



aws



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## Vocabulary in Reading Study 4.0

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### Problem

- The login feature doesn't let know the user if the username is correct or not.
- The user has access to only one list of words and a few categories.
- Analyze Text feature for PDF returns a text with the wrong spaces between lines.
- Analyze Text feature for Word documents returns a text with the wrong spaces between lines.

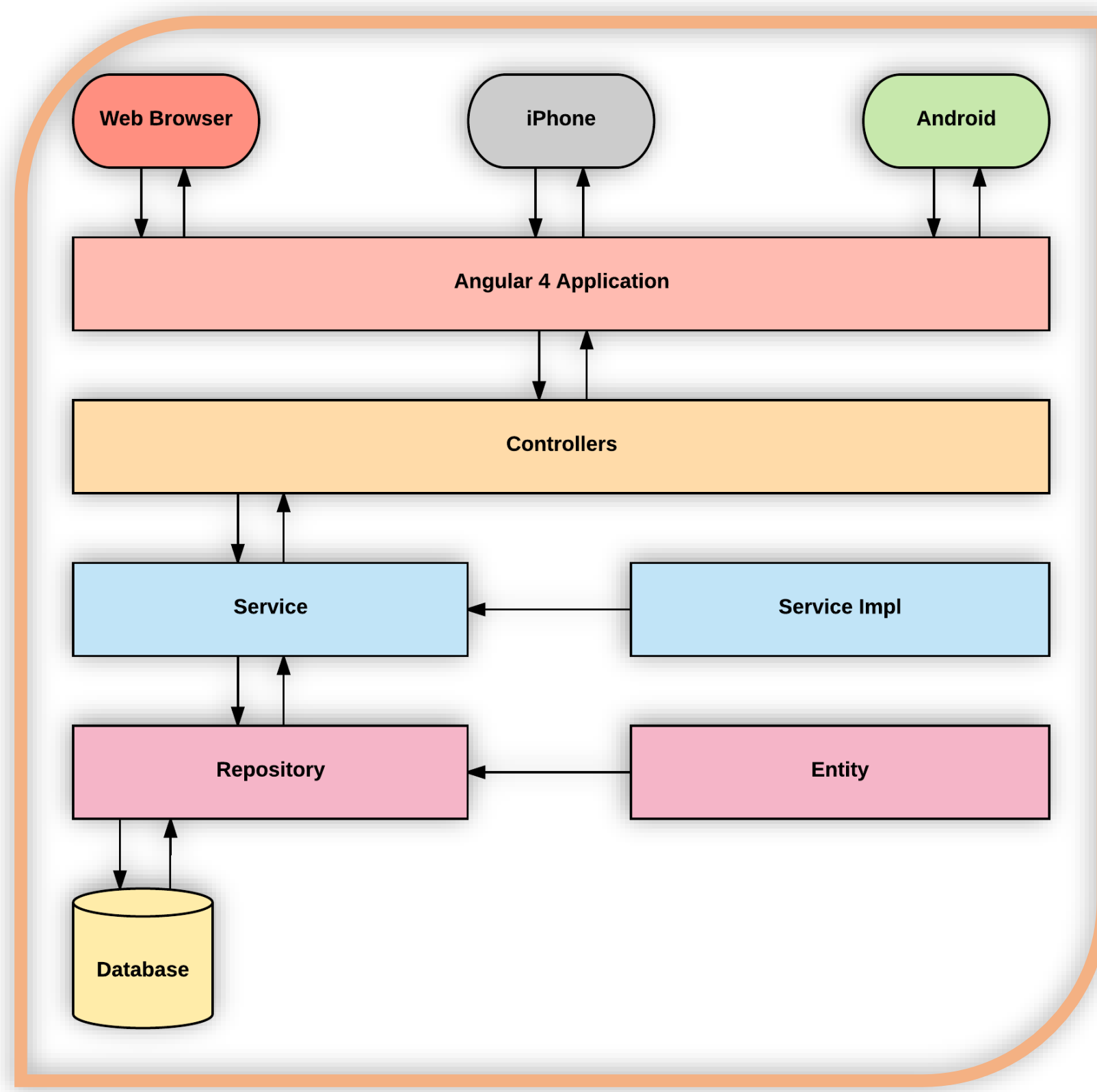
### Solutions

- Edit the login feature. User receives a message if username is wrong.
- New list of words was implemented, with new categories. User can search and find the word with its definition according to the categories.
- Analyze Text feature for PDF and Word documents returns a text with the correct spacing between lines.

