HAWK IN CLOUD

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http://hawkincloud.github.io/dev/

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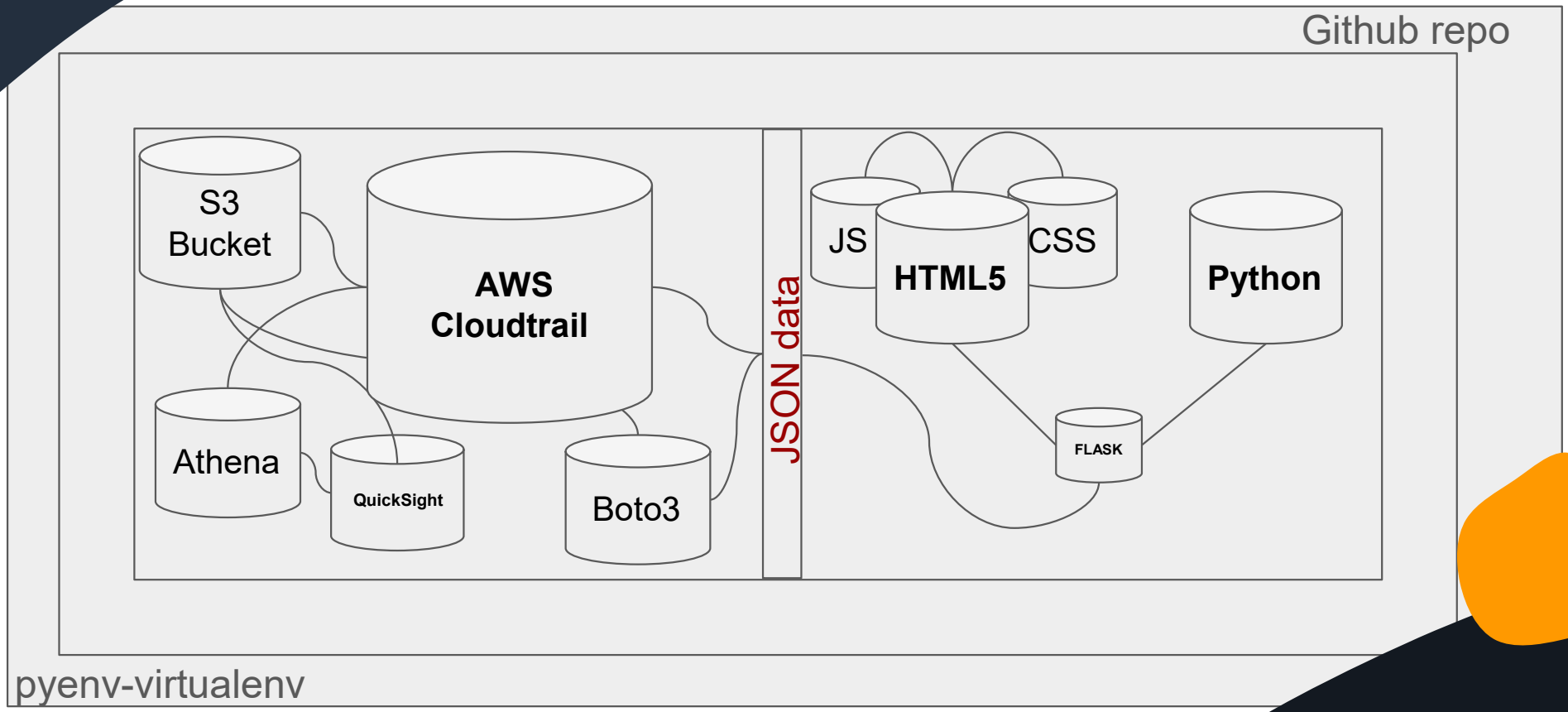
Concept



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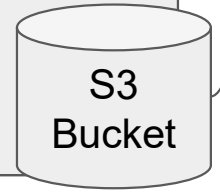
AWS CloudTrail Logs

Our “Hawkincloud” offered by AWS CloudTrail that provides a record of all API calls made within an AWS account. It tracks all activities, including who made the call, what resources were called, when the call was made, and so on. The events in a trail can be delivered to an Amazon S3 bucket. CloudTrail is a highly scalable, managed service that provides a comprehensive view of your AWS environment and enables you to make informed decisions about resources, ensuring their security and compliance.



