Project Design Phase-I
Solution Architecture

Date	14 October 2022
Team ID	PNT2022TMID33309
Project Name	Solution Architecture
Maximum Marks	4 Marks

Solution Architecture:

The preceding architecture shows an Event-driven design. To interact with the solution we use API Lambda functions which are initiated upon user request. Following are the high-level steps.

1. Create a watch list. Use the "Refresh_watchlist" API to submit new data, or load existing data from a CSV file located in a bucket. More details in the following "Loading Data" section.
2. Make sure the data is loaded properly and check a known keyword. Use the "check-keyword" API. More details in the following "Testing" section.
3. Once the watch list data is ready, submit a request to "query_newsfeed" with a given newsfeed configuration (url, document section qualifier) to submit a new job to scan the content against the watchlist. Review the example in the "Testing" section.
4. 4.If an entity or keyword matched, you will get a notification email with the match results.

To deploy and test the solution we follow four steps:

- Create infrastructure
- Create serverless API Layer
- Load Watchlist data
- Test the match

Example - Solution Architecture Diagram:

AWS Cloud

Internet

WebScrape

Incoming Requests Queue

newsfeed bucket

Alert

Notification Service

APIGateway

Evaluate content

Amazon Comprehend

Aurora serverless postgres DB

refresh watch list

check keyword

Watch list