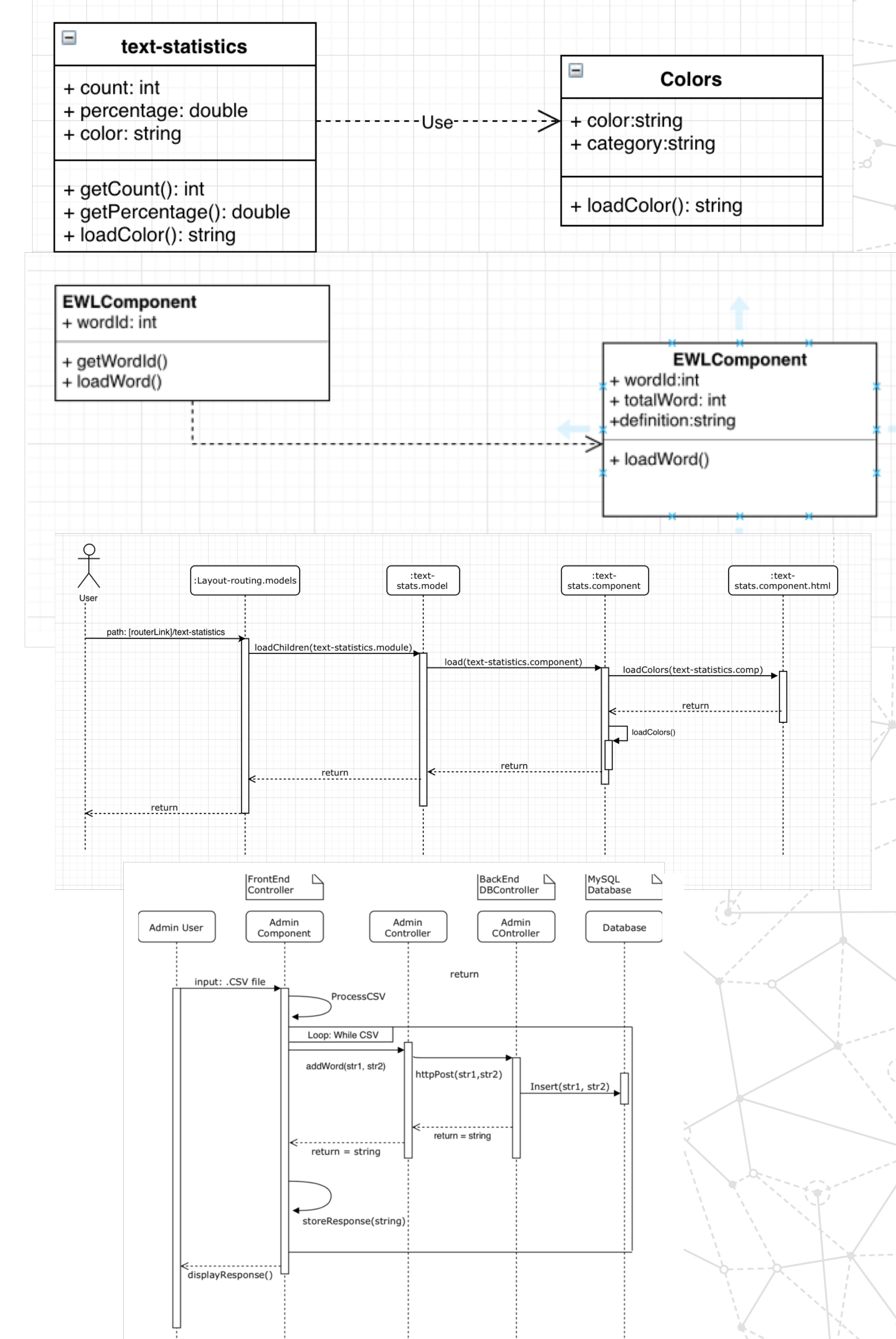
Categories are properly color coded according to the project owner specifications.

Statistics are calculated accurately and the new categories are added to the pie and bar chart.

Message error is display when the user enters an incorrect password and user is redirected to login page.

**Acknowledgment:** The material presented in this poster is based upon the work supported by Dr. Masoud Sadjadi and Yuzhoug Feng. I am thankful to the help that I received from my group members, Monica Rodriguez, Jessica Fernandez- Rubio, Chelsey Benomy, Pablo Arista, Taufic Islam

## Object Design



## Implementation

HTML5, Bootstrap, CSS, and ng-Bootstrap were used in the making of the UI components of the frontend.

The frontend was developed using Angular 4 in sequence with Typescript

## Verification

**Test case ID:** 23-01

**Description/Summary of Test:** As a User I would like to analyze the text so that I can see the correct percent of each category, see how many words per category

**Pre-condition:** Text must have been input

**Expected Results:** See the statistics of the text in two different charts and how many words per category **Actual Result:** Successfully got the two charts and the words counted in their respected color category  
Status (Fail/Pass): Pass

## Summary

VIRS 4.0 now has :

- Another dictionary
- Is able to tell when a password is incorrect
- Calculate the statistics correctly
- Show the the correct color for each category