## ENDEAVOUR HEALTH CHARITABLE TRUST

Technology Stack

# Development Tools

* Java 8
* Javascript/JQuery
* NodeJS (for easily building fast, scalable network applications)
* Ajax (send data to and retrieve from a server asynchronously)
* Maven (build automation tool)
* Spring 4 (Core support for dependency injection, transaction management, web applications, data access, messaging, testing)
* IntelliJ (Development IDE)
* GitHub (web-based repository for revision control and source code management)

# Database

## Apache Cassandra

* Elastic scalability
* Always on architecture
* Fast linear-scale performance
* Flexible data storage
* Easy data distribution
* Operational simplicity
* Transaction support

# Server Technology

* Apache Tomcat 8 (open-source web server)
* Apache Camel (rule-based routing and mediation engine that provides a Java object-based implementation of the Enterprise Integration Patterns using an API)
* Java SE 8
* Linux Ubuntu, Debian, Fedora, CentOS/RHEL, SUSE

# Messaging Queuing

## RabbitMQ

* Reliability
* Flexible Routing
* Clustering
* High availability queues
* Multi-protocol
* Management UI
* Tracing

# APIs and Protocols

* REST
* SOAP
* SFTP
* SMTP
* IMAP

# Data Standards and Transforms

* IHTSDO SMOMED CT
* FHIR 1/2
* HL7 2/3
* ITK
* XML
* JSON
* OPENHR
* EMISOPEN
* ODATA
* POJO

# Testing and Support Tools

* Endeavour Administration Suite
* IntelliJ Test Runner
* Cassandra-stress
* RabbitMQAdmin
* Nagios XI