

# Software Requirements Specification

For

## Android GREVocab



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## Revision History

Name	Date	Reason For Changes	Version
Debasis Kar Roopali Sahoo	12 <sup>th</sup> April,2011	Initial ... Only Displaying A List of words on the screen with their meaning and POS upon selecting.	1.0
Debasis Kar Roopali Sahoo	21 <sup>st</sup> April,2011	Animated effects	1.1
Debasis Kar Roopali Sahoo	27 <sup>th</sup> April,2011	Customizable background color, Credits and Menu Making	1.2
Debasis Kar Roopali Sahoo	1 <sup>st</sup> May,2011	Feedback Option and Intents	1.3
Debasis Kar Roopali Sahoo	10 <sup>th</sup> May, 2011	Arranging List Alphabetically	1.4
FINAL SUBMISSION			

# 1. Introduction

## 1.1 Purpose

- ✓ This application provides facility to go through some of the common GRE vocabulary.
- ✓ It saves time as it allows number of students to the flexibility of realizing the vocabulary on the go anywhere as no one go anywhere without his phone.
- ✓ User can visualize the word, its meaning, its parts of speech, its difficulty level on 1<sup>st</sup> version.

## 1.2 Document Conventions

The following are the list of conventions and acronyms used in this document and the project as well:

POS: Parts Of Speech  
n: Noun  
v: Verb  
ad: Adjective

## 1.3 Intended Audience, Reading Suggestions & Project Scope

Scope of this project is very broad in terms of other paper books. Few of them are:-

- This can be used in coaching institutions as well as in corporate world to enrich the vocabulary.
- Can be used anywhere any time as it is a phone based application(user Location doesn't matter).

## 1.4 References

*This application has been prepared on the basis of discussion with Team members, faculty members and also taken information from following books & websites.*

1. <http://www.google.com/>
2. <http://www.wikipedia.org/>
3. <http://www.alex.com/>
4. Fundamental of Software Engineering By Rajiv Mall
5. Software Engineering by Pressman, Roger
6. Software Engineering by Ian Sommerville
7. Schaum's Series, "Software Engineering"

# 2. Overall Description

## 2.1 Product Perspective

From the given choices the candidate can select his field (like POS, Difficulty and Alphabetical Order etc) for going thorough the words.

### Utilities:-

It includes:-

- ✓ Skip and come back to the words afterwards if needed.
- ✓ Gives the list of attempted and unattempted words and can go to any words and user would be able to assign his own difficulty to one word.

## 2.2 Product Features

The features that are available to the **Administrator** are:

- ✓ The administrator has the full fledged rights over app.
- ✓ Can create/delete any contents.
- ✓ Can view the database and modify it.
- ✓ Can hide any kind of features from the both of users.
- ✓ Insert/delete/edit the information of available on app.

The features available to the **Student** are:

- ✓ Can view the different categories of words.
- ✓ Can view their parts of speech (POS).
- ✓ Can view the various examples and meaning of a word.
- ✓ Can view and modify its difficulty level.
- ✓ Can give their feedback.

## 2.3 User Classes and Characteristics

There are various kinds of users for the product. The users include:

- ✓ **Students** who will be using the above features by accessing any words.
- ✓ **Administrator** who will prepare& load database into the software.

## 2.4 Operating Environment

The product will be operating in Android OS environment.

## 2.5 Design and Implementation Constraints

The whole implementation is done in two modules. The first one is Administrator and the second is Student.

### Module I:-

This first module tracks the path of Administrator. In this module it shows how the admin can log into the database and can add/modify entries to the database. Also he can manipulate the database and add new functionalities and relationships in the database.

