

[QuartzBio]



QuartzBio, a subsidiary of the Precision for Medicine group, is a multi-omics data integration and interrogation platform intended to analyze biomarkers data. The company's platform provides various services like comprehensive biological insights, cross-study profiling & interrogation, data-informed trial decisions, data management, and systems integration, enabling clients to better manage and analyze biological data.

Project Description This project has three components:

1. Ad-hoc interrogation across systems (e.g., Excel, Smartsheet, Salesforce) – questions like the following:

- What products are covered under X client and what is the revenue by product YTD?
- What clients have the highest and lowest revenue-to-labor ratios?
- Which clients have the highest rates of missed late / deliverables? (or early / on-time deliverables)
 - Open-source LLMs and retrieval-augmented generation (RAG) pipelines would need to be created and integrated with these systems

2. Monthly Revenue Import Process

- The current process is to have someone open all the individual revenue files and enter the monthly units for each revenue line in the system one by one. That individual will also confirm that the ERP system, individual revenue file, and the portfolio backlog workbook are in alignment with monthly revenue during this process. This is a timely process and exposes Quartz to human error.
- Build a method for Quartz's internal teams to review the revenue and approve the units before the upload takes place. Interested in seeing how they could use this upload process to streamline their month-end close process without losing track of revenue and forecast on each project.

3. Automation of business and project delivery metrics, dashboards, and reporting

- Create automated dashboards using existing, defined metrics for business reporting packages (currently fully manual)
- Standard Reporting – currently in Excel and PowerPoint; ~20 reports/month from 5-6 data sources
- SaaS Reporting – currently in Excel and PowerPoint; ~15 reports/month from 5-6 data sources

Internal Partners: Executive Director, Operations

Datasets: Internal QuartzBio data

Coding Languages: Python, Excel, etc.

Specific Skills

1. Large language models and retrieval augmented generation
2. Data visualization and dashboarding

Expected Technical Difficulty: **Advanced**

LEVEL OF CONFIDENTIALITY: INTERNAL USE ONLY