

## **3.2 Non Functional Requirements**

### **Performance Requirements**

Any Interface between a user and software shall have reasonable response time based on Intranet connection

#### **3.2.1 Prominent search feature**

TITLE: Prominent search feature

OVERVIEW: The search feature should be prominent and easy to find for the user.

PURPOSE: In order to find the search feature easily for a user.

DEP: none

#### **3.2.2 Usage of the Google API**

TITLE: Usage of the API

OVERVIEW: Using Google Text to speech and Speech to text API's

PURPOSE: To convert the user voice into text and use the text for search, and also using Speech to text for listening the news article

DEP: none

#### **3.2.3 Response time**

TAG: ResponseTime

GIST: The fastness of the search

SCALE: The response time of a search

METER: Measurements obtained from 1000 searches during testing.

MUST: No more than 2 seconds 100% of the time.

WISH: No more than 1 second 100% of the time.

#### **3.2.4 System dependability**

TAG: SystemDependability

GIST: The fault tolerance of the system.

SCALE: If the system loses the connection to the Internet or missing any sensor, the user should be informed.

METER: Measurements obtained from 1000 hours of usage during testing.

MUST: 100% of the time.

## **Safety Requirements**

To ensure no data is lost in case the user decides to change devices or if the user's device is extensively damaged all data will be stored in google cloud storages. This will allow safe storage and easy accessibility from anywhere.

## **Security Requirements**

The System shall not disclose any personal information about the users. The Application shall not grant access to an unauthorized user and the Application shall not communicate with any other devices or servers while in use by the user.

In addition to that users must refrain from uploading any sensitive information such as credit card info, id or any personal information that is not required.

### **3.2.5 Communication Security**

TAG: Communication Security

GIST: Security of the communication between the system and server.

SCALE: The messages should be encrypted for log-in communications, so others cannot get user-name and password from those messages.

METER: Attempts to get user-name and password through obtained messages on 1000 log-in session during testing.

MUST: 100% of the Communication Messages in the communication of a log-in session should be encrypted.

Communication Messages: Defined: Every exchanged of information between client and server.

### **3.2.6 User Account Security**

TAG: UserCreateAccountSecurity

GIST: The security of creating account for users of the system.

SCALE: If a user wants to create an account and the desired user name is occupied, the user should be asked to choose a different user name.

METER: Measurements obtained on 1000 hours of usage during testing.

MUST: 100% of the time.

## Appendix A: Glossary

Definitions, acronyms, and abbreviations are listed below:

Term	Definition
User	Someone who interacts with the mobile phone application
Admin/Administrator	System administrator who is given specific permission for managing and controlling the system
User	Someone who can see news
Admin	fsdafsadfsdf
DEP	Dependency
PFR	Primary Functional Requirements
SFR	Secondary Functional Requirements
TAG	A unique, persistent identifier contained in a Language statement [2]
GIST	A short description to help understanding [2]
SCALE	The scale of measurement used to quantify the statement [2]
METER	The process or device used to measure using the SCALE [2]
MUST	The minimum level required to avoid failure [2]
PLAN	The level at which success can be claimed [2]
WISH	A desirable level of achievement [2]

- API: Application Protocol Interface. This is the part of a program that lets other programs or services interact with the data in the former and viceversa.
- Framework: It is like the base of a program that provides generic functionality but can be custom built for specific purposes
- Backend: The part of an app service that works behind the scenes away from the user's device, usually in the cloud (server computer owned by the company)
- Proprietary: Owned by that particular company/person etc.