Dictionary

Tiwaloluwa Ojo (100700622) **|** Aaditya Rajput (100622434) **|** Group 7

# Objective

Dictionaries are widely used and we often take spellchecking for granted. You will be required to create a dictionary that not only provides the ability to search a word, but also to add new words, delete existing words, and edit the definition of a word in the dictionary. For this project you must ensure that you meet all of the following criteria.

# Criteria

## Original criteria

* You must implement a dictionary that contains not only words but also their definition.
* You will be provided with a list of six different Comma-Separated Values (CSV) files containing words and their definitions, as well as for each a list of operations to perform.
* Your solution must be able to read in the data provided and create the dictionary as well as process the accompanying file with the list of operations to perform.
* Your program should also have a CLI so that a user can perform each of the operations from the terminal such as searching for a word to retrieve the definition.

## Revised criteria

* Implement a dictionary to search, delete, and insert words from a text file.
* The text file is composed of words.
* Definitions requirements have been truncated from the requirements.

# Tools

## Ide: Android studio

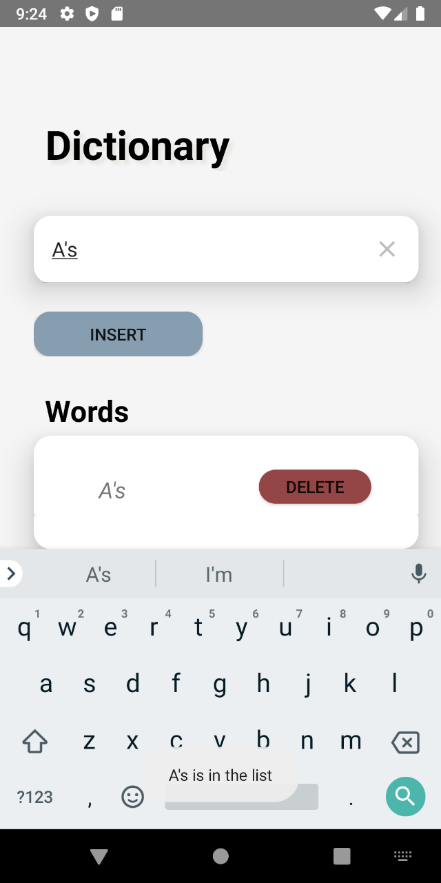
* The Dictionary project utilized the programming environment of Android Studio. This IDE allowed us to design the project as a mobile application while still adhering to appropriate Java and object-oriented principles. This should provide an interactable and visually appealing aesthetic to the user.

## Programming Language: JAva

* We used the Java programming language along with Android Studios to program and implement our algorithms as well as manipulate the app UI to change and listen to event.

# The UI: Main Activity Page

## Dictionary



**1**

**2**

**3**

**4**

**5**

**6**

* Displays the title of the document.

## SearchView

* The user can search for their desired word in this search bar. It will display a confirmation of whether the searched word exists or not.

## Insert Button

* Sends the user to another activity page so as they might insert their new word.

## Words recycleview

* This Recycleview is where the user can view the words that exist on file as well as the ones they insert.

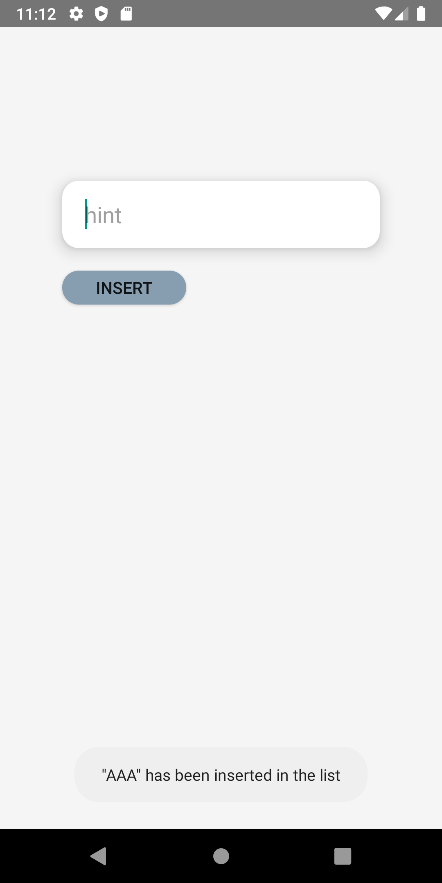
## RecycleView Cards

* The words exist horizontally stacked upon each other. Each card has both a word and a delete button.

## Search Toast

* Depending on the success of the search query, a toast will inform the user if the word is there. It is case sensitive.

# The UI: Insert Activity Page



**1**

**2**

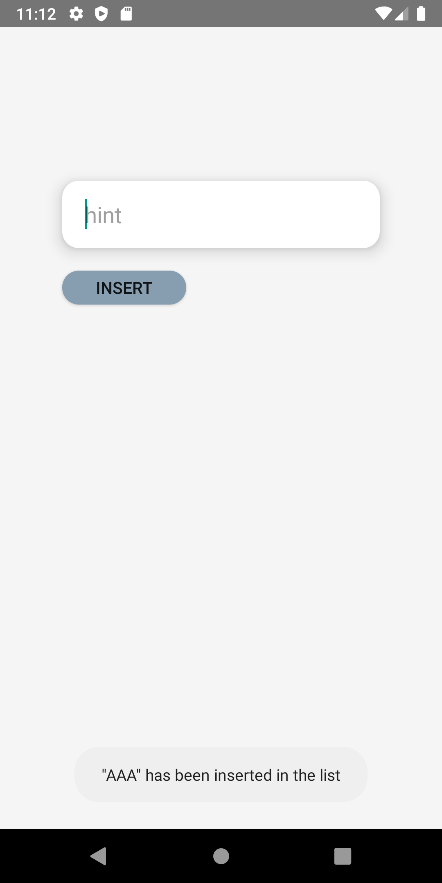
## Textview

* This is where the user inserts the word they want to see on screen and in the app recyclerview.

## Insert Button

* The insert button inserts the word into the recyclerview and the txt file.

## Toast Button

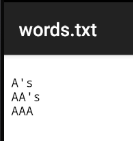


**3**

* Notifies the user the word has been inserted in the recyclerview and the txt file upon button click.

# Results

## The Updated recyclerview



## The updated Txt file

* Filles are located in the system memory + Android/data/com.example.dictionary/files/raw

## Project files

## <https://github.com/tiwaojo/Dictionary.git>

## Problems

* Could not sort file due to null pointer error. We are aware where the issue is (MainActivity.writeFile). upon write to file on first time, the program adds a new null line to the txt file. This could not be avoided as the file would not append to a new line nonetheless.