# CommCare for Low-Literate Users

The Application Builder has several different settings that can make CommCare more accessible to users that have low levels of literacy or are illiterate. Below you will find a description of the main setting, "sense mode," as well as design and implementation advice.

## Design Considerations

When designing and building an app for low-literate users, here are some techniques you can employ:

**Multimedia:**

- Make extensive use of images and audio prompts. Images can serve as a reminder to the user about what counseling point the need to discuss or what data they need to capture.
- Audio message can be directed to the user instead of the beneficiary. For example, a question which asks "how many children does the client have?" can be recorded like that instead of "how many children do *you* have?" being directed to the client. If desired, the mobile user can even use headphones to help her hear the recordings and ask the right questions.

**Question Types:**

- Text questions are almost impossible for many low-literate or illiterate users. In such cases it is best to minimize text questions and focus on single-select and numeric questions. One work-around is to have the user get help in registering clients from a family member or co-worker who is literate and able to type. Another option is for someone else, like a manger or supervisor, to register clients using CommCare so that the case list is pre-populated.
- Limit the number of options and avoid multiple choice (more than one answer) questions. If you have a single question with 6 options it may be confusing, so it is sometimes best to break that into a series of shorter questions. Also, rather than asking multiple choice questions such as "which pregnancy danger sign does the client have?" try asking a yes/no question about each individual danger sign in the list.

**Distinguishing Forms and Cases:**

- Picking a name from a list of names can be a particular challenge for low-literate users. Consider having a very short case list, where possible, and use a number as an identifier where possible, if the user is numerate.
- Use Icons in Module and Form lists to help the user navigate. See Icons in CommCare
- Note: The CommCare team is working on improvements to CommCare that should make navigation of case lists easier by including audio and images. See Adding Icons in Case List and Case Detail screen.

## Implementation Considerations

Low-literate users can often do an excellent job with their work- for example, many community health workers who are illiterate or have poor vision are excellent at providing counseling to their beneficiaries. CommCare can be a job aid for them as well, and not a huge source of stress or confusion.  While there will always be challenges, there are some issues you can consider during the implementation of a project that may help with this issue:

- **Training**: If there is a portion of your app that requires text entry, you could include a family member, such as a spouse or child, in a portion of your CommCare training  Often these family members already help with documentation so it may be useful to include them more explicitly in your project.
- **Worker Monitoring**: CommCare reports are focused on worker activity and monitoring. Illiterate users sometimes use CommCare differently in counseling sessions and incorporate it into their workflow differently. It is worth investigating how all types of workers are using CommCare before acting on confusing reports.
- **Field Testing**: If your users have variable literacy levels, it is important to include users of different capabilities in any piloting of field testing.

## CommCare Sense ("Simple CommCare")

CommCare Sense Mode, when turned on, activates a number of settings that make CommCare more user-friendly to low-literate users. It causes different changes in the Java/J2ME/Nokia style phones and Android Smartphones, so these are described in detail below.

Note that it is always worth testing different configurations with your mobile users, to find out what works best for them.

CommCare Sense is activated by checking the box in **General Settings** on the Settings page of your application. When you change the setting, you must make a new build and deploy it to the phone in order for the changes to take effect.

### CommCare Sense for Android Smartphones/ODK

The only significant change on Android devices is that Form Management is disabled- this means it no longer is possible to save incomplete forms or view submitted forms. Dimagi field staff have found that the ability so save partially completed forms caused confusion and resulted in work being lost. Here are screenshots showing how the different configurations look:

**Normal:**                                              **Sense Mode:**
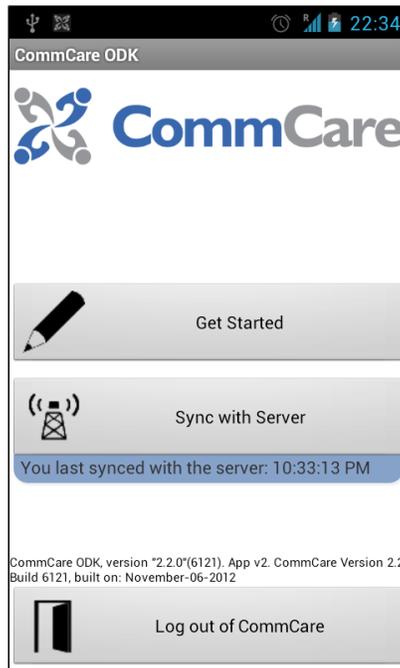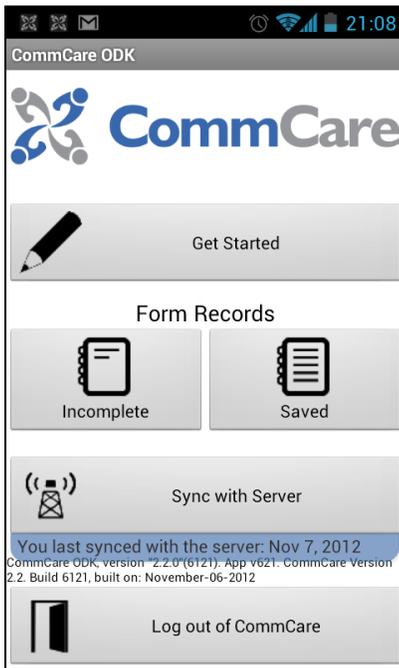
## CommCare Sense for Java Phones

Activating Sense mode causes the following changes in Java/J2ME/Nokia-style feature phones:

- **Extra Key Action:** Sets, by default, the hash key to play audio messages (as opposed to cycle)
- **Item Selection Mode:** Changes default from "Normal Scrolling" to "Numeric Selection."  This means if you have a question with multiple possible answers, you cannot scroll up and down- you have to push the corresponding number (i.e. push "2" to choose the second option)
- **Send Forms Mode:** Sets, by default, the form sending activity to automatic (as opposed to manual push)

There are additional changes to settings you may want to consider:

- **User Login Mode:** Consider changing this to "automatic" instead of "normal"- this means that the user will not have to enter a passcode; rather as soon as they open CommCare they will automatically be logged in.
- **Form Entry Style:** Consider setting this to "One Question Per Screen" instead of "Multiple Questions per Screen." This will reduce confusion in case the user accidentally pushes the up button. In Multiple Questions per Screen, scrolling up will allow the user to see the answers to previous questions.