Expanding the Options for Immunization Data Collection with Personal Digital Assistants

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Topics

- Background
- Goals
- Participants
- Collaborative Process
- System Architecture
- Application Screen Displays

Project Background

- Rhode Island: proposed 2 year project
  - Year 1: requirements, specifications
  - Year 2: development, implementation
- All Kids Count
  - Sponsored project with a shorter timetable
  - Recruited six registries to participate

Project Goals

- Cooperatively develop a "generic" PDA registry product to accommodate the needs of a diverse set of projects with a minimum of customization.

- Use standards whenever possible.

- Utilize registries' existing Internet infrastructure.

- Ensure data security.

Project Participants

- Rhode Island KIDSNET
- New York City CIR
- Utah USIIS
- Michigan MCIR
- Oregon ALERT
- Maine IMPACT

Project Deliverables

- A requirements and specifications document.
- A **PalmOS-based application** to view and collect data as in the requirements and specification document.
- An **MS-Windows-based module** to synchronize with the PDA and act as a conduit to the registry.
- A **server component** to sit in front of the registry application and communicate with the Windows module to exchange information.

Collaboration: Project Website
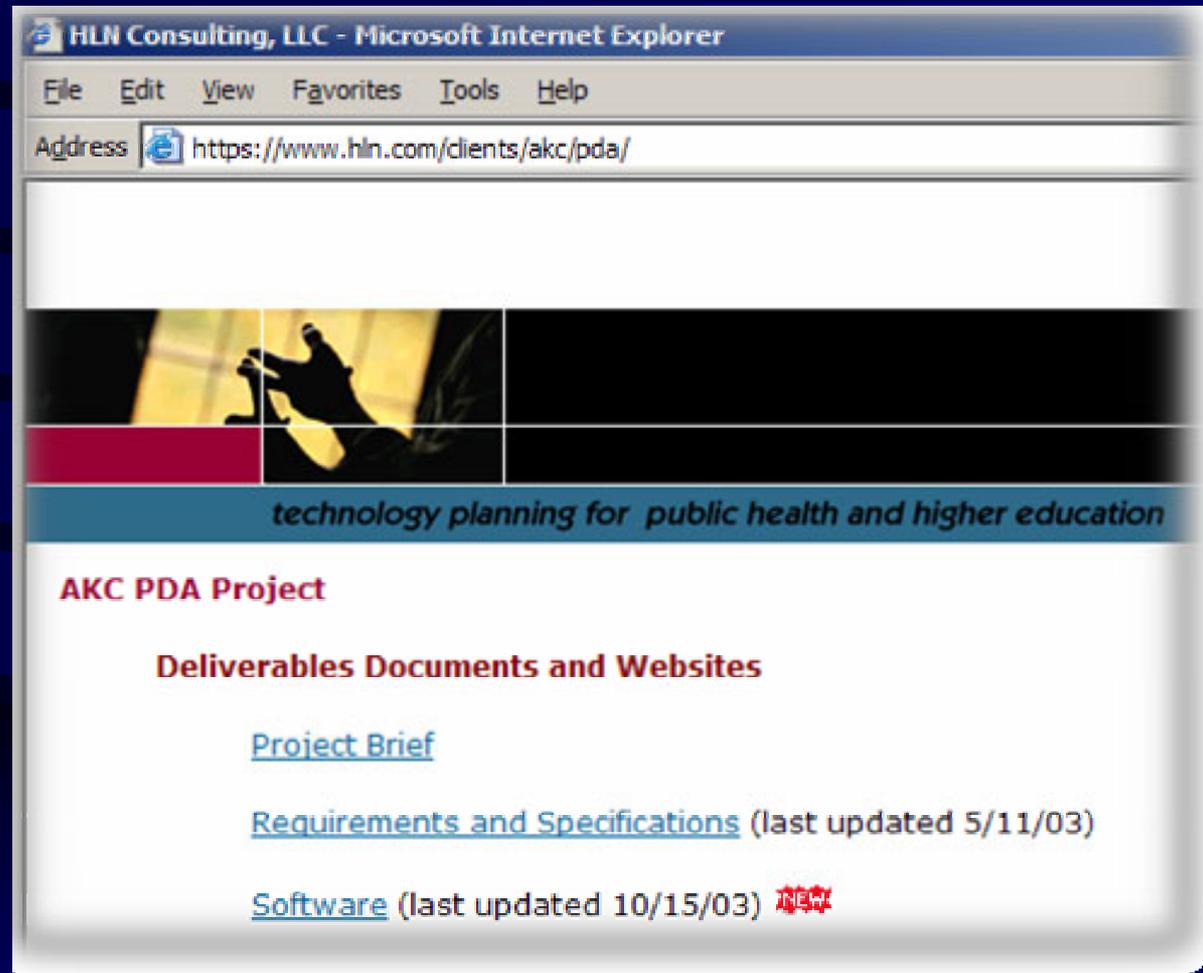
Collaboration: Web-based Tools

