# Local Linguist Mobile Strategy

## About

Local Linguist is an application to help researches gather language data from different languages. It allows researches to get locals to speak certain sets of words, recording them and uploading them to a central database.

## Problem

There are lots of local dialects and languages in Timor Leste, but the local researches do not have the means to conduct this research. Currently now they need to fly in highly international experts to come in and conduct the research. The issue with this is these experts do not have the capacity to do large scale research. The local researches have the capacity needed, they just need the means to conduct the research.

## Solution

An Android mobile application that researches can take into villages and communities around the world and gather linguist information like how to say and pronounce common words. The app will gather the users information and show them study sets of images or words for them to speak and enter how to spell it. This information is then stored on a database to allow researches access to the data, and to provide analytics.

This solution will help us better understand different languages around the world, as well as notice different dialects of the same language as it will record and catalog audio files.

## Software

* Mobile: Android (Target build 2.2)
* Backend: Node.js
* Database: MySQL
* Design Prototype: Axure RP

## Example Hardware (Phones)

These are some examples of the phones available in Timor Leste currently

* [Huawei Ascend Y330](http://consumer.huawei.com/en/mobile-phones/tech-specs/ascend-y330.htm)
* [Samsung Galaxy Young 2](http://www.samsung.com/au/consumer/mobile-phone/mobile-phone/smartphone/SM-G130HZAAOPP)
* [Vinovo G](http://www.gearbest.com/cell-phones/pp_166342.html)
* Evercross N7T

## Phase 1

Phase 1 is focused around creating a universal design and flow for the application and creating a strong framework/base for the application.

Deliverables:

* Create the logical flow of the screens
* Create the design prototype
* Create the colour palette for the application
* Creating the application API
* Create Admin page to connect to API
* Create Android framework and screen layout
* User Testing of the design prototype

End Milestone/s

* User testing of the application

## Phase 2

Phase 2 of the application will focus on expanding the Android Application, adding in the basic functionality, Backend UI and linking with the backend.

* Integrate functionality and features of Android Application
  + Record audio
  + Save audio
  + Replay audio
  + Display pictures
  + Integrate with backend and push information up
* Integrate backend with front end.
* User testing of the design
* Create a backend UI

End Milestone/s

* In field testing of the application by Unesco in Timor Leste

## Phase 3

Phase 3 will focus on creating a more robust android solution and adding new studies from the backend.

* Android Robustness
  + Add in checks for internet connectivity
  + If no internet connectivity save the data on the device
  + When connectivity is regained, upload saved studies and delete them from the device
  + Add in further checks/test cases to ensure
* Adding in the ability to pick words based on the text, rather then pictures
* Utilize the backend UI created in Phase 3 to add new studies
* Get studies from the backend onto the device

End of phase milestone/deliverable

* Create studies in Backend UI and push them and download them on the device

## Phase 4/Future options

Phase 4 has not yet been planned, however outlined below are options that we will be looking into for future phases.

* Add additional languages to the application
* Get testing of the application in other areas of the world.
* Testing of the design in different regions
* Brainstorm additional features and ideas.