Neonatal Assist

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Problem space

↗ **Neonatology** is a subspecialty of pediatrics that consists of the medical care of newborn infants, especially the ill or premature newborn infant.

↗ Working with such tiny patients requires special care and performing procedures quite differently than are done on older (and larger) patients.

↗ Often rely on memory to perform tasks: saves time, but increases the likelihood of error.

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Project description

↗ A tool, with all pertinent neonatal references in one user friendly, beautifully designed mobile application.

↗ Create an android supported mobile app using some tools provided by ODK Survey.

↗ Requirement: must be **safer and more efficient** than paper and pen.

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Design Objective

- ↗ Educate

- ↗ Maximize Efficiency

- ↗ Minimize User Error

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Findings so far

↗ General content and proposed features have been provided by Jocelyn Kirk.

   ↗ There are specific tools that neonatal nurses every day.

↗ Nurses are lacking fast access to current reference information while at the bedside.

↗ Lo-Fi prototype informed by preliminary research based on Jocelyn's proposed content.

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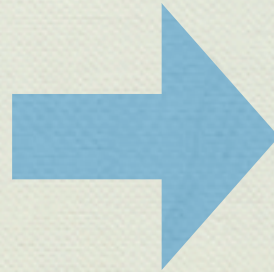
Home Screen

Features:
9 Primary Categories
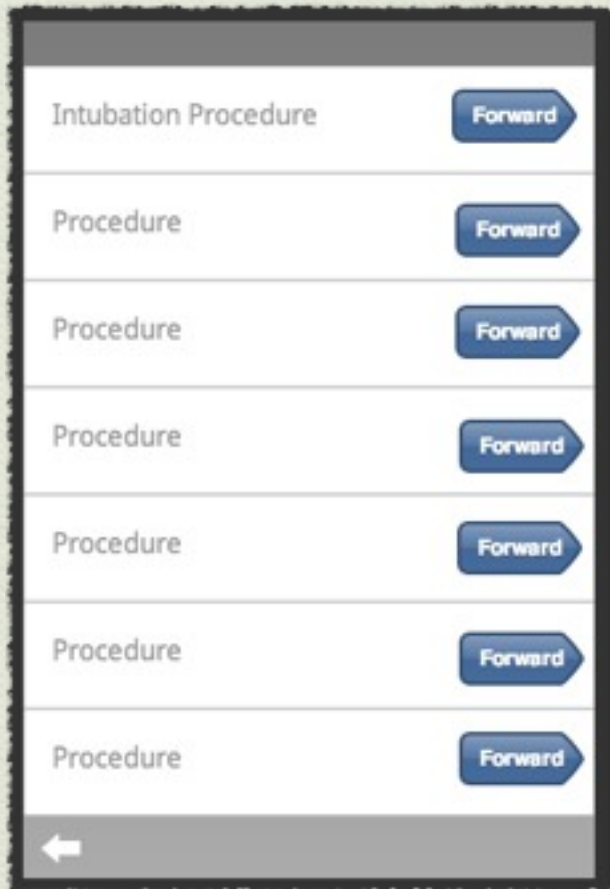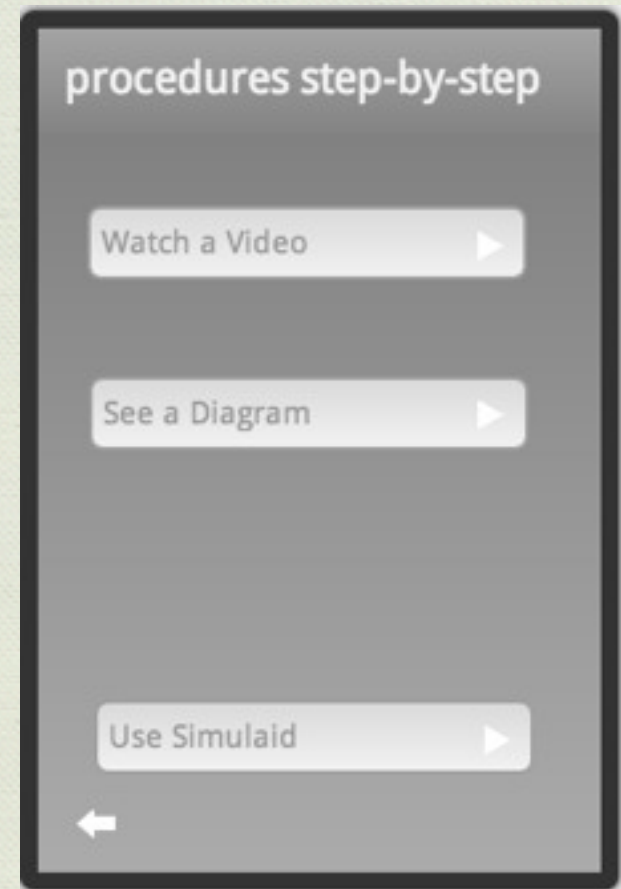Text Search
Audio Search
Favorites
Scanner

