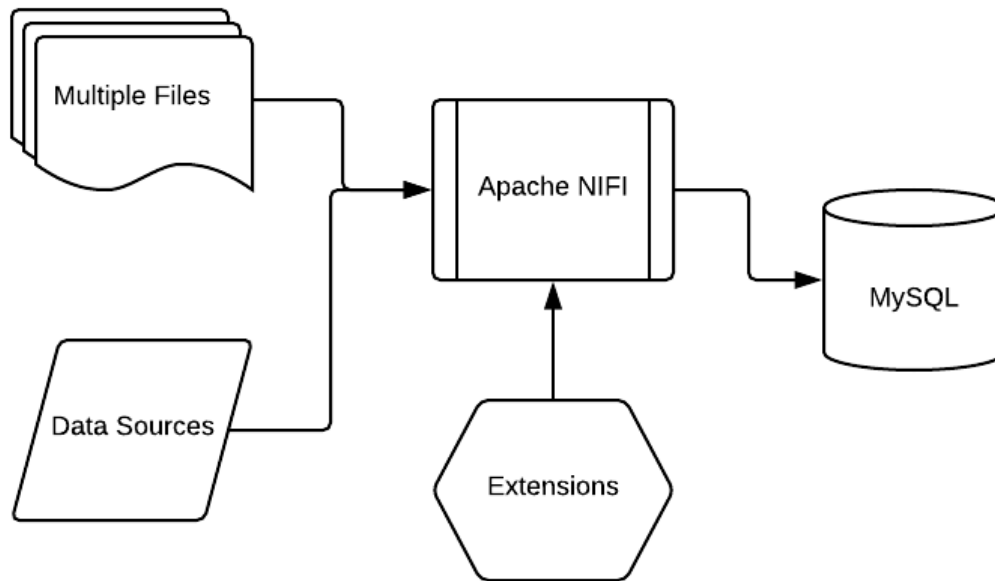# Work of Statement

Objectives

This project is a small scope of original production base Proposal that will allow the quick development before the stock holder presentation in August. It will consist of Data Ingestion from multiple sources, Dockerizing of web application, backend modules for easy deployment to AMS EC2.
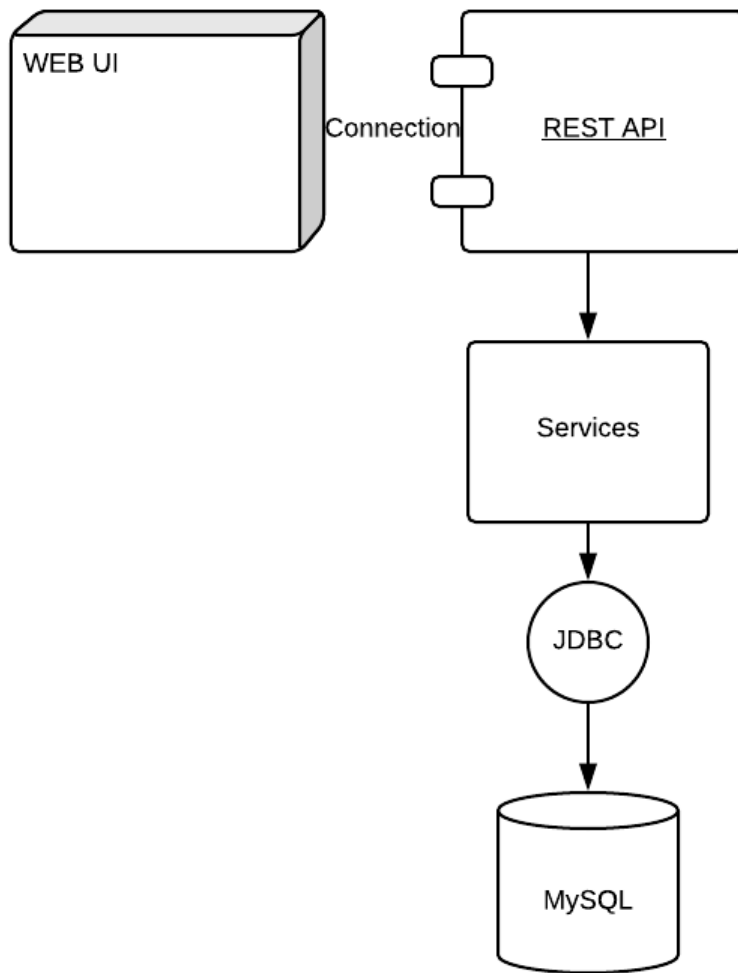
Scope of work

Data Ingestion will consist:

