



Team 55: National Firefighter Registry

In Collaboration with CDC-
NIOSH

10/17/2020

Team 55: Personnel

Team 55 Members:

- James Davis
- Haolong Yan
- Rahul Nowlakha
- Joe Kurokawa
- Traver Clifford
- Eric Mammoser*

CDC Mentors:

- Jill Raudabaugh
- Breanna Newton

GT Mentor:

- Elizabeth Shivers

*New member, will act as QA

10/17/2020

Agenda

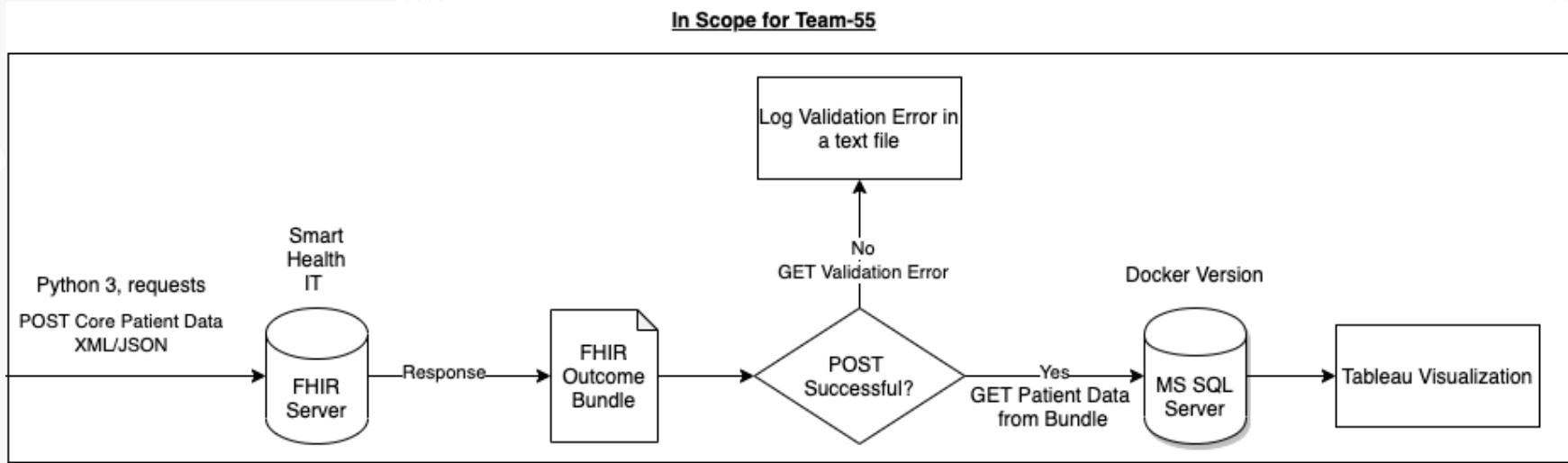
- Architectural Update
- JSON Parser Update
- XML Parser Update
- FHIR Validation Update
- DB Update
- QA Update
- Project Plan Update
- Plans for Upcoming Weeks

Architectural Update

- Decided to move conversion of JSON/XML to common format to after the FHIR server response
 - Old: Convert XML to JSON and then POST JSON only
 - New: Post XML/JSON directly, convert response to Python dictionary
- As a result, will no longer use the `fhirclient.py` library and instead roll the FHIR validation code into the JSON/XML handling

Updated Diagram

- Only change here is the update to use requests instead of fhirclient



JSON Parser Update

- NDJSON can be handled using `ndjson` Python library
- Updated to use `requests` library to handle JSON formatted POST to FHIR server

XML Parser Update

- Directly pulled in XML and was able to POST it to FHIR server using an HTTP request
- Was able to POST a bundle of patient resources to server
- Currently debugging spurious characters in the XML response after conversion to a Python dictionary using library `xmltodict`

FHIR Validation Update

- This is no longer a separate task; it has been integrated into the JSON and XML Parser sections since these will do an HTTP request on their own

DB Update

- GUI up and running, able to view table created
- Worked through Docker settings issue causing an issue when trying to run the database create script

QA Update

- Personnel change here, as Eric is taking over from Michael
- Validated that Dockerfile was able to stand up the DB
- Was able to access DB using the GUI

