

radicant Data Engineering Case

You've been given a sample dataset of fund data from a 3rd party provider and asked to create an API which will power radicant's ESG (sustainability focused) fund explorer dashboard. The goal is to provide our customers with a bespoke interface enabling them to search for ESG focused funds based on a variety of factors. The client should have the opportunity to query based on the factors listed below (served via an API developed in a Python or Java based framework, (i.e. flask, django, fastapi, spring boot):

- Clients should be able to filter for **ESG** funds and receive a list of matching fund identifiers in response based on their:
 - **i) Size (assets under management)**
 - **ii) Dominant sector allocation** (the economic sector with the most exposure within the fund)

Bonus Points:

As getting to understand our customer's investment preferences is one of the key aspects of offering this tool, radicant would also like the ability to save the client's preferences each time a request is made against the API for later analysis. Your API should consist of a single basic endpoint with two methods:

1. A GET method to return the ESG funds based on the filter criteria
2. A POST method to store the query preferences of the client

The backend host for the ESG fund data can be stored in a RDBMS of your choosing but the data model you develop to serve the API will be part of your challenge response. Please be prepared to demo the API locally on your laptop or serve it on a cloud provider of your choosing.

Responses should include a link to a public repository with the application code.

Please don't spend more than 3 hours on the response. In case of any questions feel free to reach out to brian.rooney@radicant.com.

Good luck!