1. Use Apache NIFI as center to connect multiple resources and retrieve data into our system.
2. Database setup, MySQL with schema design.
3. Data format conversions.
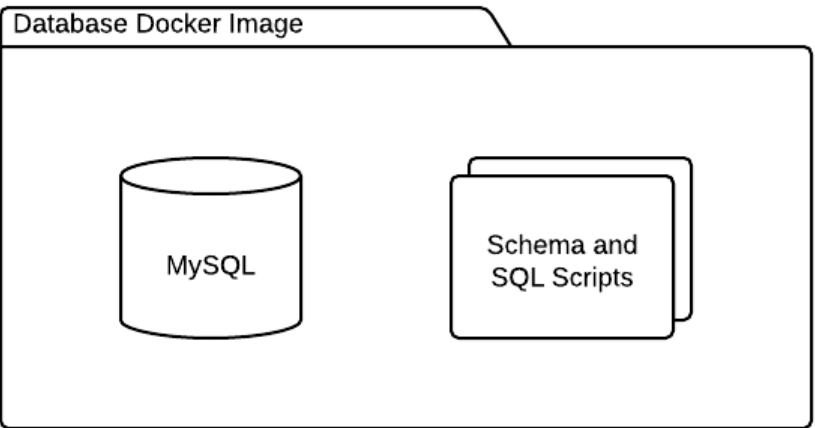4. Wrap up those modules into dockers as deliveries.

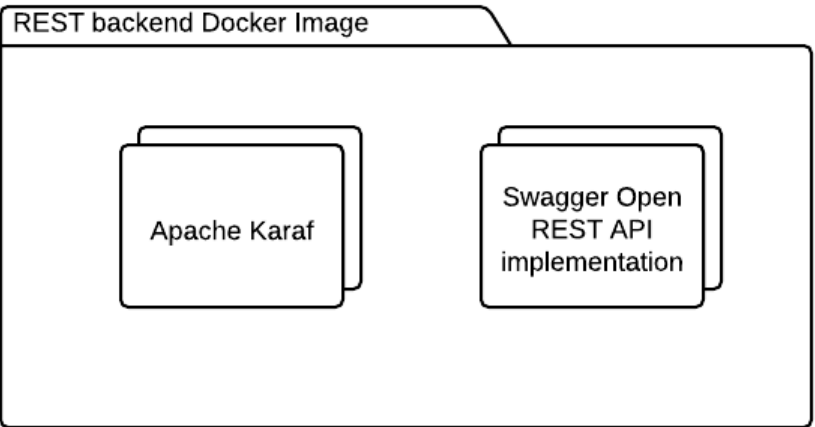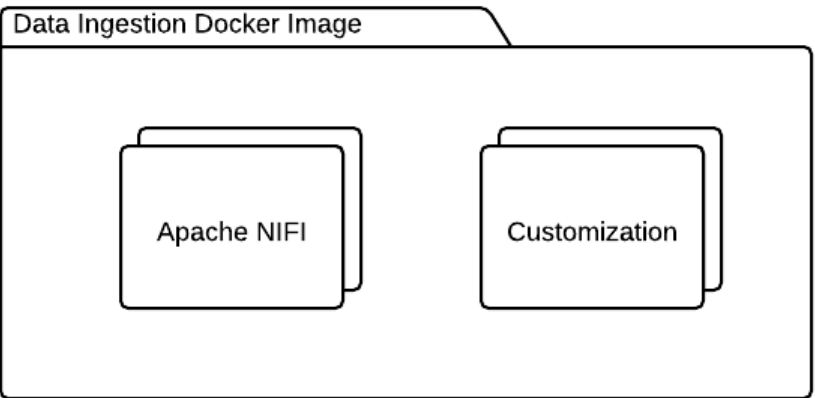REST API design and development will consist:

1. Open REST API standard.
2. Apache Karaf container base.
3. Swagger base implementation

3

WEB UI

Connection

REST API

Services

JDBC

MySQL

Wrap those modules into Docker containers, Data Ingestion, REST and Database.

Data Ingestion Docker Image

Apache NIFI

Customization

REST backend Docker Image

Apache Karaf

Swagger Open REST API implementation

Database Docker Image

MySQL

Schema and SQL Scripts

4

Schedule

The below itemizes Deliverables and estimated time to implement. Those modules are packaged as docker images for easy delivery and deployment.

	Time	Deliverable
Data Ingestion Docker Image	Estimated 25 Hours, but depends on how many data amount and sources.	NIFI data flow and Docker Image and Instance
REST Backend Docker Image	Estimated 25 Hours, but depends on how many database tables and amounts.	Java implementation and Docker Image and Instance
Database Docker Image	Estimated 25 Hours, depends on alternations and amount of SQL scripts, data format conversion.	Schema Design, data loadings and Docker Image and Instance
AMS EC2 Deployment and Web Application Integration	Estimated 25 Hours, depends on Web Application Integration.	Deployment of Docker Images to EC2 with all modules including Web App.
EC2 Production Environment Test and Maintenance	No Estimation.	Maintenance of production and any alternation, tuning etc.

Time   **Deliverable**