MICHIGAN STATE
UNIVERSITY

Beta Presentation
Surgical OR Instruments and Needle Tracking

The Capstone Experience

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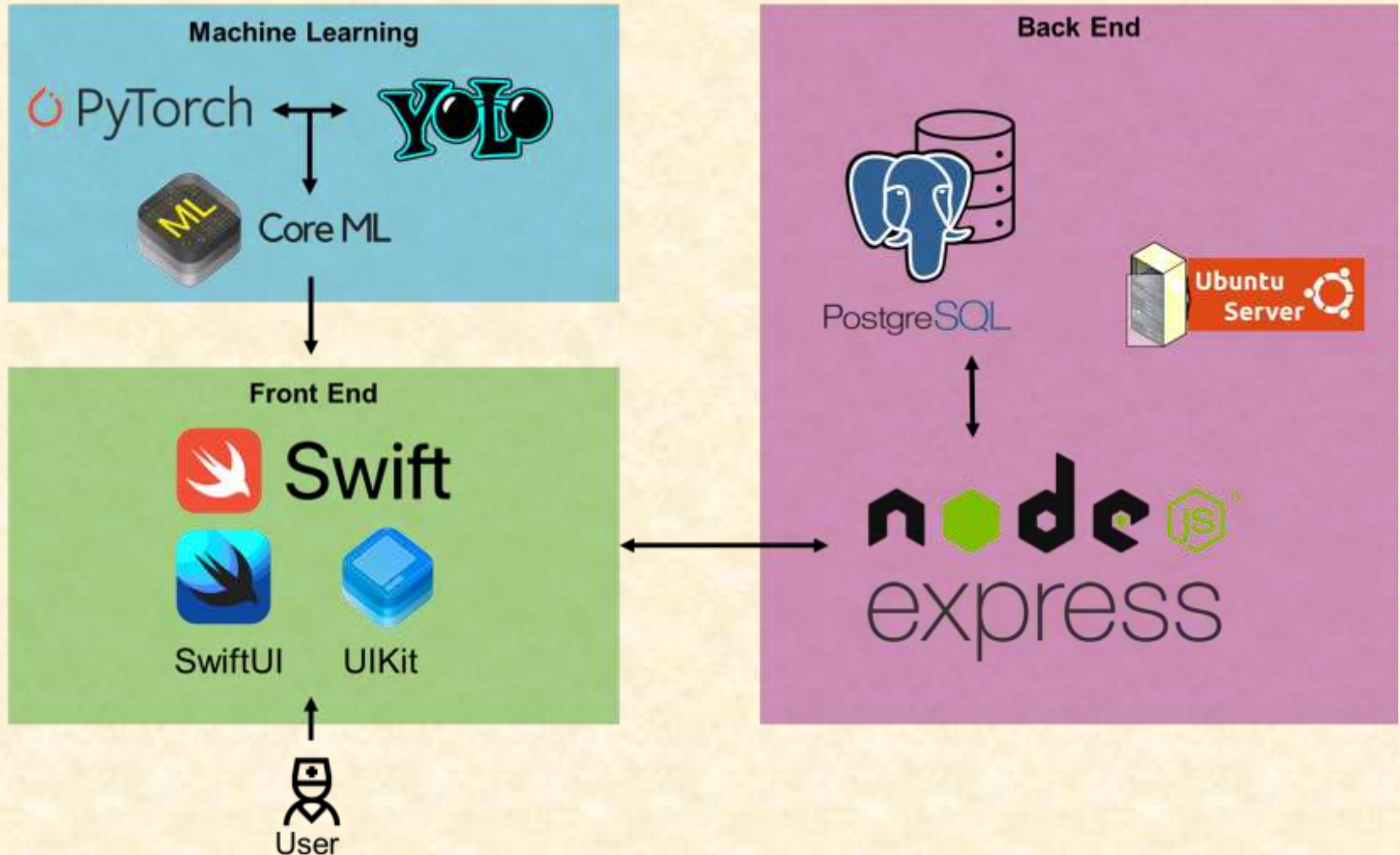
Fall 2024