AWS CloudTrail

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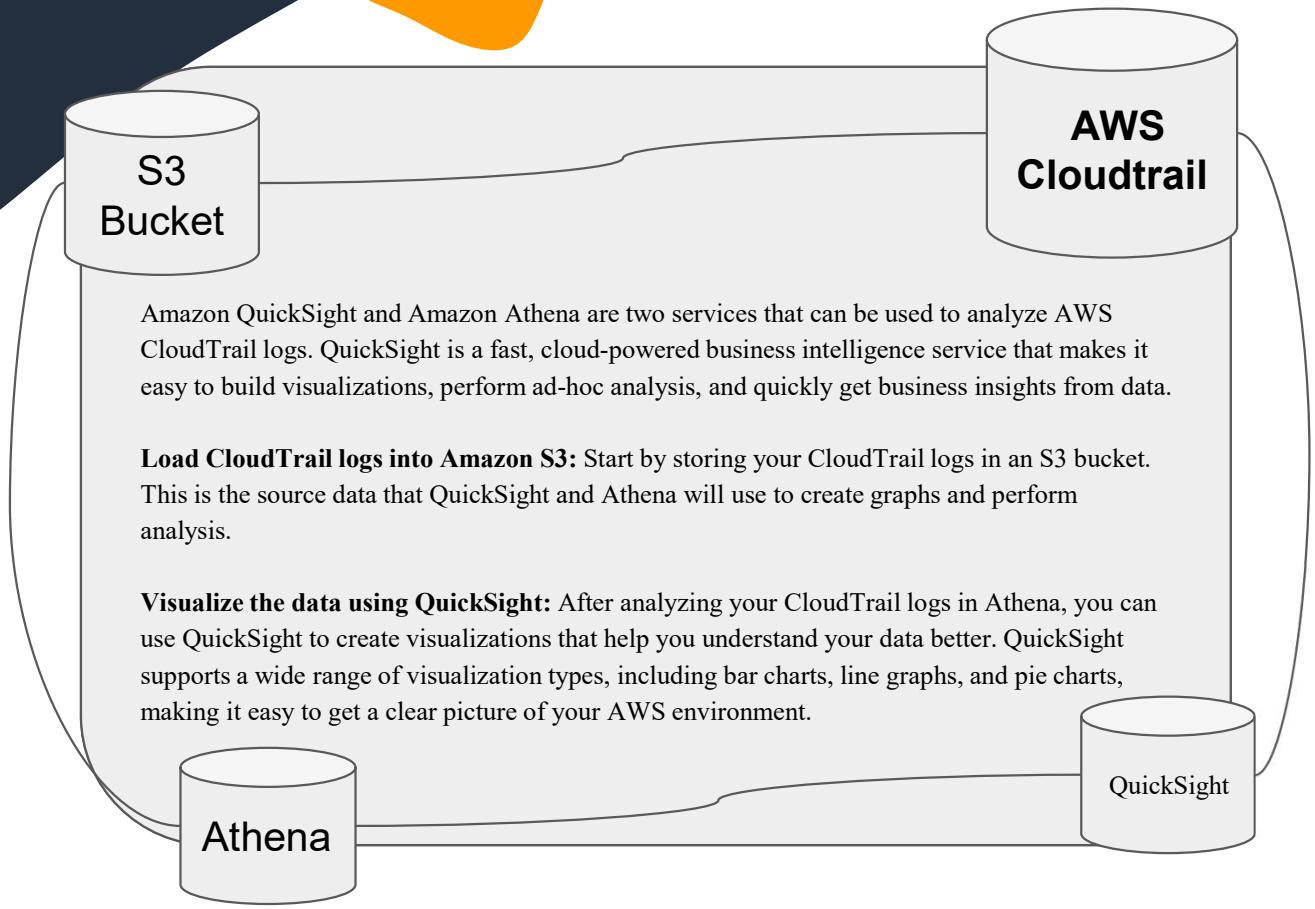
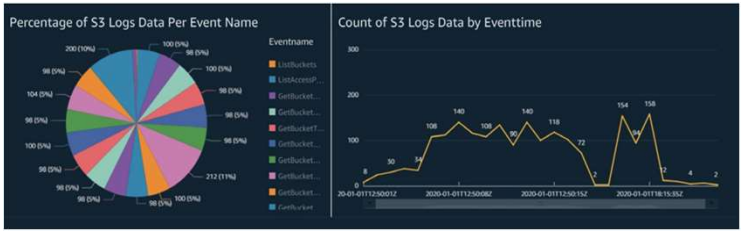
AWS CloudTrail Logs Visualization



Amazon QuickSight and Amazon Athena are two services that can be used to analyze AWS CloudTrail logs. QuickSight is a fast, cloud-powered business intelligence service that makes it easy to build visualizations, perform ad-hoc analysis, and quickly get business insights from data.

Load CloudTrail logs into Amazon S3: Start by storing your CloudTrail logs in an S3 bucket. This is the source data that QuickSight and Athena will use to create graphs and perform analysis.

Visualize the data using QuickSight: After analyzing your CloudTrail logs in Athena, you can use QuickSight to create visualizations that help you understand your data better. QuickSight supports a wide range of visualization types, including bar charts, line graphs, and pie charts, making it easy to get a clear picture of your AWS environment.



