

[Description](#)

[Intended User](#)

[Features](#)

[User Interface Mocks](#)

[Screen 1](#)

[Screen 2](#)

[Key Considerations](#)

[How will your app handle data persistence?](#)

[Describe any corner cases in the UX.](#)

[Describe any libraries you'll be using and share your reasoning for including them.](#)

[Describe how you will implement Google Play Services.](#)

[Next Steps: Required Tasks](#)

[Task 1: Project Setup](#)

[Task 2: Implement UI for Each Activity and Fragment](#)

[Task 3: Working with database](#)

[Task 4: Barcode Detecting](#)

[Task 5: Building Games](#)

GitHub Username: kareem-farag

Kids Learning

Description

This app is a words library for kids learning app, giving kids the opportunity to listen, read and have joyable games related to those words helps your kid to make a benefit with his time.

This app includes English and Arabic words library with support of puzzle, matching and choosing games.

You could also make use of our printed books with the QR reading feature that make a connection between the book material and the application.

Intended User

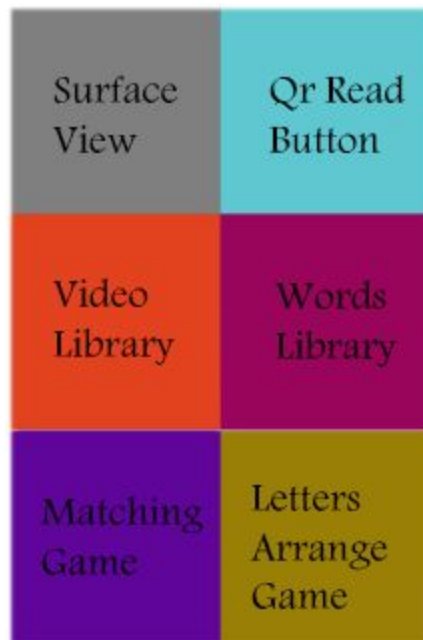
This app is for your toddler and you could enjoy puzzle games too.

Features

- Words Library with pronunciation
- QR reader
- Words matching game
- Letter order game

User Interface Mocks

Screen 1 Main Activity



A surface view give the user the ability to detect qr without opening camera in separate activity. Qr Read button opens camera to give the user a better way to detect Qr. Other buttons open activities (VideoLibrary , WordsLibrary, MatchingGame and LettersArrange) Activities.

Screen 2 (Words Library)




Screen 3 (WordChooseActivity)



Cat	Lion
Rabbit	bag
Apple	ball
Best	Basket

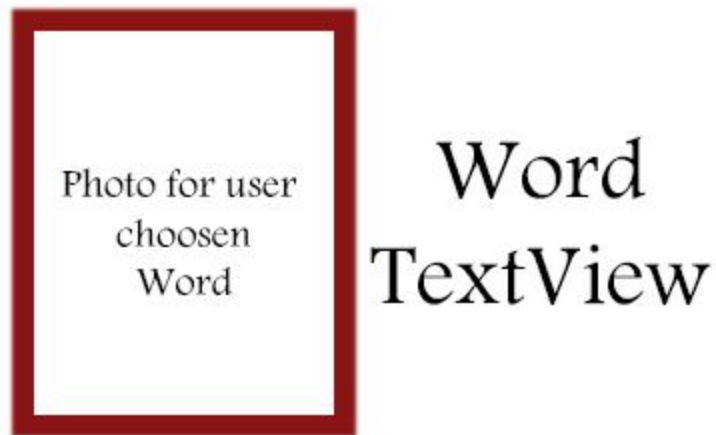
Screen 4 (WordViewActivity)



Translation	back to library
Pronunciation	Video
Word Choose	Letters Arrange

Screen 5 (WordWidget)

A widget for displaying the chosen word by user



Key Considerations

- App is written solely in the Java Programming Language
- App utilizes stable release versions of all libraries, Gradle, and Android Studio.
- User could use D-pad to navigate within application.

How will your app handle data persistence?

App will use a web json url to get words and videos library and use Room persistence library to store data.

Describe any edge or corner cases in the UX.

When user presses the back button he will be get to the previous activity until he will get back to the MainActivity then he will prompted if he is sure to close the application.

Describe any libraries you'll be using and share your reasoning for including them.

Application uses Picasso handle the loading and caching of images, butterknife for binding views, expo player for playing words pronunciation and volley library for handling networking work.

Describe how you will implement Google Play Services or other external services.

For using qr code scanning I'm going to implement google play mobile vision service library. Application also will use ads google play service for implementing ads.

Next Steps: Required Tasks

Task 1: Project Setup

- Building a web API json url to get data.
- Implementing gradle libraries.
- Declaring activities inside manifest file.
- Preparing the required resources (photos , words pronunciation audio files)

Task 2: Implement UI for Each Activity and Fragment

- Build UI for MainActivity.
- Build UI for WordsLibraryActivity.
- Build UI for WordActivity.
- Build UI for WordChooseActivity.
- Build UI for LettersArrangeActivity.

Task 3: Working with database

- Using Android Volley library to handle json url data.
- Store gathered data into sqlite database.

Task 4: Barcode Detecting

- Implement vision google play service library to use `barcodeDetector`.
- Build a class to deal with barcode and get the matching word.

Task 5: Building Games and expo player activities.

- Creating Letters arrange and word choose games classes.
- Creating an Expo class to connect pronunciation media files with ExpoPlayer Library.