Featured List

Procedure Demonstrations
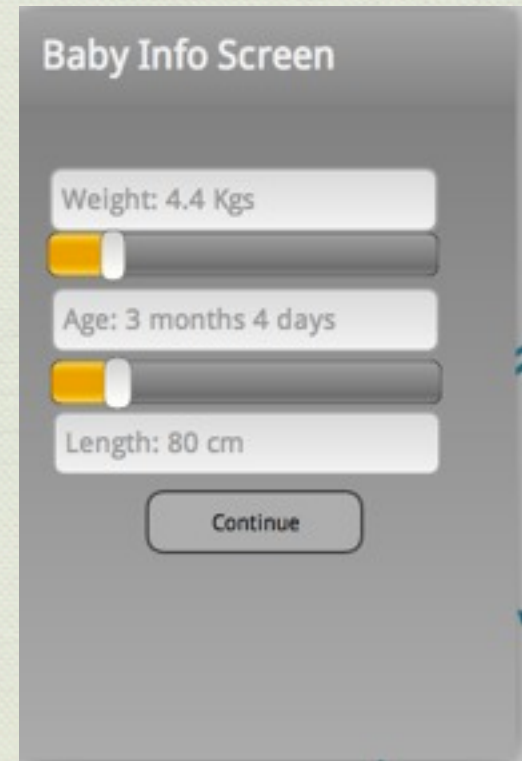
Maximize Efficiency/Minimize User Error:

Audio Function:
- Search
- Record
- Transcribe

Large Icons:
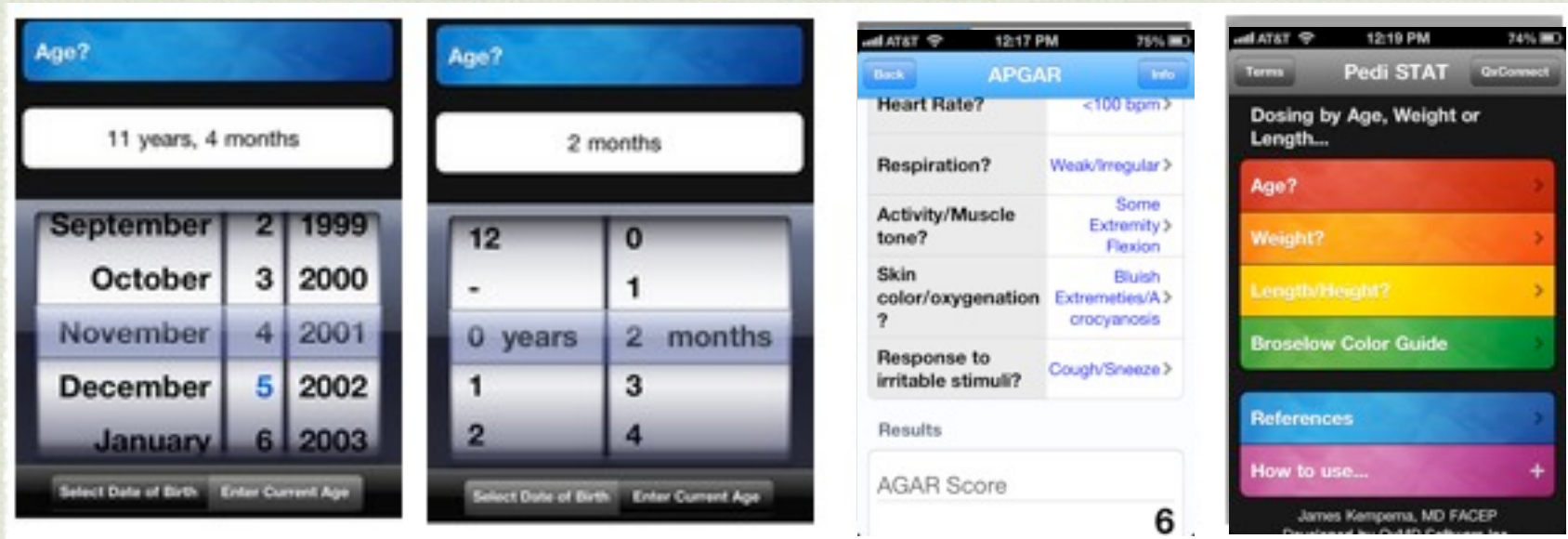- Prevent input error
- Minimal Design Noise
- Intuitive Function