Project Tracking

Issue in detail [update] [delete]

Dealing w/ Vaccine Group Names

Issue name	Dealing w/ Vaccine Group Names
Priority	3 - Default
Private	No
Project	Development
Client	AKC-PDA
Description [edit]	In most circumstances the Vaccine Group Name is a name that correspond... actual vaccines that constitutes the Vaccine Group. However, in some situati... be the case. should the vaccine group name correspond to the first membe... group, or should it be a separately assigned name?
Submitted by	Ron Lin
Responsible person	Mike Berry

Different Participants…
Differing Requirements…

Consensus around:

- Data entry only
- Viewing records only
- Palm OS
- Wired/Bluetooth Synchronization
- Low-end devices

Other ideas:

- Barcode scanning
- Wireless LAN integration
- Desktop reporting
- PocketPC

Use Case

- **Synchronize**: download patient list to the PDA
- **Use**: in the practice setting,
    - Browse/search the patient list
    - View patients' immunizations, recommendations
    - Add immunizations
    - Add patients
- **Synchronize**: upload data to the Registry and refresh patient list

System Architecture

PDA

Desktop
Computer
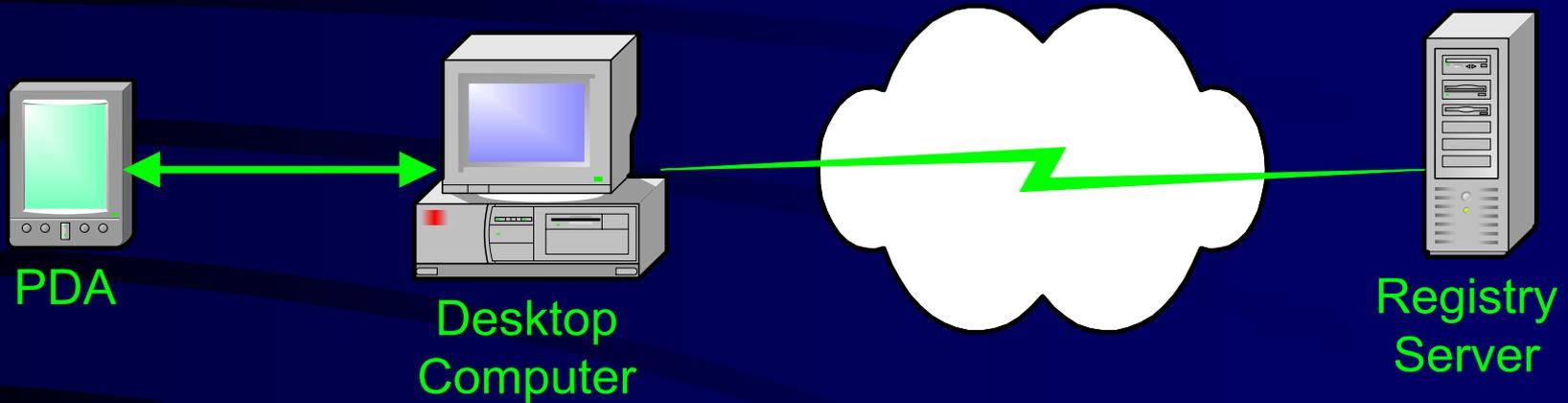
Registry
Server

Architecture:
PDA for Data Entry
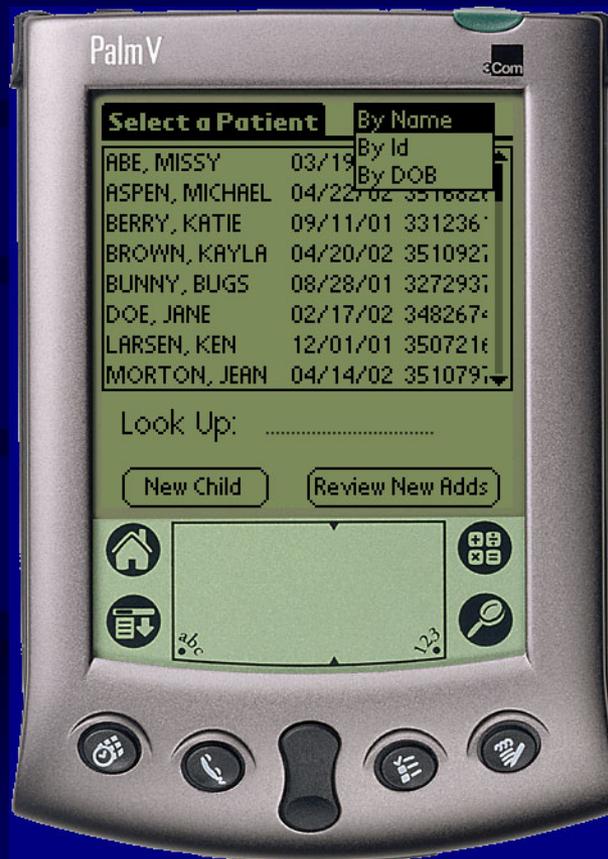
Architecture:
Desktop for Synchronization

