Motivation

Assist Trillium Day Health staff in providing effective Patient care
- Digitize currently physical artifacts (Assessments, Care Plans, Attendance)
- Provide a web application to view these artifacts
- Provide a database to store the artifacts
- Provide an application to log and verify attendance using fingerprint scans

Background Info

- Trillium is a local health care clinic
- The Day Health Program provides patient education and activity
- Day Health Sessions are hosted by Trillium and run by different facilitators
- To manage this program Trillium needs...
  - Medical documentation for the patients
  - Tracking of patient progress through the program
  - The ability to record accurate patient attendance

Process and Methodology

Overview
- Waterfall for Requirements and Design
- Scrum for Implementation
- "Infrastructure" stage to set up development tools (Git, Database Server, etc.)

Design

Key aspects of Design
- User friendly and easy to learn
- Patient-Document and Patient-Session relationships
- Document history for Auditing
- Security

Database Design
- Allowing variable Document Types

Technologies and Rationale

Angular
- Web Application
- Team member experience
- User-friendly web applications
- Libraries for desired features

jQuery
- Database
- Already in use at Trillium
- A requirement

node.js
- Web Server
- Prefect for small scale project
- Database Integration
- Replaced Spring

MS SQL Server

Lessons Learned

Process Lessons
- Scrum is ineffective when team and domain are new
- Need time to learn domain and understand requirements

Outsourcing Fingerprint Application to 360Biometrics
- Did not have to spend time learning new technologies
- Experts much more efficient than we could have been.
- Less control over finished product
- Integration risks
- Overhead on requirements communication.

Technology Lessons
- Learned to save time by switching to technologies better suited to the project. Changing from Spring to node.js saved the team a lot of time.
- Learned the importance of quick and organized team communication. Slack was especially helpful.