



Hello! We're happy to meet you. We're sending the following challenge whose details are listed below. Good Luck!

"Extracting Data from BigQuery and Data Visualization"

You are required to log into the Google Cloud Console, query a dataset from BigQuery (``bigquery-public-data.bbc_news.fulltext``) and create a function in Google Cloud Functions using Python. The function should return the received data in JSON format (Fields are Category and Title, limit is 50). To invoke this function asynchronously, you need to create a web application on Cloud Run. We expect you to use Cloud Pub/Sub for asynchronous processing. Processing the returned response should include adding ID and Count columns (ID should be sequential, while Count can be random), displaying the results in a table, and additionally visualizing the ID and Count values with a graph.

FastAPI or Flask can be used on the backend. Any desired technology can be used for the frontend.

All project codes, API and application links should be added to a new GitHub repository. (Versioning with commits is crucial and impactful.)

Note: Log in or Sign Up with your [Google Cloud Console](#) account. (Google Cloud will grant you 300\$ credits for free to use their services. They might ask for card details. In this case, you won't be charged unless you activate manually.)