Architecture:
# Registry Server for Data Consolidation

- Java-based "Web Services" front-end to Registry

- Requires Internet presence and Secure Sockets Layer (SSL)

- Common data model used by all components

- Specific registry data model maps to common data model through a simple configuration file

- Specific registry data values (*e.g.,* available vaccines and lots, vaccine series/groups) are inherited from the participating registry
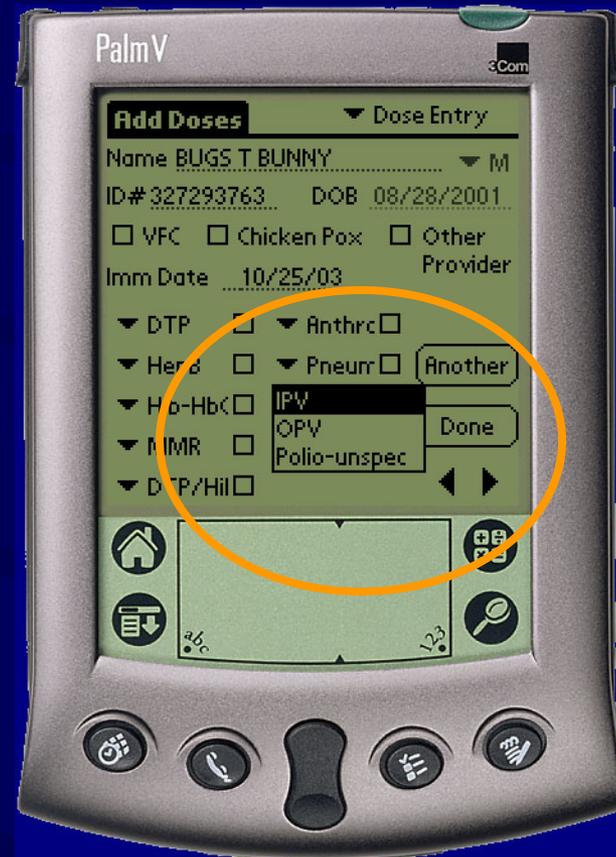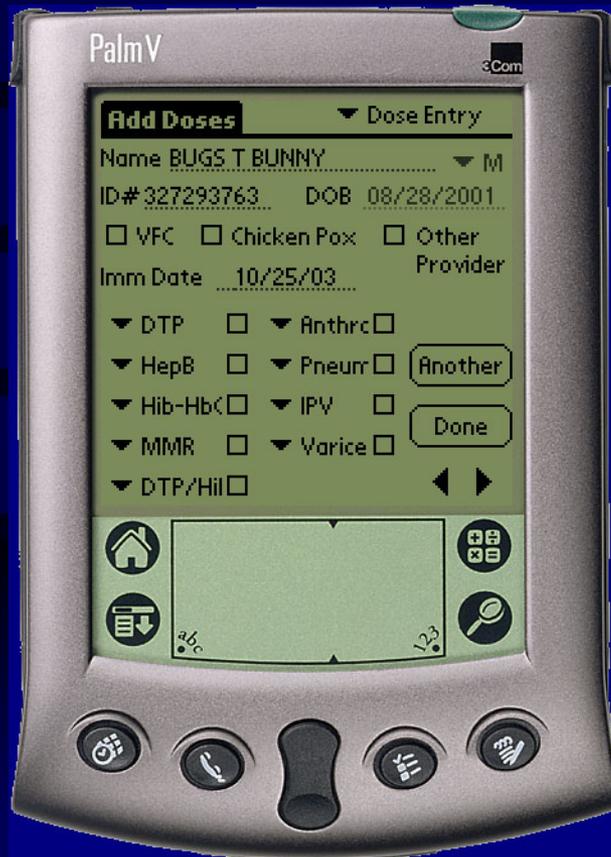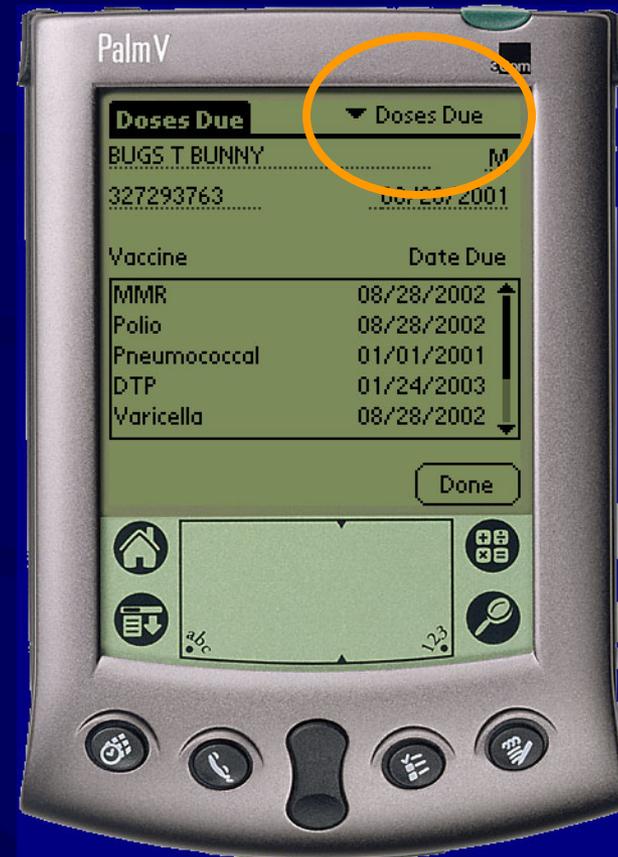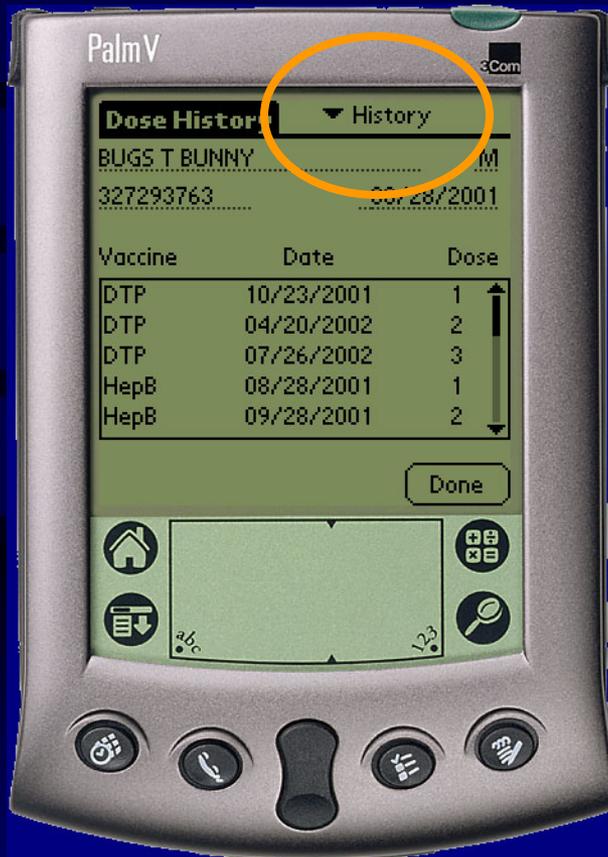
Application Screen Displays

