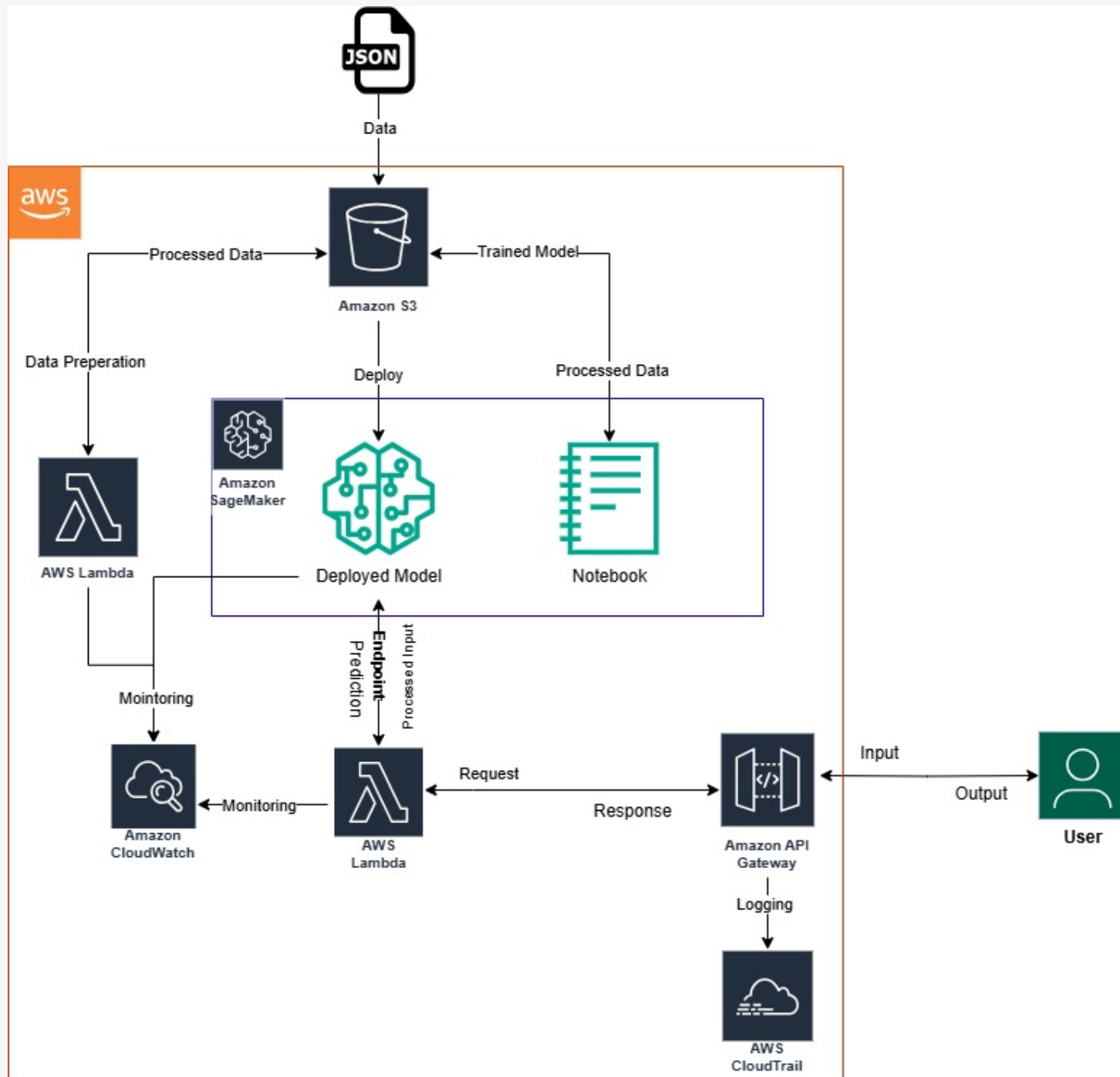


AWS-Powered QnA Model Architecture



Architecture Overview

- **Data Storage:**
 - **Amazon S3:** Stores raw, processed data and trained models
- **Data Ingestion and Preparation:**
 - **AWS Lambda:** Prepares incoming JSON data for processing.
- **Model Training:**
 - **Amazon SageMaker:** Trains models using data from S3 and saves trained models back to S3.
- **Model Deployment:**
 - **Amazon SageMaker Endpoint:** Provides an endpoint for real-time predictions.
- **User Interaction:**
 - **Amazon API Gateway:** Routes user request to the Lambda function for predictions.
- **Prediction Processing:**
 - **AWS Lambda:** Prepares user inputs, calls the SageMaker endpoint for predictions, formats the response.
- **Security and Monitoring:**
 - **AWS CloudTrail:** Function: Monitoring and logging and tracks API calls and user activities for security and auditing.
 - **AWS Cloudwatch:** Collects and monitors logs and metrics for Lambda functions, Model.