

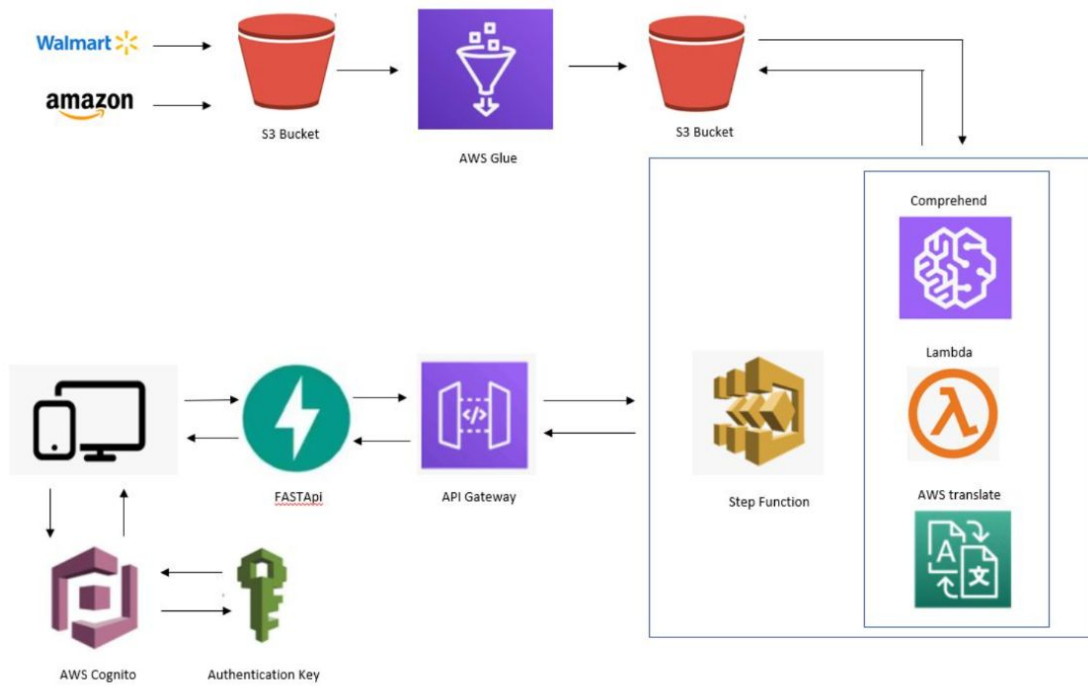
Project : Amazon Reviews Analysis pipeline with Price Comparisons

Summary	In this codelab, you'll explain the project steps
File id	https://codelabs-preview.appspot.com/?file_id=1jA65PqsQRwlj_ovkDnmuDLT7qK5jygMXLUuEfWNADWA#9
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Amazon Review Analysis



Architecture:

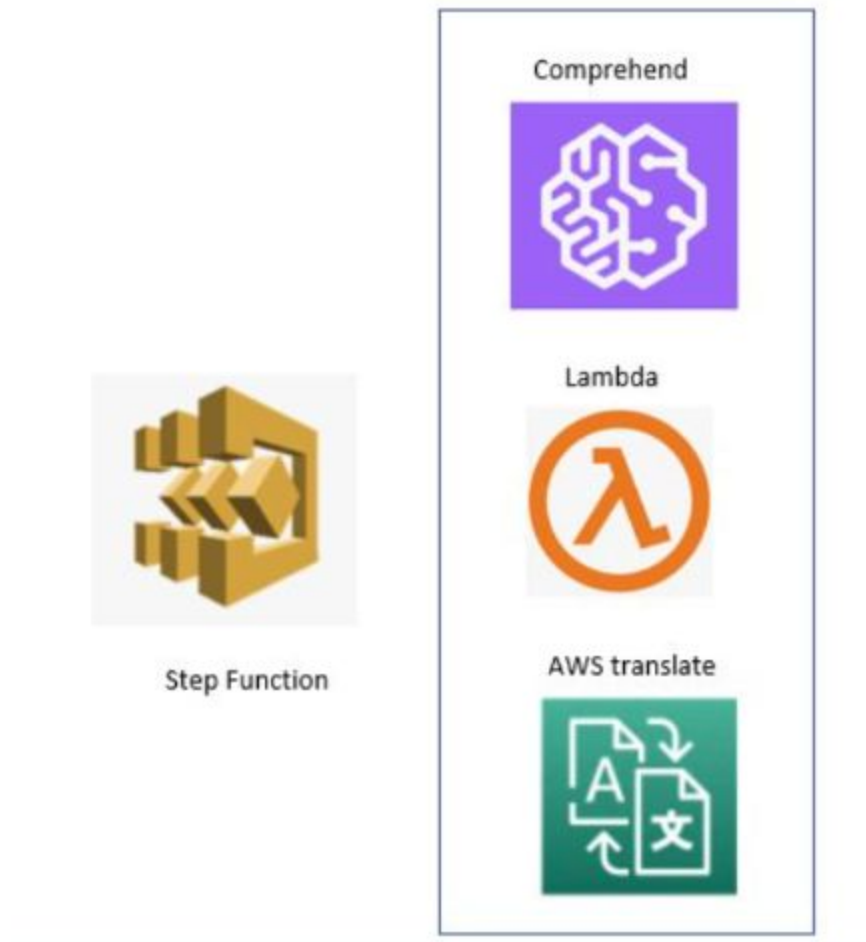


Step 1: **Data Processing and Sentiment Analysis**



- Create s3 bucket and load data files into it with the bucket having all public access

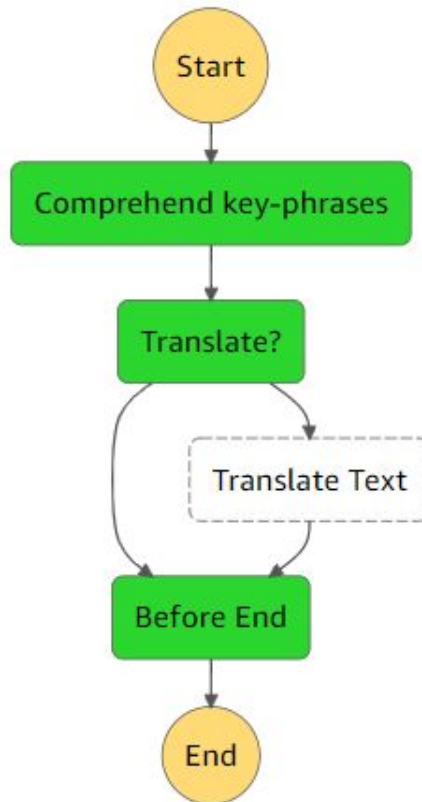
Step 2: Data Summarisation and Translate API



- AWS Comprehend is used to detect key features and provide the response in either english/french using translate

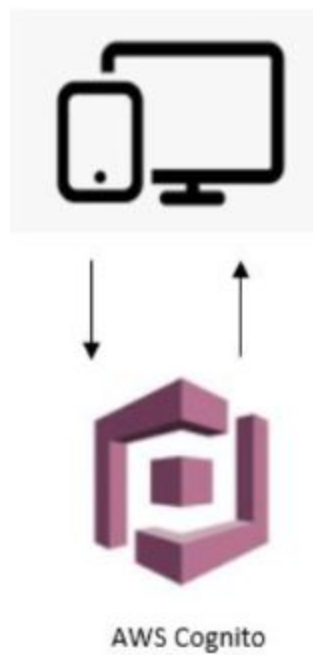
Implementation on step-function:

Graph inspector



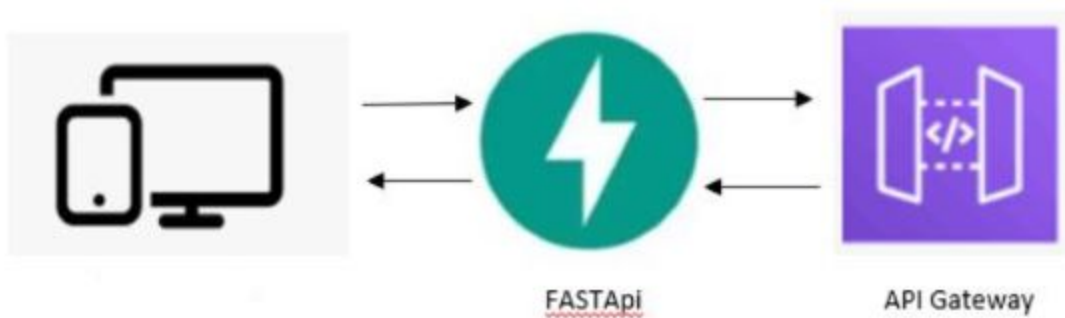
■ In Progress ■ Succeeded ■ Failed ■ Cancelled ■ Caught Error