From Students…
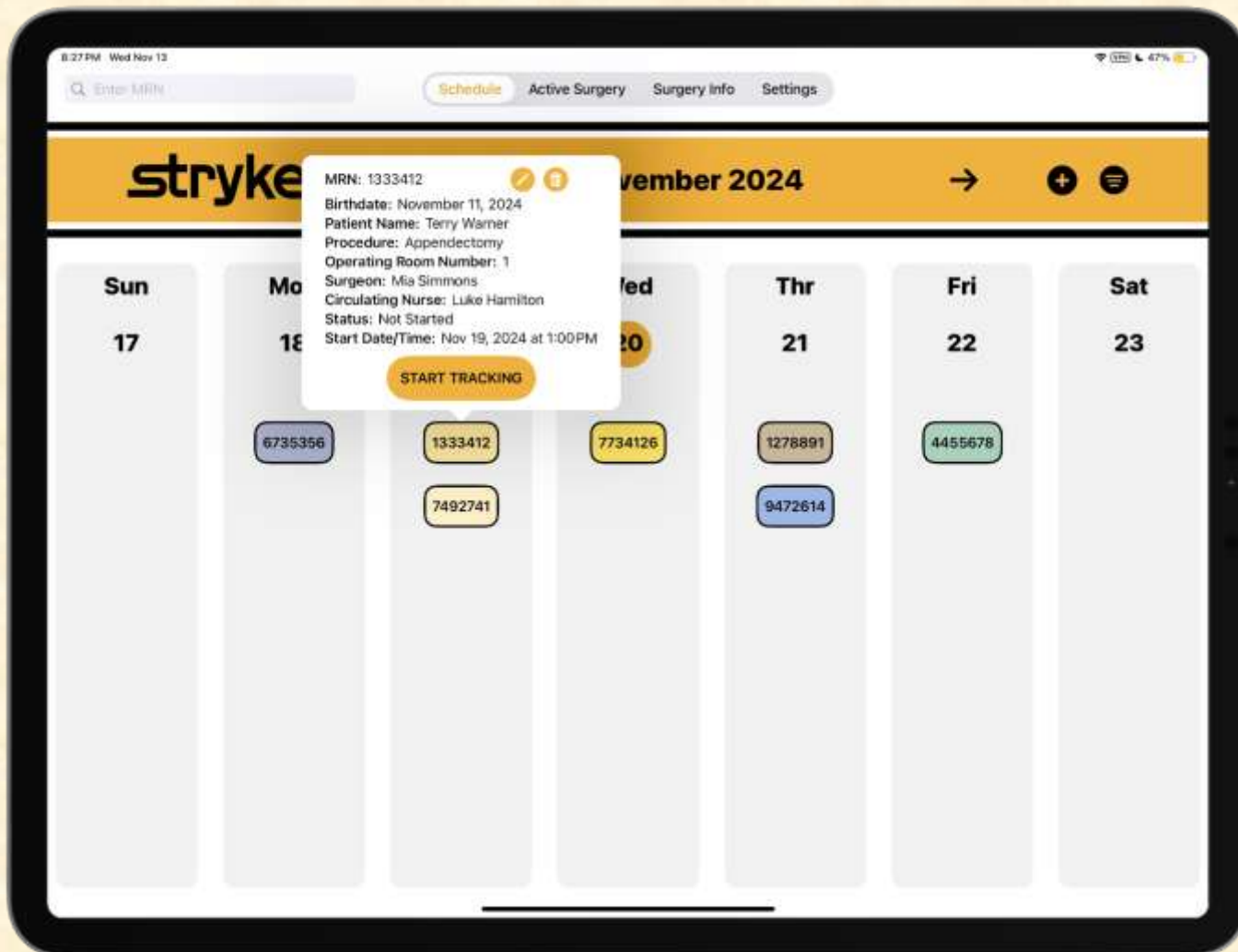*…to Professionals*

Project Overview

- Retained surgical items occur nearly 12 times daily in the USA.

