Open Source Telemedicine

Procedure Declaration Using Mark Up Language

Images of phone in this presentation © Google. All rights reserved. This content is excluded from our Creative Commons license. For more information, see http://ocw.mit.edu/fairuse.
Procedure

A set of one or more instructions which are executed to collect data.

Essentially, they provide the CHWs with the medical decision trees developed by the clinical specialists.
Basic Implementation

Procedure: The decision tree in its entirety.
Page: A set of one or more instructions
Element: A point of instruction.
<Procedure title="Welcome"
author="Sana"
id="000-0000-0000-0000"
Version="1.0">
<Page>
<Element id="1"
concept="FAVORITE COLOR"
question="What is your favorite color?"
type="ENTRY"
answer=""/>
</Page>
</Procedure>
Element Attributes

```
<Element id="1"
    concept="FAVORITE COLOR"
    question="What is your favorite color?"
    type="ENTRY"
    answer="" />
```

**Concept:** A term from the ontology

**Question:** Prompt presented to the user

**Type:** A flag which indicates the widget to use.

**Answer:** A default value.
Procedure Element Types

- TEXT
- ENTRY
- SELECT
- MULTI-SELECT
- RADIO
- TIME
- DATE
- PATIENT_ID
- BINARYFILE
- GPS
- EDUCATION_RESOURCE
- PICTURE
- SOUND
- PLUGIN
- ENTRY_PLUGIN
Other Element Attributes

- **Optional Attributes**
  - required
  - audio
  - image

- **Element Specific**
  - RADIO, SELECT, MULTI_SELECT
    - choices

- PLUGIN
  - action
  - mimeType
Complex Implementation

Branching Logic: Branching logic added at the page level.
Branching Logic

Simple Comparison

Type: Comparison operators.

EQUALS, GREATER, LESS
Branching Logic

Compund

<Page>
  <ShowIf>
    <or>
      <Criteria type="EQUALS" id="1" value="BLUE"/>
      <not>
        <Criteria type="EQUALS" id="1" value="BLUE"/>
      </not>
    </or>
  </ShowIf>
  <Element ...>
</Page>

Boolean Operators: and, or, not
Branching Logic

Simple Comparison

Type: Comparison operators.

EQUALS, GREATER, LESS
<Procedure title="Welcome" author="Sana" version="1.0" id="000-0000-0000-0000">
  <Page>
    <Element id="1" concept="FAVORITE COLOR" type="ENTRY">
      <question>What is your favorite color?</question>
      <answer></answer>
    </Element>
  </Page>
  <Page>
    <ShowIf>
      <or>
        <Criteria type="EQUALS" id="1" value="BLUE"/>
        <Criteria type="EQUALS" id="1" value="RED"/>
      </or>
    </ShowIf>
    <Element id="2" concept="QUEST" type="ENTRY">
      <question>What is your quest?</question>
      <answer></answer>
    </Element>
  </Page>
</Procedure>
HST.S14 Health Information Systems to Improve Quality of Care in Resource-Poor Settings
Spring 2012

For information about citing these materials or our Terms of Use, visit: http://ocw.mit.edu/terms.