

Github Aggregator

EXECUTIVE SUMMARY

Use Case:

1. Requirement: Create an API Service to fetch the statistics of the contributors of user-specified GitHub repositories in the Amazon Web Services Environment.
2. Identify and list unique domains to the specified repository and sort them by the number of commits per contributor for all the branches.
3. The Repository name and Date are the parameters to be passed for the REST API to fetch the contributor data.
4. Create a table in AWS Relational Database Service SQL instance for storing the data pertaining to the fields Unique ID, Repo Name, Domain Name, Count, Date range parameter, Date of Run collected using API.

SCOPE Technical Requirements

Create API in AWS environment

Include authentication via session token and using AWS Secrets Manager

Data are written to a table in the RDS SQL Server instance

Version controlled Non-Technical

Appropriate documentation provided

Design review prior to development

Demo of working service

Creation of test harness to demonstrate service

Example

Input: Repository name

Output: Company domain name, along with a total number of commits and the total number of contributors

Input: hashicorp/consul

Output should be: { "microsoft": { total_contributions: 50, unique_contributors: 10 } "hashicorp": { total_contributions: 15, unique_contributors: 12 } , "gmail": { total_contributions: 50, unique_contributors: 11 } , "cloudflare": { total_contributions: 52, unique_contributors: 10 } }