- Leverage AI/ML to implement real-time tracking of surgical OR instruments and needles

- Use manual verification checkpoints to ensure quality and accuracy in tracking records

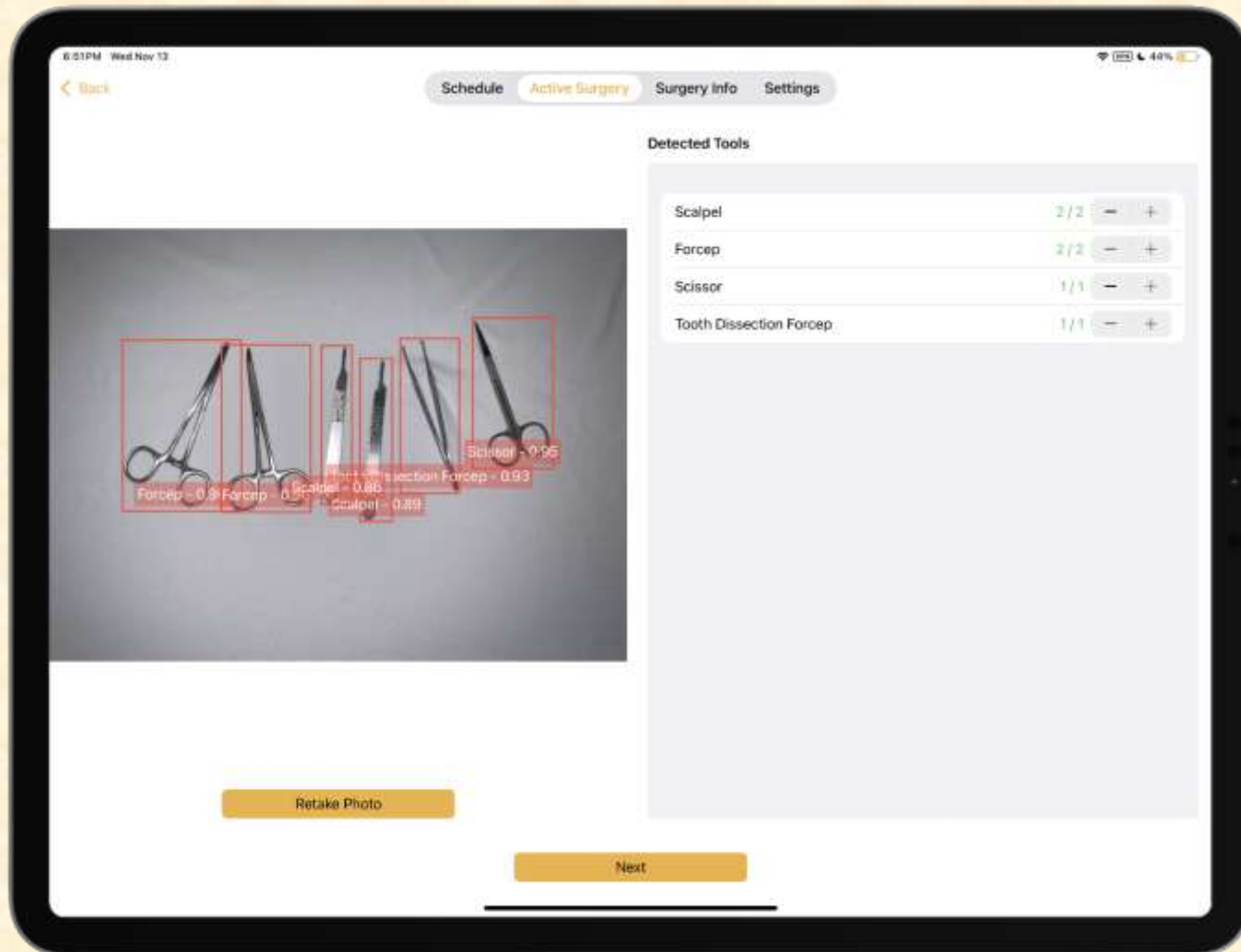- Generate tool status logs for audit and analytical purposes