### Current System

- This is the fourth iteration of the application.
- The system can analyze a text, pdf, word document, and even images to give a readability score.
- The web application has a dictionary with definitions.
- The application has vocabulary tests with different levels of difficulty as well as translation services
- Current system is available in both, Android and iPhone, as well as Desktop.

### System Design



### Requirements

- Users must be able to receive a message if username incorrect.
- Users must be able to have access to a new list of word and search.
- Users must be able to choose words and find their definition according to their category
- Users must be able to analyze PDF and word documents with the correct spacing.

### Verification

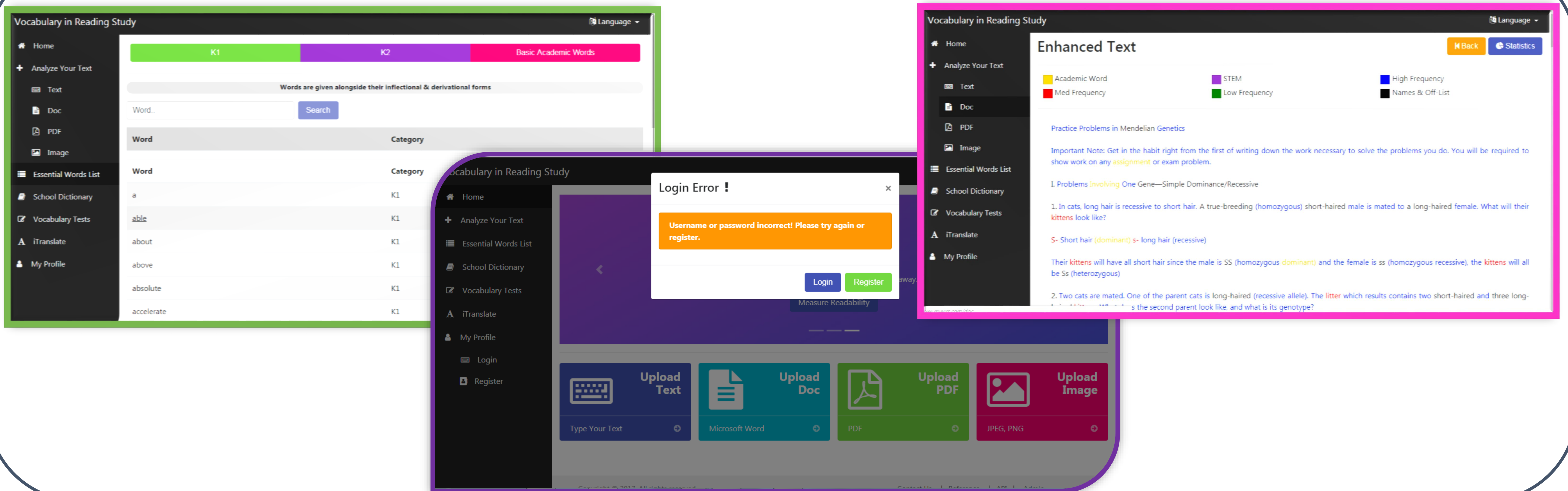
- Implemented unit tests
- Implemented several integration tests