AWS CloudTrail Logs Stored

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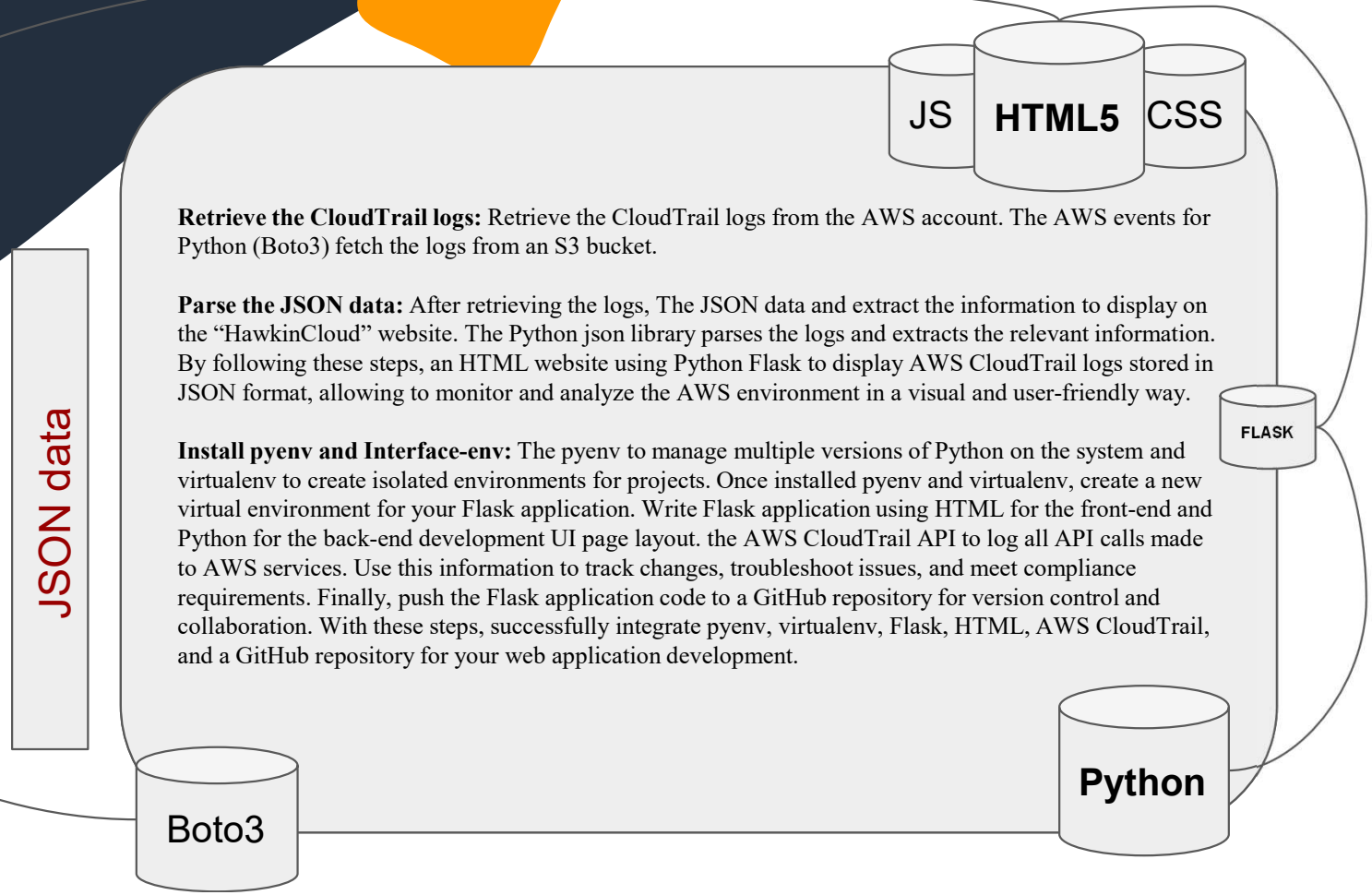

Retrieve the CloudTrail logs: Retrieve the CloudTrail logs from the AWS account. The AWS events for Python (Boto3) fetch the logs from an S3 bucket.

Parse the JSON data: After retrieving the logs, The JSON data and extract the information to display on the "HawkinCloud" website. The Python json library parses the logs and extracts the relevant information. By following these steps, an HTML website using Python Flask to display AWS CloudTrail logs stored in JSON format, allowing to monitor and analyze the AWS environment in a visual and user-friendly way.

Install pyenv and Interface-env: The pyenv to manage multiple versions of Python on the system and virtualenv to create isolated environments for projects. Once installed pyenv and virtualenv, create a new virtual environment for your Flask application. Write Flask application using HTML for the front-end and Python for the back-end development UI page layout. the AWS CloudTrail API to log all API calls made to AWS services. Use this information to track changes, troubleshoot issues, and meet compliance requirements. Finally, push the Flask application code to a GitHub repository for version control and collaboration. With these steps, successfully integrate pyenv, virtualenv, Flask, HTML, AWS CloudTrail, and a GitHub repository for your web application development.

Management - M.H.

Stakeholder Management - M.H.

Cost Analysis - M.H.

Blueprint

Misc. Details