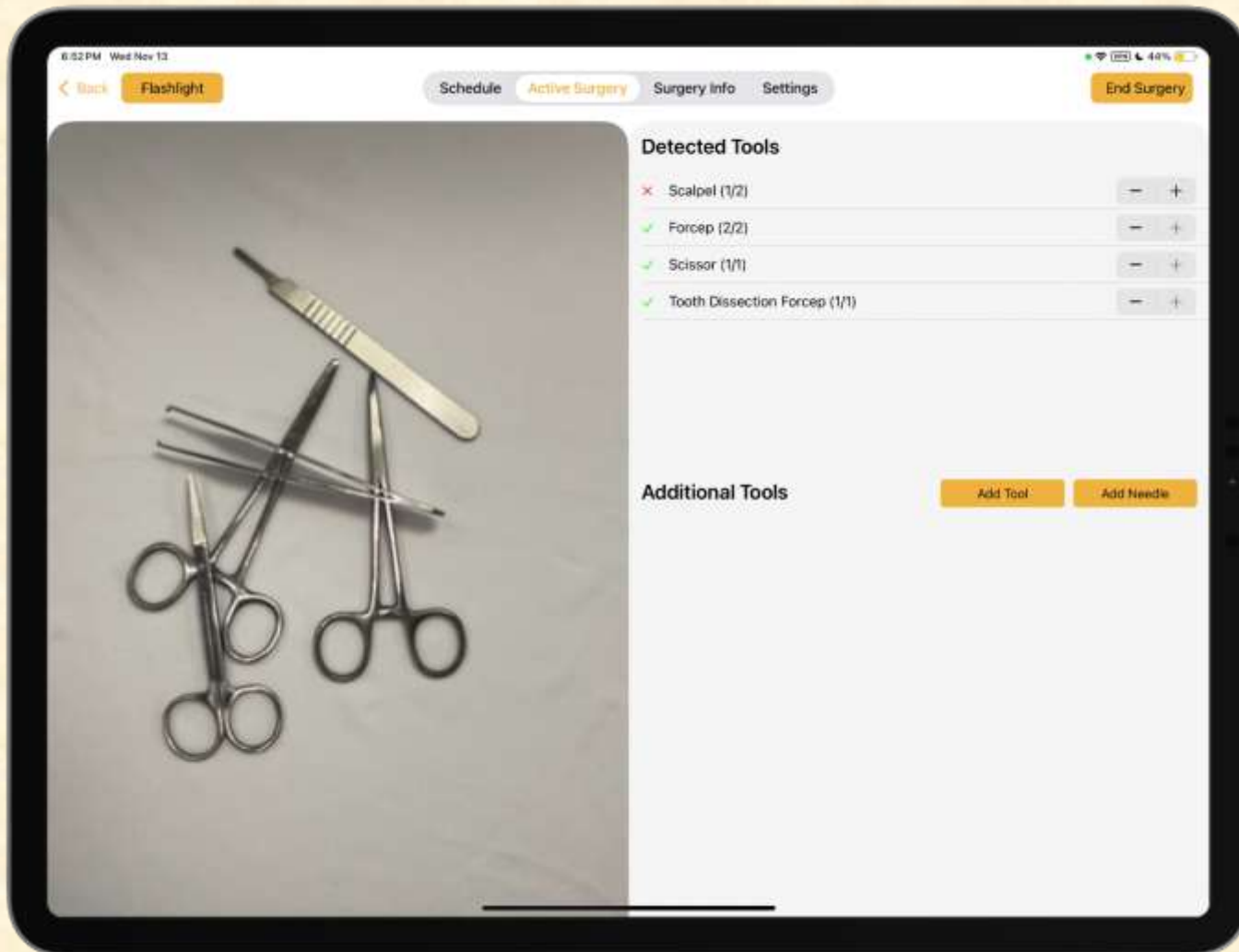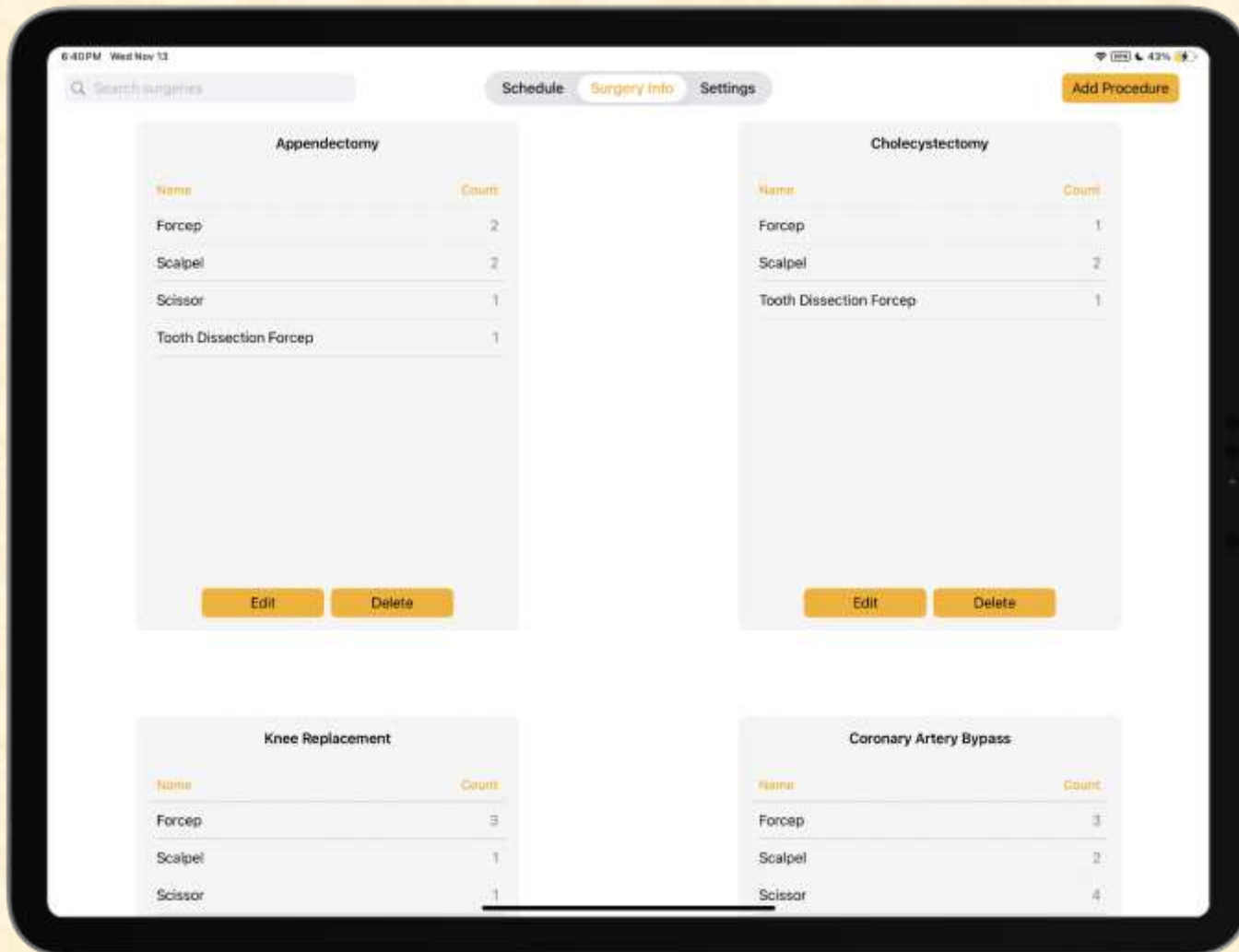
System Architecture

Schedule

Pre-Check

Live-Feed

Surgery Information Page

What's left to do?

- Features
- Stretch Goals
  - Storing Hospital with Operating Rooms
  - Having Single Use Items Stored
  - Generating an Aggregate Report
- Other Tasks
  - iOS app UI Improvements
  - Improve Error Handling
  - Bug Fixes in Network Calls

Questions?

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