DHIS-ODK

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What is our project about?

- Paper forms
  - difficult to automate/access
- Weak or no connectivity to internet for a wireless based system.
Recent Fieldwork

- **Fieldwork**
  - DHIS Team
    - Skype Call
    - E-Mail
  - Waylon Brunette (ODK Collect)
    - Face-to-Face Meeting
    - E-Mail
  - Hillary Worden (ODK Tables)
    - Face-to-Face Meeting
    - E-Mail
Overview of implementation plans

- **Architecture:**
  - Android
  - JSON & XML
  - ODK Collect & ODK Tables
  - DHIS Web API

- **Major Components:**
  - Form Acquisition module
  - Form Completion module
  - Form Submission module
Overview of implementation plans

Important changes from original plan:

- No longer making a server side web module
- All data acquisition and submission will be done through the web api
- Now more in line with DHIS implementation guide
Overview of implementation plans

DHIS Web Module

DHIS Communicator

Internet

DHIS Web Module

DHIS Communicator

Open Data Kit

Android

Overview of implementation plans
Overview of implementation plans

ODK Table

Manager

DHIS Communicator

Internet

DHIS2

Open Data Kit
What have we been doing?

- **Server side**
  - Setting up local copy of DHIS
  - DHIS Security
  - How to submit data

- **Client side**
  - **ODK Table**-like module
    - UI for major components
    - Storing and getting forms in/from local database
    - Uses **ODK Collect**’s form
  - CSV -> Table -> X-Form -> CSV
Android - 3 States

NEW

FINALIZE

EDIT

User can fill out a form multiple times separately
Prototype Demonstration

CSV file In SD card

ODK Table

ODK Table

XForm

In background…
Evaluation plan

- Functionality:
  - Submit Data
  - Retrieve Data

- Good Solution?
  - Faster than the current paper system.
    - Time Taken
    - Easy of Use

- Evaluation Through User Testing
Evaluation plan

- Targeting
  - Healthcare Workers in India
- Deadline May 16th
- Final Target
  - Mid-Wives and Community Healthcare Workers that use DHIS in the world
What’s left?

Future work
- Android server side: server connection
  - Data submission testing, data retrieval

Unknown
- DHIS2 Forms with multiple columns
  - Solution: multiple tables for one form
- JSON ↔ CSV/Table
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