# Vocabulary Tracker

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## Motivation

Reading is a very important way to learn English, but many Books (especially novels) use words and expressions that are not easily comprehensible to the non-English reader. In this case the reader turns to a dictionary to find out more, interrupting thereby the flow of reading, and also leaving the reader with no other possibility of remembering the definitions obtained from the dictionary than using paper and pencil to take notes. Such notes may be lost or may never be consulted again, and if consulted, will not give any hints as to the temporal progress achieved.
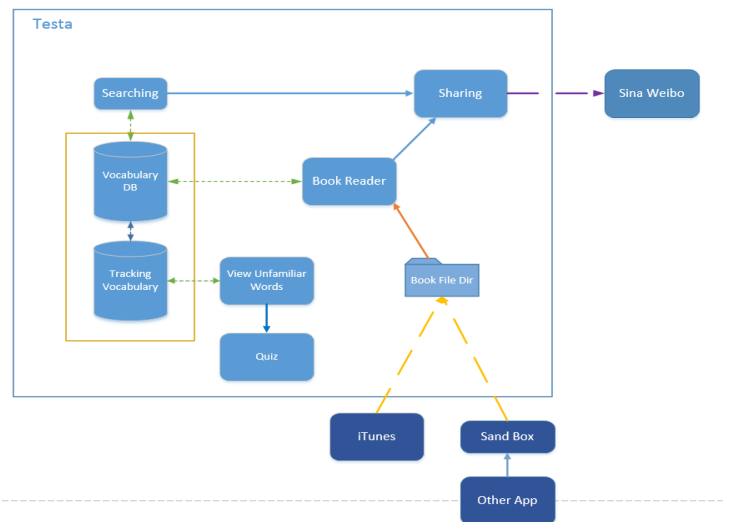
## Objective

The project aims to develop a personal English content reader for Chinese users. This application is developed on iOS platform and operates on iPad. And it can help Chinese readers, build their English vocabulary and improve their comprehension of texts on without being troubled by the need to search for vocabulary in a dictionary. Also, the smart e-book reader must provide the means to quantify the progress achieved by the reader via different quiz-games.
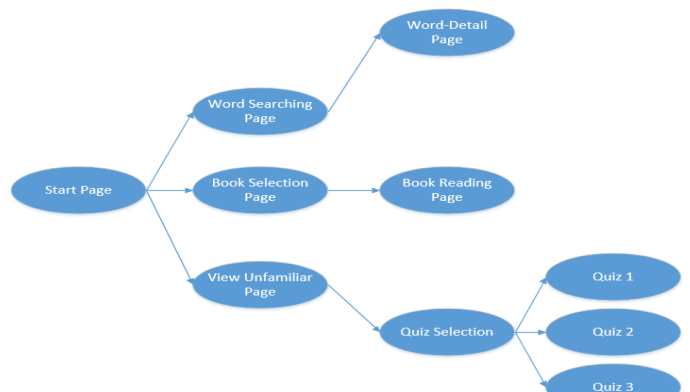
## Design

### System overview

The following is the application class diagram. Each view controller is related to a function module in the application.
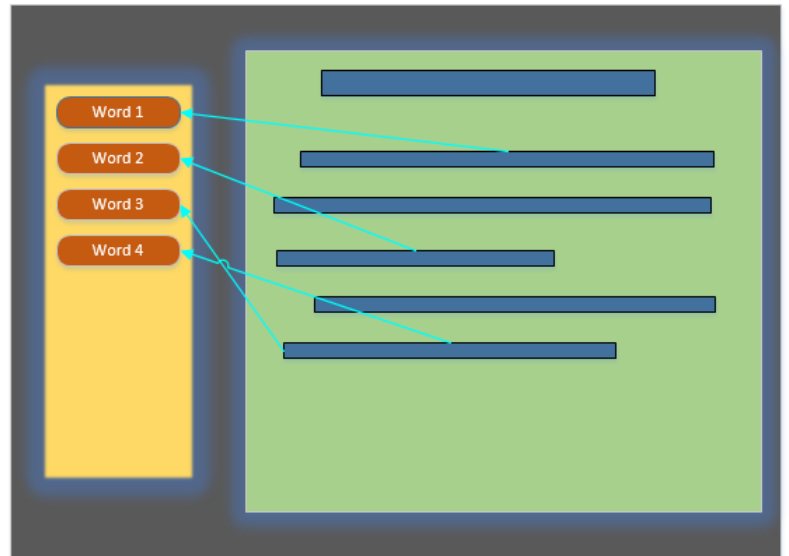


