VISIDA Language Extension

# Purpose

This document is targeted to developers and is written to explain the process and requirements to extend the VISIDA app into other languages.

# Required Translation Material

There are three categories of data that require translation they are:

* Strings (text which appears on buttons and pop ups)
* Audio (if applicable, audio button and help button audio recordings)
* Instructions (collection of text, video, audio and images)

The strings used in the VISIDA app can be found in <root>\app\src\main\res\values\strings.xml. A reference document containing all of the translations can be found in <root>\Documents\VISIDA\_Strings\_Master.xlsx. This master reference document contains 3 worksheets:

* **Strings:** The English strings for buttons, pop ups, their corresponding audio file names for each translation and the text translation for each language.
* **Help Audio:** The English transcription, translated transcription and corresponding audio file names
* **Instructions:** Grouped by Activity; contains the Image to be shown (NOTE: The images are in various translations throughout the document, you will have to create your own images for any new translations), the English text, translated text and corresponding audio file name. Some audio files were delivered with different names, to help keep track of audio files both names are listed.

# App Integration

To add another language to the app follow the Android instructions here: <https://developer.android.com/guide/topics/resources/localization> for adding translation resources to the correct directories. You will be required to add the following files:

* Strings.xml
* Instructions\_text.xml
* Instruction\_media.xml

# Instructions Format

The instructions are comprised of two parts, the text and the media. The media may be in the form of an Image (to be placed in the corresponding language’s drawable folder) or a video (to be placed in the corresponding languages raw folder).

Although Android studio will give a warning about mismatched number of items in the translated string arrays the instructions are built at run time so this warning can be ignored.

For each activity requiring instructions there is are two arrays with the name inst\_media\_<activity> and inst\_media\_<activity>\_audio. These arrays MUST have the same number of items within them to avoid Null Pointer Exceptions when creating the instructions.

Raw and Drawable resources can be used interchangeably since the InstructionFragment contains a factory method which checks the resource type and returns the correct type of Fragment (either Image or Video Instruction fragment).

# Add Runtime Language Configuration

To allow the app to be swapped into your new language at run time (as apposed to building a whole apk with just your new language) simply add your language to the list of options within the Strings.xml file. You need to add two items,

1. The name of the language eg, English, French, Khmer; under the <string-array name=”**preference\_language\_list”**>. This is the visible option to the user when they are selecting a language.
2. The corresponding language code eg, en, fr, km; under the <string-array name=”**preference\_langauage\_entryvalues”**>. This is the language code used by the device to look up the localization. (https://developer.android.com/guide/topics/resources/multilingual-support)