Unique Tools:
- Effective
- Efficient
- Accurate

Related Work(X)

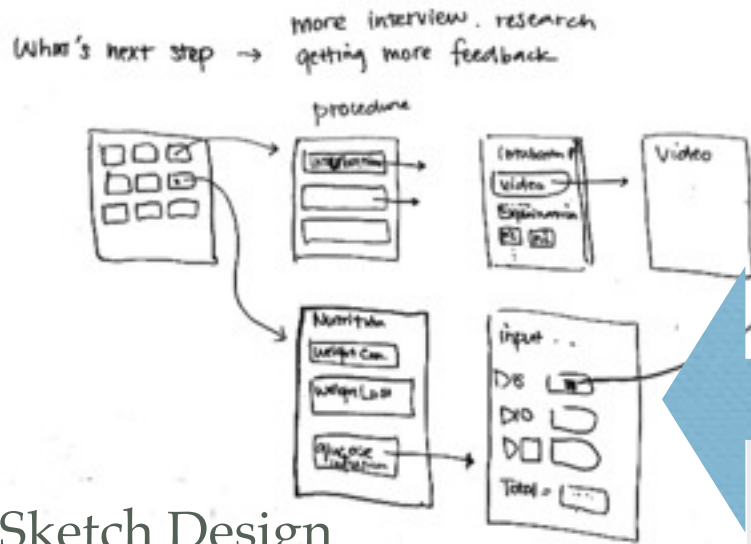Several apps exist that contain neonatal reference material.

Pros:
➡ Easy Scrolling
➡ Aesthetic UI
➡ Good Design

Cons:
➡ Too much information.
➡ Lacking some important information
➡ Difficult to navigate.

Architecture (X)

Sketch Design

Basic Components:
- Calculator
- Audio Search/Transcribe
- Video Links
- Scanner

- How do they interact?

Low Fidelity Wireframe

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Design and Evaluation (X)

↗ Iteration and Evaluation through usability testing.

↗ Arrange meetings with nurses to test usability.

↗ Based on feedback, design may change in order to improve.

↗ Challenge of UI will be ensuring the flow of information reflects nurses work-flow.

↗

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Plan for next quarter (X)

↗ Week 1 - 3: (Development)

◆ Android device install ODK Collect.

◆ All 9 icons on Home Screen:

  ◆ Procedure, Diagnostic, Nutrition, Normal Newborn, Meds, Labs, Head-To-Toe, Gestation Age.

◆ Audio recording(quick search)/transcribe notes.

◆ Procedures: Videos and Diagrams. Calculators.

↗ Tools: ODK calculator, Audio Recording.

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Plan for next quarter

↗ Week 1 - 3: (User Research)

⬖ Research Goals: Meetings arranged through Jocelyn

⬖ Contextual Inquiry, Directed Interviews at UWMC

⬖ Discuss Information Architecture

⬖ Create Complete Prototype

⬖ Iterate Design / Implement UI

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Thank You!

↗ Any Questions?

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