

TakeMeThere(TMT) is a startup focusing in ride-hailing solutions. TMT grew so fast that now they can process more than 200K transactions a day, causing their data to grow even bigger. Now that TMT want to expand more, their data team wants to build extensive datawarehouse that also include data quality solution. Data Engineer in TMT understands that there are at least 6 data quality matrices, commonly listed as DAMA, which are Accuracy, Completeness, Consistency, Uniqueness, Timeliness, and Validity.

After deep research, the data engineer team wanted to at least have proper data quality platform with 3 main functions: **Data Observability, Data Monitoring and Data Alerting**, in which the Data Observability will handle the completeness and timeliness (freshness), Data Monitoring will allow data team to create custom rule (usually for accuracy and validity), and any alert will be configured through Data Alerting menu and will be sent to any communication line TMT's Data Engineer will use (Slack, Telegram, etc).

As Senior Engineer, please help TMT to draw the framework for each feature, that includes the design for all stack TMT used; Airflow (please design the DAG), MySQL (as data source), Google Cloud Platform (Google Cloud Service and BQ), and Tableau. Those tech stacks must be used to maximize the power of data quality platform that soon you will be developed.