Step 3: User Authentication for APIs



- Creating the user pool using AWS Cognito with an Streamlit Application

Step 4: Front end deployment



- For each of the above APIs, create an end point in FAST Api using @app.get

And to enhance the application further we made a few more additions:

1. Performed Sentiment Analysis on data from S3 and added an extra column- further stored it on DnamoDB

Scan: [Table] Review_Sentiments: key ^

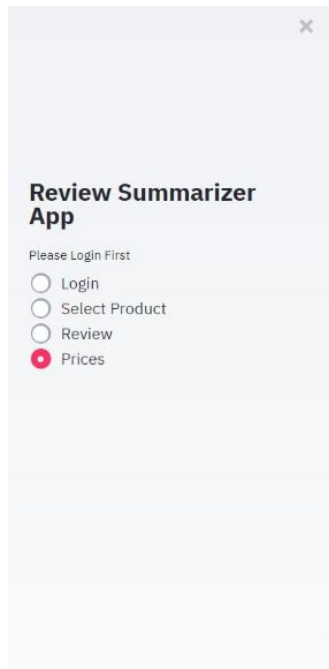
Scan [Table] Review_Sentiments: key ^

+ Add filter

Start search

<input type="checkbox"/>	key ⁱ	product_id	review	sentiment	verified
<input type="checkbox"/>	B00BAWSNI8108	B00BAWSNI8	Bought this cable to run for presentations It works great is high quality and...	POSITIVE	TRUE
<input type="checkbox"/>	B00BKUTDDY804	B00BKUTDDY	Ok This is my 2nd NXZT power supply I do not understand the negative re...	POSITIVE	TRUE
<input type="checkbox"/>	B00BKV3BQ8150	B00BKV3BQ8	My unit was defective and didn t work I suppose your luck may differ	NEGATIVE	TRUE
<input type="checkbox"/>	B00BKV3HQW89	B00BKV3HQW	My grandson loves to use these when he and his friends go out They alwa...	POSITIVE	FALSE
<input type="checkbox"/>	B00BKVQETY232	B00BKVQETY	Great price for RAM that does the job I got a used iMac and needed to bu...	POSITIVE	TRUE
<input type="checkbox"/>	B00BKW2410761	B00BKW2410	My wife still uses this after maybe 3 years of use	POSITIVE	TRUE
<input type="checkbox"/>	B00BKW8WBG197	B00BKW8WBG	the price and quality is great	POSITIVE	TRUE

2. A screen was added to show the comparison of prices for the selected product

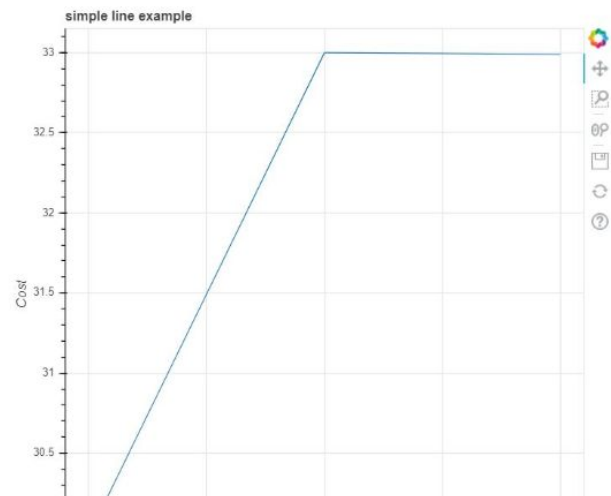


Price comparison for Storite Hard Drive

Amazon Price for the product - 29.99

Walmart Price for the product - 33.00

eBay Price for the product - 32.99



Some snap shots:

