

Find The Word Mobile Application Functional Specification

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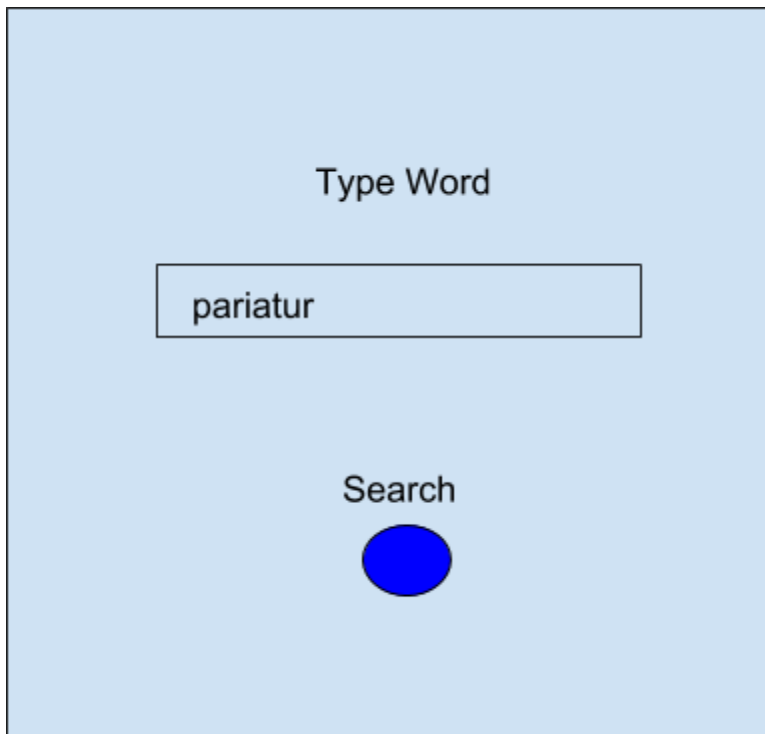
Introduction

The purpose of this document is to outline the functional specification for Find Word Application.

Overview

This application may help students who learn from their own notes or physical book. It may help as well a user who is looking for particular word or phrase in manual or contract where font is very small and is hard to read the text. This application will allow user to take a picture of e.g. book page and find the word/phrase of text on that page.

Main functionalities



Main screen where user can type word and then press button to start search on book pages.

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Errrrrr
(word not
found)



The user must hold phone still above book page for at least 1 second, then application take picture of book page and analyse image for word searched. If the word is not found on current page the failure sound is played. User may continue to the next page.

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Beep (word
found)



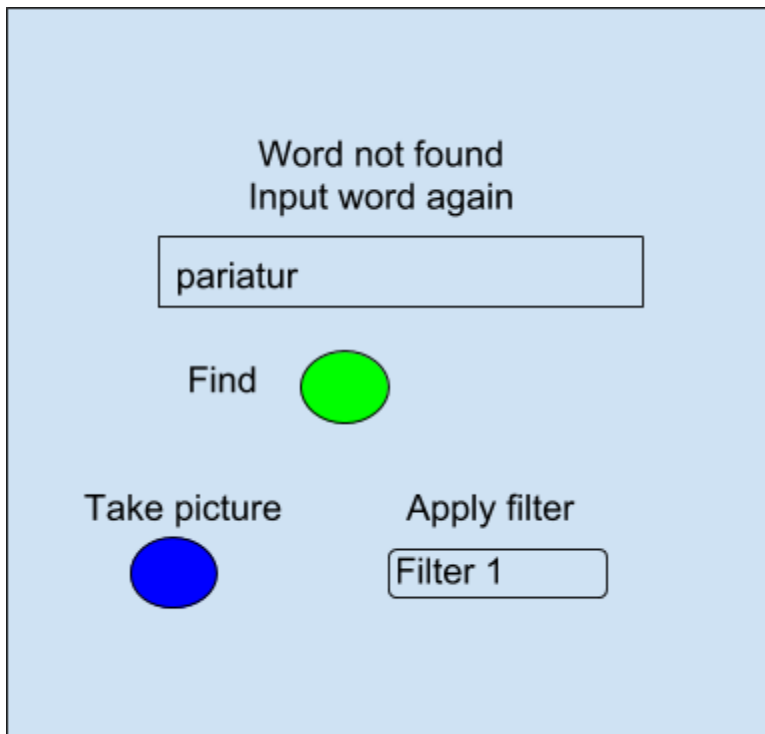
The user must hold phone still above book page for at least 1 second, then application take picture of book page and analyse image for word searched. If the word is found on current page the success sound is played.

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[1]

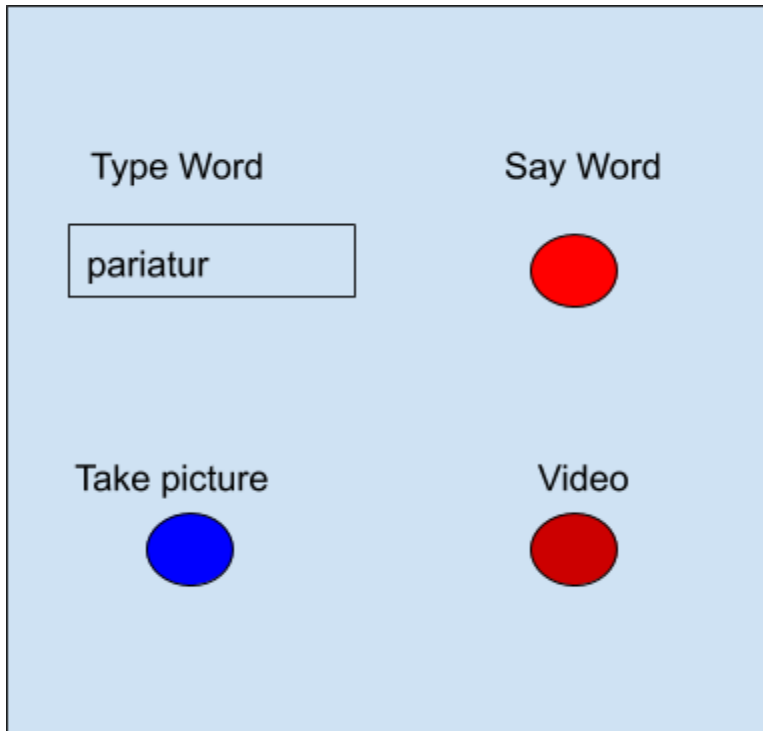
Application extract text from image and then highlight searched text so user can find the text on his sheet of paper.



If word was not found,

- user have chance to input word again and find the word without taking new picture
- user can take another picture(the first one could have been of bad quality)
- although text recognition engine uses its own image filters it might not be enough to extract text with accuracy high enough to recognize word, user can apply additional image filters (from dropdown list) which may help with image text recognition

Optional Functionalities



User can record the word by using phone microphone instead of typing it then user can take picture or take video where while recording by using device camera application will highlight the searched word "live" on the device screen.

Brief Use Cases

Word Search

Actors: User

Brief description: This use case starts when user already started the app and the main screen is displayed for the user. The edit text is presented for the user and user can enter the word. The user enter the word and press search button.

Highlight the word

Actors:User

Brief description: This use case starts when the word is found on the page. The word is highlighted on the screen.

References

[1] <https://lipsum.com>