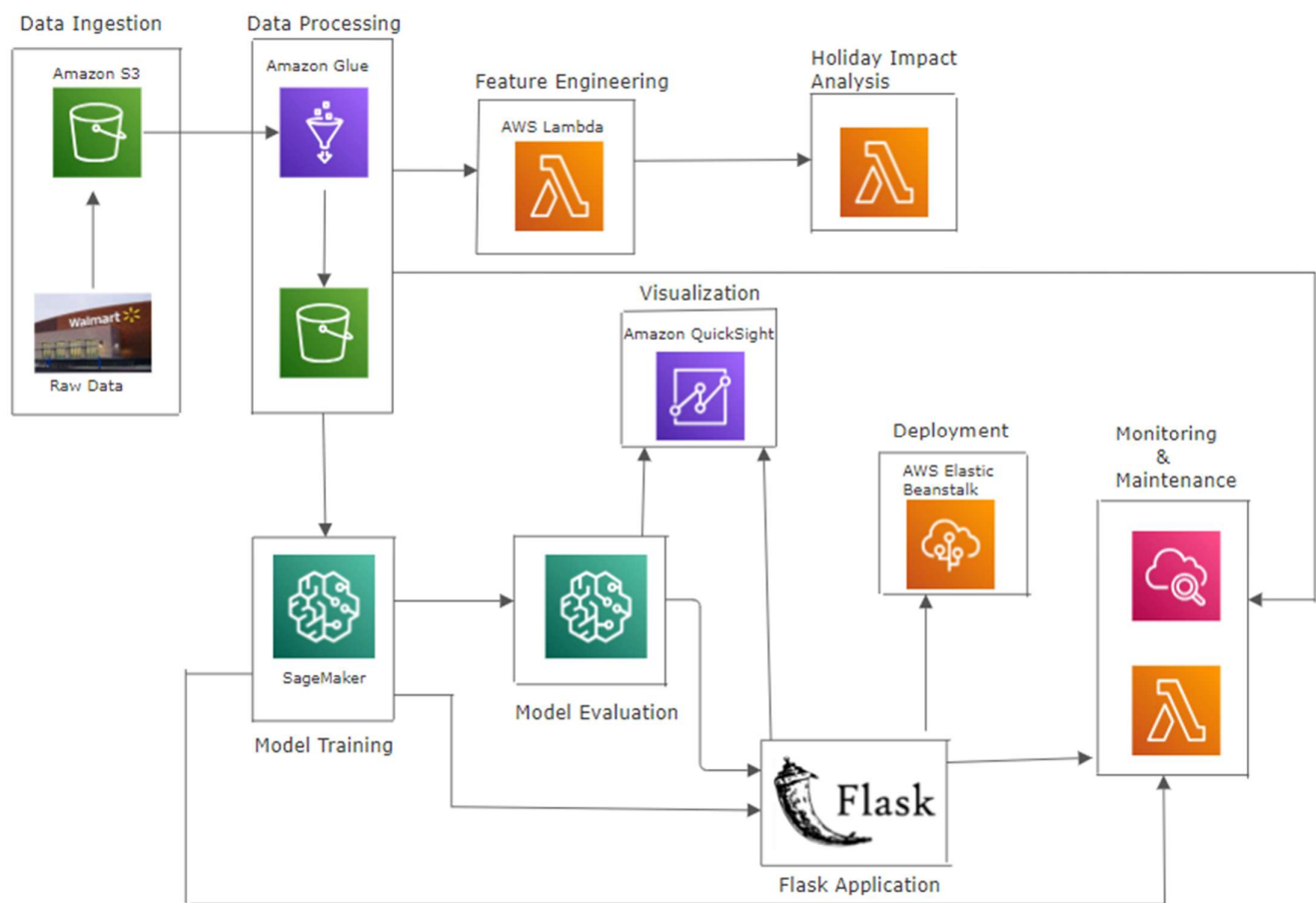


Project Design Phase – 1

Solution Architecture

Date	1-11-2023
Team ID	Team - 591779
Project Name	Walmart Sales Analysis for Retail Industry with Machine Learning
Maximum Marks	4 Marks

Solution Architecture:



- First, the raw data from Walmart stores is stored in Amazon S3.
- Then we use Amazon Glue to perform ETL operations and store the processed data into another S3 bucket.
- Next, with the help of AWS Lambda, we perform feature engineering to extract and engineer features from the processed data and also to compute the impact weights of holidays.
- Then we use Amazon SageMaker for training machine learning models.

- Then evaluate the models using Amazon SageMaker
- Develop the flask application for user interaction
- Flask application is then deployed on AWS Elastic Beanstalk
- Then we use QuickSight, a visualization tool to visualize and to gain insights from the data.
- Aws CloudWatch and AWS Lambda functions are set up to monitor the deployed models and infrastructure.