	Unit Testing	Integration Testing

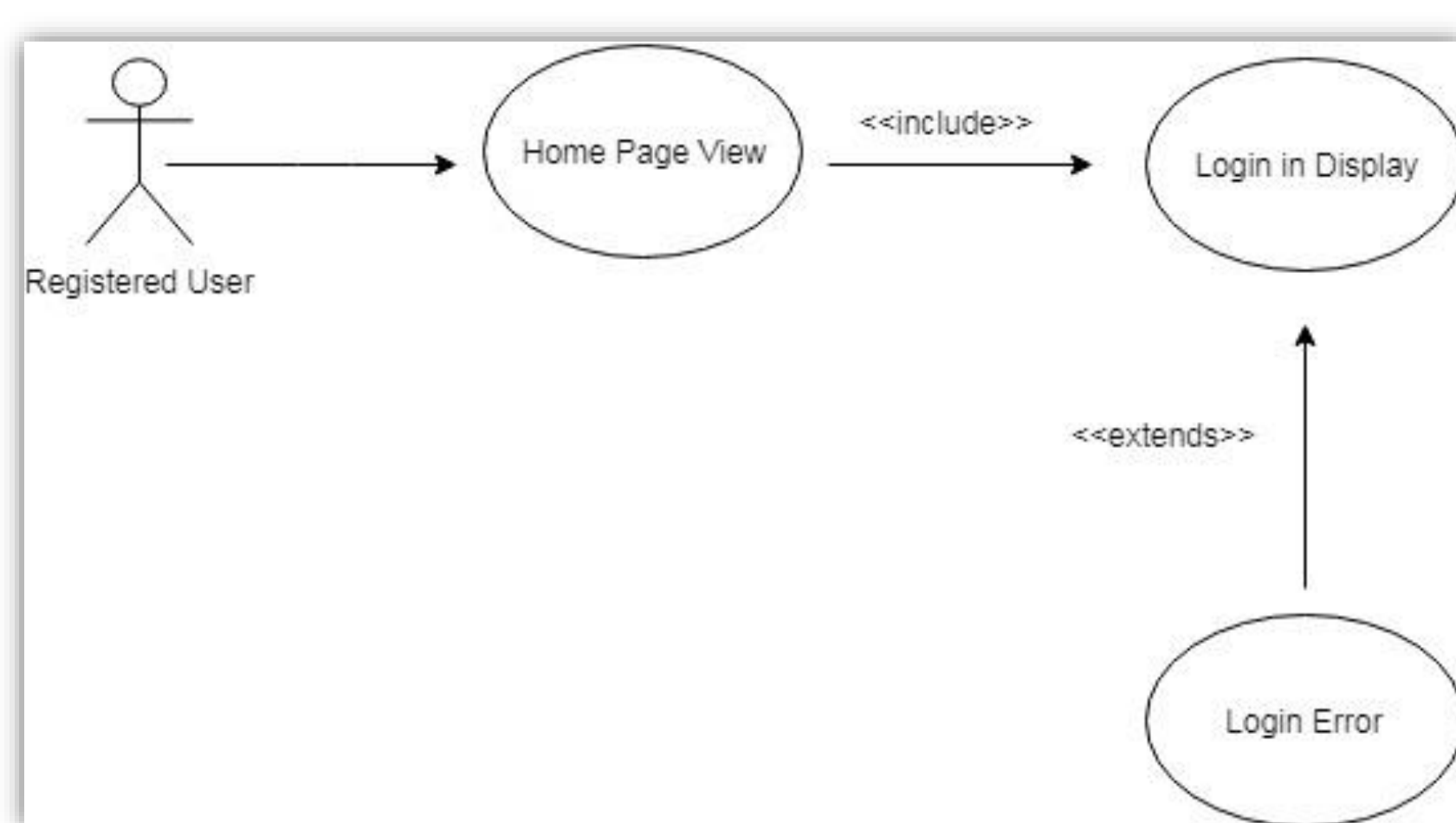
### Implementation

- HTML5, Bootstrap, CSS, and ng-Bootstrap were used in the frontend, as well as Angular and Typescript
- The system print the words of a pdf or word document as an array, if more than two consecutive spaces are found, it makes a new line and omits following empty spaces.
- The system prints a Login Error message if user enters wrong username when trying to login.
- User has access to a new list of words (EWL), and can search the words and click on them to get definition.