### Application scene transition overview

Every iOS application consists of several scenes, and each of them deals with a specific problem or demand. The following is the design of our application scene transition. It also shows how to reach each component.
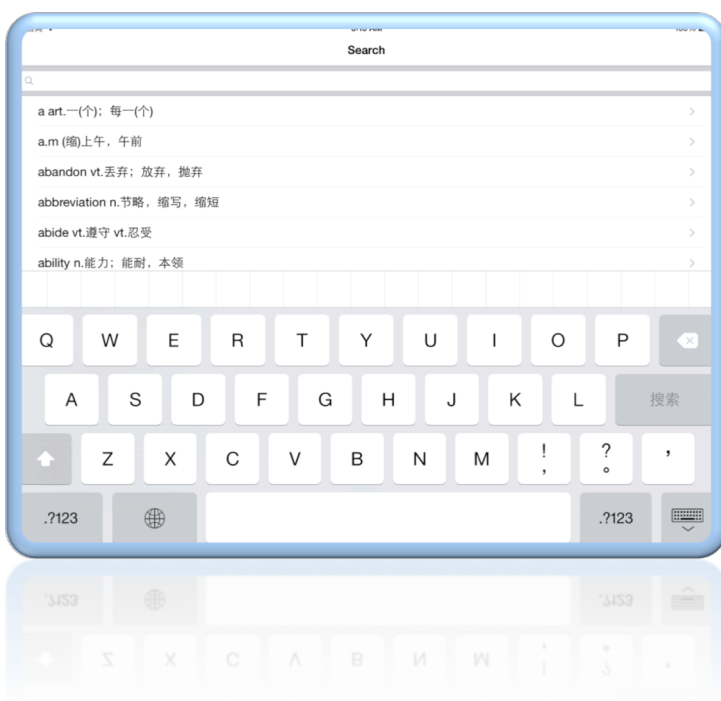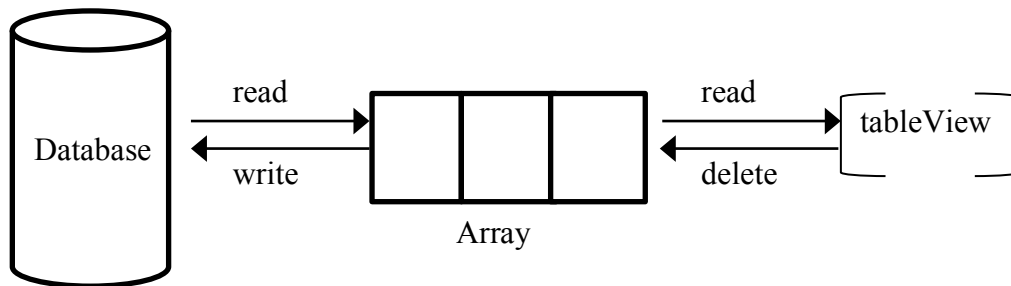
## 1. Book reader

This reader allows the user to import and to view PDF File. It has a table-view at one side of the reading window, which enables user to check meaning of certain English words conveniently. This reader also allows user to add (delete) a word to (from) the word list.

## 2. Tracking vocabulary and quiz

This component allows user to refresh their memory about all words they added and do some quiz about these words.

## 3. Searching

This part support word search, and give Chinese meaning and pronunciation for the searched word.

## 4. Database (SQLite)

iOS provide SQLite API library. SQLite provides a small and efficient way of store and access data. In our application, all English word and their meaning will be stored into SQLite files. The tracking word that user added into their customized list will also be stored in an SQLite table.



## 5. Sina Weibo sharing component

This component is used to share content to user's Weibo social network account whenever they request.

## Evaluation

**Reliability:**

For most imported files, and user interaction, the application works properly.

**Speed:**

Except for the first time entering search component, the application responds agilely.

**Usefulness:**

The application fulfills goals that we set in the objective.

## Conclusion

In this project, the major accomplishments achieved are Book Reader, Vocabulary Database and words review system.

There are still many possibilities within our application. We have already signed up as apple developers because we wish to publish through Apple App store in the near future. To make our application better, there are some plans available.