



ADD REVIEW DATA

Adding reviews with text analysis

Next, you are going to add a feedback section to your website. However, you will also use the [Amazon Comprehend](#) service to gather sentiment, key phrases, and entities out of the review. The sentiment will be used to customize the message back to the end user. We will then store the additional entities and phrases so that they can later be analyzed.

AWS Amplify provides the ability to add recommendations by using the **amplify add predictions** category.



Tip

The predictions category in Amplify is an abstraction of several AWS AI Services, including:

Amazon Transcribe - Converts speech to text

Amazon Polly - Converts text to speech

Amazon Rekognition - Performs image and video analysis

Amazon Translate - translates text between languages

Amazon Comprehend - Extracts data from text

Run the following command in your Cloud9 terminal:

```
amplify add predictions
```

Next, select **Interpret**:

```
hoog:~/environment/andy-pizza-shop (master) $ amplify add predictions
Scanning for plugins...
Plugin scan successful
? Please select from one of the categories below
  Identify
  Convert
> Interpret
  Infer
  Learn More
```

Select **Interpret Text**, enter a name of `textInterpret` and then choose **All**:

```
Plugin scan successful
? Please select from one of the categories below Interpret
? What would you like to interpret? Interpret Text
? Provide a friendly name for your resource textinterpret
? What kind of interpretation would you like?
  Language
  Entity
  Keyphrase
  Sentiment
  Syntax
> All
```

Choose **Auth and Guest users**

```
Plugin scan successful
? Please select from one of the categories below Interpret
? What would you like to interpret? Interpret Text
? Provide a friendly name for your resource textinterpret
? What kind of interpretation would you like? All
? Who should have access?
  Auth users only
> Auth and Guest users
```

Add Reviews to our Data API

It is important to save our review data and the analysis of the feedback that we receive from customers, so that we can later apply business intelligence to our data. To do this, we need to add the following code to our `graphql.schema` file. Open the file located at **`amplify/backend/api/andypizzashop/schema.graphql`**

APPEND the following data to the end of the schema file and **save `schema.graphql`**:

```
# Added for reviews
type Review @model {
  id: ID!
  comments: String
  dateAdded: AWSDateTime
  sentiment: String
  username: String
}

type ReviewPhrase @model {
  id: ID!
  phraseText: String
  phraseType: String
  dateAdded: AWSDateTime
  username: String
}
```

Again, perform an **amplify push** and Amplify will update AppSync to add the new data model to our api:

```
amplify push
```

```
^Choog:~/environment/andy-pizza-shop (master) $ amplify push

Current Environment: dev

| Category | Resource name | Operation | Provider plugin |
|-----|-----|-----|-----|
| Api | andypizzashop | Update | awscloudformation |
| Auth | andypizzashopeefc3f03 | No Change | awscloudformation |
| Interactions | andyPizzaOrder | No Change | awscloudformation |
| Predictions | textinterpret | No Change | awscloudformation |
? Are you sure you want to continue? (Y/n) █
```

Select **Yes** to the questions for generating the API code, and amplify will push the changes to AWS.

```
GraphQL schema compiled successfully.  
  
Edit your schema at /home/ec2-user/environment/andy-pizza-shop/ampli  
? Do you want to update code for your updated GraphQL API Yes  
? Do you want to generate GraphQL statements (queries, mutations and  
! Updating resources in the cloud. This may take a few minutes...
```

This will take a few minutes to complete. Once deployment is finished, move on to the next step to add the review functionality to the application.

