IBM Watson NLU

Natural Language Understanding

Train custom category models to create classifications relevant to your domain.

Features

- 5 level category hierarchy
- Train by keyphrases
- JSON input
- Wikipedia based taxonomy
- Explainability

Custom Categories (Beta)

Benefits

Flexible

Make your hierarchy shallow or deep as needed, up to 5 category levels.

Painless training

Train your model in NLU with short key phrases, no labeled data needed.

Explainability

Use explainability to understand why your model predicted a category.

How it Works

Training custom categories

To train a custom categories model, you will need to provide labels and their corresponding "key phrases." Custom categories then creates a mathematical representation for each label using the key phrases. These mathematical representations are based on mappings to Wikipedia terms.

Analyzing text with your custom categories

At predict time, the categories algorithm computes a mathematical representation for your incoming text and returns the custom categories that are most mathematically similar to it.

Categories also supports hierarchy natively, i.e you can specify labels in a tree fashion like, 'movies/action.' In this case, categories will traverse the hierarchy to decide the best possible category node to return.

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Details

- API Version: 2021-02-16
- Language Support: English
- · Region: US-South

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Best Practices

Categories have a distinct mathematical representation that is based on the key phrases used to define them. It's important to ensure key phrases are distinct to avoid confusing results.

Tips for training your model

- 1. Don't use the same key phrases across different category hierarchies:
 - × 'apple' should not be a key phrase for both /fruit & /laptop
- 2. Don't overlap words in key phrases across different categories:
 - × 'sales' and 'salesman' should not be in different categories
- 3. Don't use key phrases with similar meanings across different categories:
 - × 'cold' and 'chilly' should not be in different categories
- 4. Don't repeat category labels:
 - ×/transportation/car and /expenses/car should not both have 'car' as a category label

Note: Different categories refers to categories with divergent roots. **/fruit** and **/car** are divergent, whereas **/fruit** and **/food/fruit** are within the same category.

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