### Module II:-

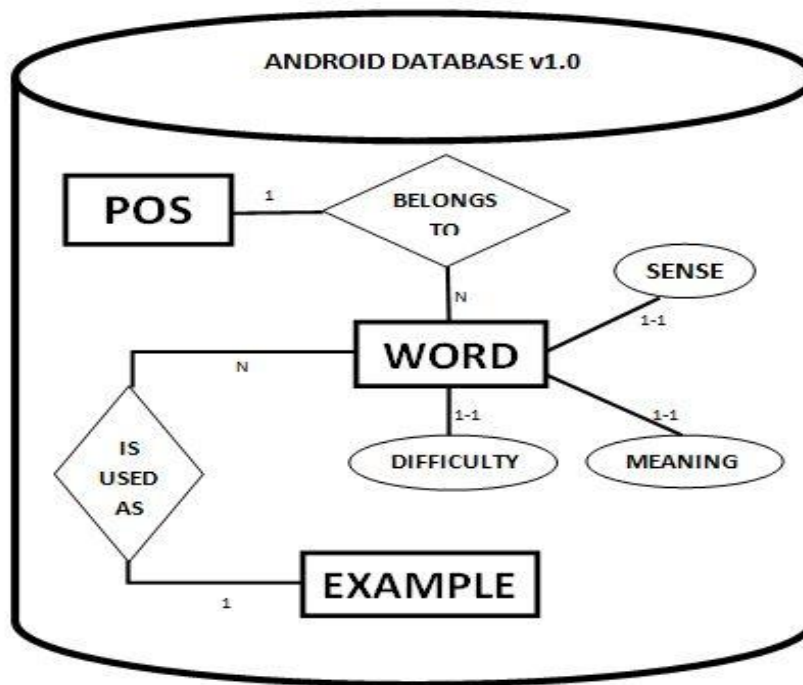
This second module track the path for the user(Students). The student can get into the app with a valid subscription issued by the admin. After successfully installation, the student agrees to the admin's terms and conditions and then he will get instruction about the examination process. Then after clicking the start button he cans start viewing the word list.

## 2.6 User Documentation

The product will include user manual. The user manual will include product overview, complete configuration of the used software, technical details, backup procedure and contact information which will include email address.

## 2.7 Assumptions and Dependencies

An ER-Diagram representing all relationships and dependencies is designed which's been shown in next page.



### 3. System Features

#### 3.1 Description and Priority

Proposed Database is intended to store, retrieve, update, and manipulate information related to vocabulary dictionary which include

- ✓ Word
- ✓ Its POS
- ✓ Random Difficulty Assigned By Administrator

#### 3.2 Functional Requirements

This section gives the list of Functional which are applicable to this application. Functional requirements are nothing but the services provided by the system to its end users.

1. Solicit all the words from A-E should be shown with their meanings.
2. Categorization of words selection such as: POS, Alphabetically, Difficulty or Random etc.
3. Customizable background and no background run capability
4. User access to change word's difficulty level
5. Proper feedback form.

### 4. External Interface Requirements

#### 4.1 User Interfaces

Application will be accessed through HVGA Android OS phone. The interface would be viewed best using 800 x 600 pixels resolution setting. The software would be fully

compatible with Android 2.0 and above. No user would be able to access any part of the database without any permission.

#### **4.2 Hardware/Software Interfaces**

- ✓ Operating System: Android 2.0 or above
- ✓ RAM: 128 Mb or more
- ✓ Resolution: 240\*320 Minimum

#### **4.3 Communications Interfaces**

The Customer must connect to the Internet to give their valuable feedback.

### **5. Other Nonfunctional Requirements**

#### **5.1 Performance Requirements**

Some Performance requirements identified is listed below:

- The database shall be able to accommodate a minimum of 10,000 records of students.
- The software shalln't use of multiple instances at a time in foreground/background.

There are no other specific performance requirements that will affect development

#### **5.2 Safety Requirements**

The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup.

#### **5.3 Security Requirements**

Some of the factors that are identified to protect the software from accidental or malicious access, use, modification, destruction, or disclosure are described below.

- Keep specific log or history data sets
- Assign certain functions to different modules
- Restrict communications between some areas of the program
- Check data integrity for critical variables
- Later version of the software will incorporate encryption techniques in the user/license authentication process.
- Communication needs to be restricted when the application is validating the user or license. (i.e., using https).

#### **5.4 Software Quality Attributes**

The Quality of the System is maintained in such a way so that it can be very user friendly to all the users. The software quality attributes are assumed as under:

- 1) Accurate & hence reliable.
- 2) Secured.
- 3) Fast speed.
- 4) Compatibility