Login Screen
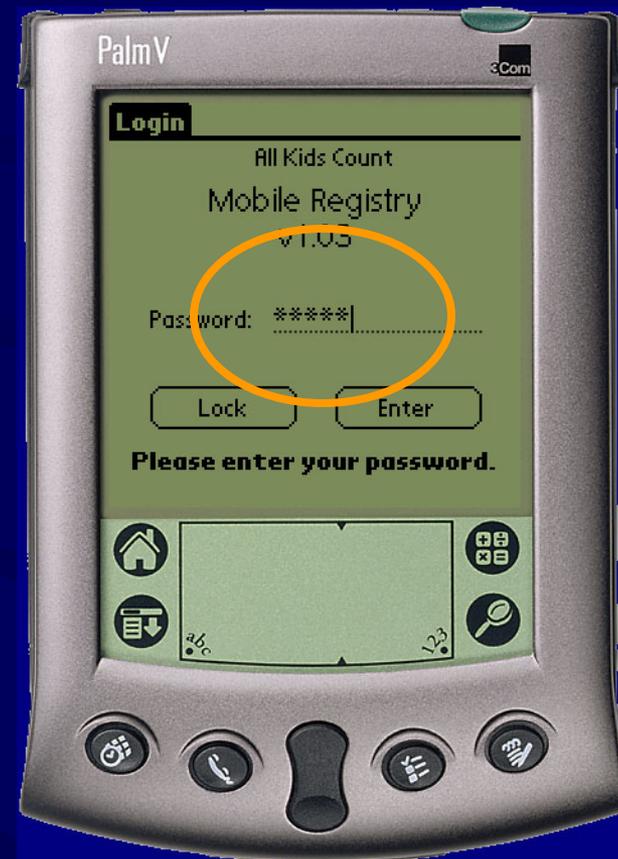
Select a Patient
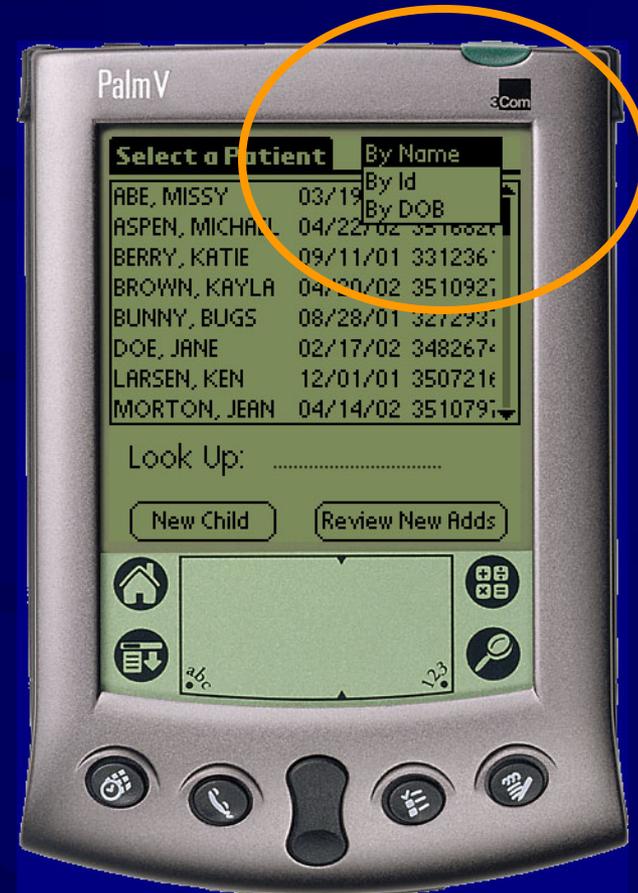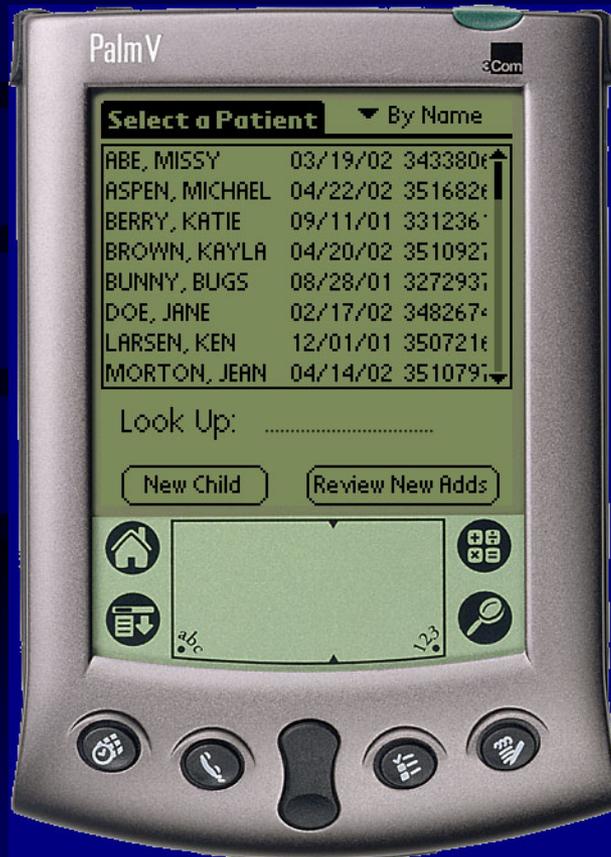
Add Doses

History and Doses Due

Contact Information

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All Kids Count

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