Data Engineer Assignment

Dear applicant and maybe future colleague,

We're excited that you decided to work on our task!

Assume you are working with a web-based application that generates text-based logs. You have been tasked with ingesting these logs, processing them, and storing their contents for use in analytics workflows. An example of such a log entry is provided on the next page. Please design a framework to ingest and store such log data.

- A detailed data-flow diagram will suffice (hand-drawn or digital)
- Focus only on high level components and features
- Specify which tools you would choose to implement each component (e.g. scheduler, database) and be prepared to explain your choice and to give alternatives if prompted
- Feel free to make any assumptions that you like, but please state them explicitly

After you have finished your solution, please answer the following questions briefly:

1. What kind of applications can you think of that could be made possible with your design?
2. What are the limitations or drawbacks of your design?

```
{
    jsonPayload: {
       project_key: "my_project_1",
       body: {
             token: "my-fake-token",
             query: {
                   term: {
                         product.name: “generic-tshirt",
                         product.category: "mens"
                   }
             },
             from: 0,
             size: 20
       },
       fields: {
             region: "EU",
             request_duration_seconds: 0.001234,
       },
       http_method: "GET",
       http_status: 200,
       http_uri: "http://my-domain.example.com/search",
       logger: "my.logger",
    },
    labels: {
       container.googleapis.com/namespace_name: "my-namespace",
       container.googleapis.com/stream: "stderr"
    }
    receiveTimestamp: "01-01-01T12:12:12.121221212Z",
    severity: "INFO",
    timestamp: "01-01-01T12:12:12.121221212Z"
}
```

Please submit the assignment within 7 working days and reach out to your Recruiter if you have any questions related to the task.

Thank You!
Data Analytics Team