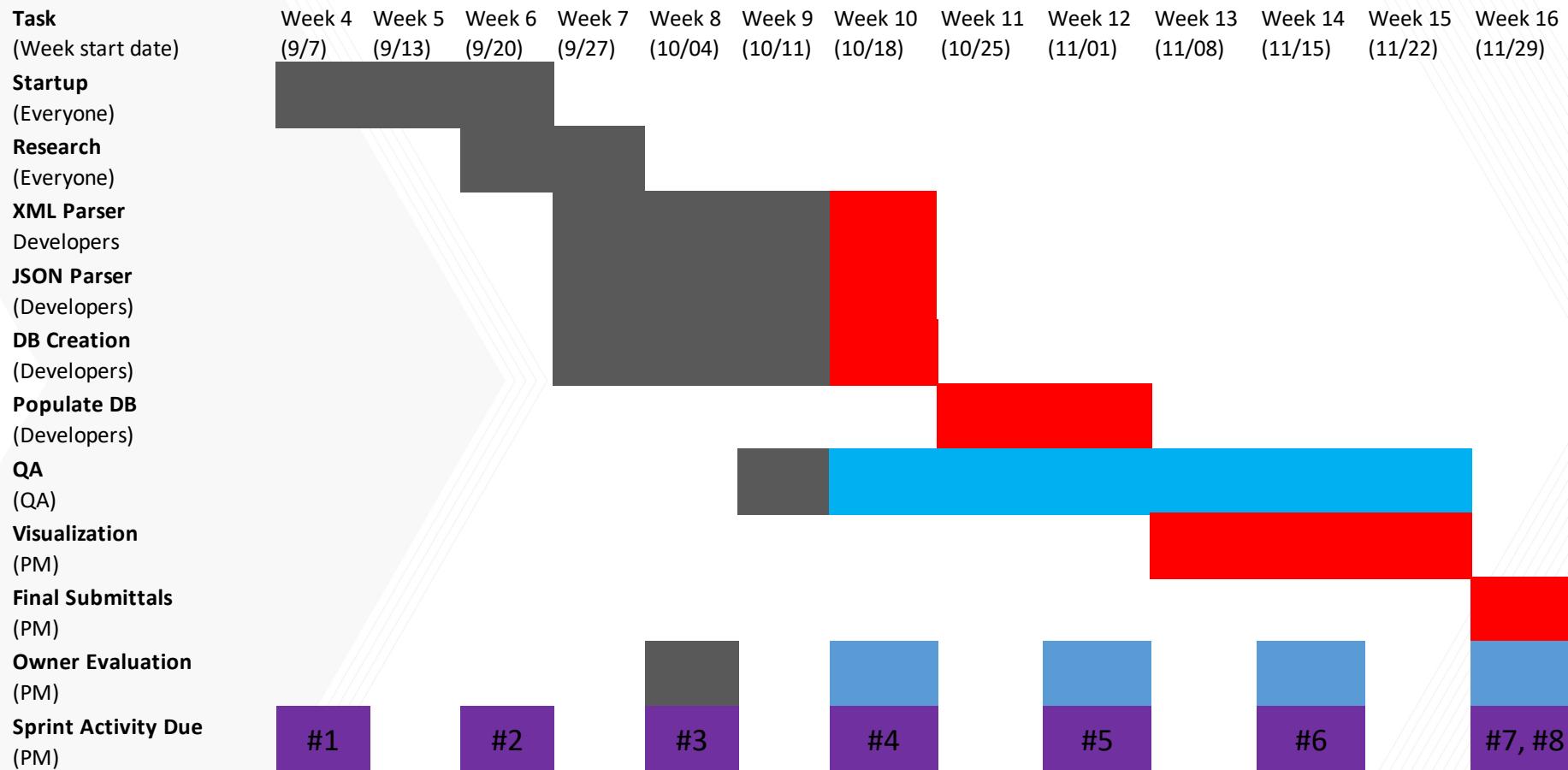
QA Screenshot

- Docker on left, DBeaver GUI on right

The screenshot displays two windows side-by-side. On the left is a terminal window titled 'root@47e3946f731a: /'. It shows a log of SQL Server startup messages from October 17, 2020, at 20:07:51. The log includes messages about database upgrades, Polybase feature being disabled, tempdb database clearing, starting up the tempdb database, and the Service Broker endpoint being disabled or stopped. It also mentions the Database Mirroring endpoint being disabled or stopped, and the Service Broker manager starting. Recovery is complete, and the default language is set. The log concludes with the creation of the FIREFIGHTER database and switching the database context to it.

The right window is the DBeaver 7.2.2 interface. The title bar says 'DBeaver 7.2.2'. The main area is the 'Database Navigator' tab, which is currently active. It shows a tree view of the 'FIREFIGHTER' database. At the top level are 'master - localhost:80' and 'FIREFIGHTER'. Under 'FIREFIGHTER', there is a 'Schemas' node, which is expanded to show 'dbo'. Under 'dbo', there are nodes for 'Tables', 'Views', 'Indexes', 'Procedures', 'Sequences', 'Synonyms', and 'Table Triggers'. Below the 'Database Navigator' is a 'Project - General' tab, which contains a table with columns 'Name' and 'DataSource'. It lists 'Bookmarks', 'ER Diagrams', and 'Scripts'. The bottom of the interface has a 'Schemas' tab.

Project Plan Update



10/17/2020

Plans for Future Weeks

- Update JSON and XML parser code to handle conversion of FHIR server response to common data format to be passed to SQL insertion code
- Begin mapping FHIR resources to DB fields to support DB population
- QA to validate implemented code for parsers
- JSON/XML parsers to be updated pending any QA feedback