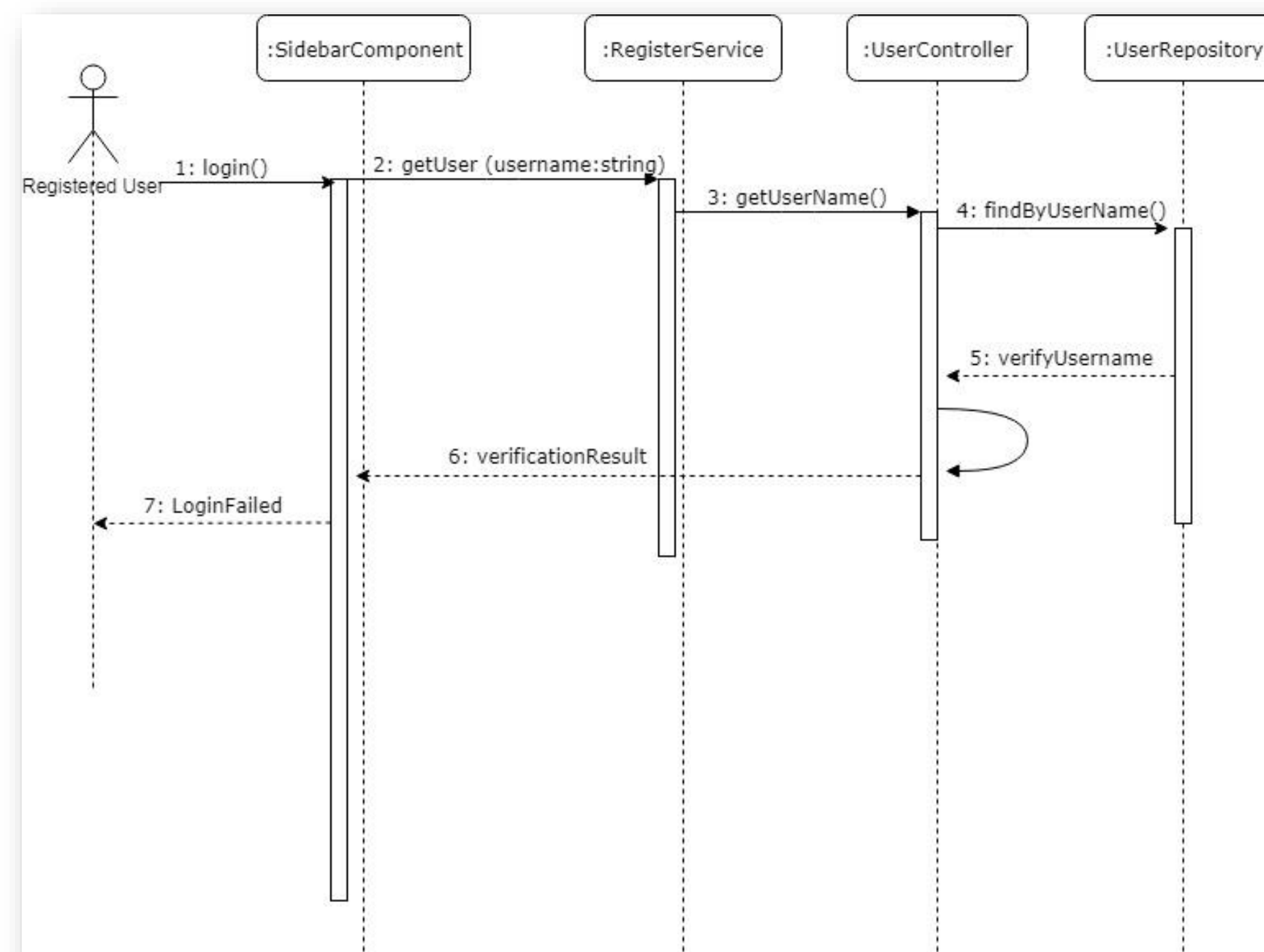
### Screenshots



### Use Case Diagram: Login Error



### UML Sequence Diagram: Login Error



### Summary

- VIRS 4.0 has now a new list of words (EWL), where users can search and click in the word to get the definition.
- VIRS 4.0 has now a new group of categories for words.
- User now get an error if trying to login and put the wrong username.
- System now prompts the user to re-try to login after a failed attempt.
- Users can now analyze word documents and pdf, and the outcome text has the correct spacing between lines.

### Acknowledgement

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