SCOPE OF WORK

Project Background and Requirements

The goal of the project is to do the following:

- Capture 6 million unique user records (which include bio-data, photo image, signature and document upload)
- Format the 6 million records in the client preferred format
- Ensure that all 6 million records are transmitted to client's database in the proper format set
- Provide a dashboard that show the different insight into the process of capture to persistence of all records
- Ensure performance is built into the system to ensure system is optimal and fast during data capture
- Multiple agents in their hundreds should be able to work and connect simultaneously to the remote API's
- In the instance of service endpoint failures, agents must still be able to capture data in an offline mode and synchronize when service endpoints are back online

Product Background

The product portfolio

- a. Agent Desktop Application
- b. Remote API's
- c. Admin Web Portal

Together this suite of applications are a simple data capture solution that helps to achieve the following:

- Helps data operators capture user/customer data through an agent desktop application installed on a pc
- Helps data operators push and format captured data to a set of remote API's
- Remote API's process data and return data status to the agent applications
- Remote API's persists captured data into a mirror DB
- Remote API's contains integrations with 3rd party API's which verify and send response on data requests
- Remote API's send captured and processed data to client API's
- Client API's validate data, persists to her DB and sends data status response to remote API's
- A web admin portal is connected to remote API's to report on status of data capture and persistence to the mirror Db and client's DB.

Technical Background

- Monolith Architecture
- Desktop agent application runs on JAVA FX
- Remote API's are built on Spring Boot
- Admin web portal is built on REACT
- Mirror DB runs on MYSQL
- A RabbitMQ message broker also implemented

Deliverables

- Understudy codebase
- Implement New feature improvements
- Audit, review and recommend shortest implementation path for a stable and resilient architecture (message broker, performance, security, availability and resilience)