
title: Tutorial: cognitive profiling weight: 10

To explore the cognitive profiling capability in Watson Assistant Solutions, complete this tutorial.

Note: All REST API endpoints that are referred in this tutorial are prefixed with `/v1/profile`.

Step 1: Access the Swagger documentation

1. Log in to the [Watson Assistant Solutions console](#) using your IBMid.
2. From the home page, click the link for the cognitive profile swagger documentation.

Step 2: Create a profile for a user.

Pass the following JSON object to the `/user` endpoint to create a cognitive profile for John Smith.

```
{
  "first_name": "John",
  "last_name": "Smith",
  "user_id": "222222"
}
```

HTTP Status code 200 is displayed.

Step 3: Shape the profile

1. Submit a `like` event for John Smith. Pass the following JSON object to the `/events` endpoint to register that John Smith liked a restaurant that is named Spittleck in Berlin, Germany.

```
{
  "timestamp" : 100212,
  "user_id": 222222,
  "event_type": "like",
  "relates_to": {
    "domain": "restaurant",
    "class": "restaurant",
    "object": {
      "yelp_id": "spittleck-berlin",
      "name": "Spittleck",
      "is_closed": false,
      "category": ["german"],
      "rating": 3,
      "latitude": 52.5111994,
      "longitude": 13.4028,
      "price": "$$",
      "city": "Berlin",
      "zip_code": "10117",
      "country": "DE",
    }
  }
}
```

```

    "state": "BE",
    "distance": 652.459473818992
  }
}

```

The following response is displayed. The likeability of German restaurants is represented by a magnitude score of 0.2. The profile service applies a confidence score of 0.83 to this value. The likeability of medium priced restaurants is also 0.2 and a confidence score of 0.83 is applied.

```

{
  "userId": 222222,
  "response": [
    {
      "confidence": 0.8333333333333334,
      "key": [
        {
          "name": "german",
          "class": "category"
        }
      ],
      "magnitude": 0.2
    },
    {
      "confidence": 0.8333333333333334,
      "key": [
        {
          "name": "$$",
          "class": "price"
        }
      ],
      "magnitude": 0.2
    }
  ]
}

```

2. Submit a **hate** event for John Smith for the same restaurant. John Smith visited the same restaurant one day later and received terrible service. Pass the same event to the `/events` endpoint, but change the event type to **hate** and update the timestamp.

```

{
  "timestamp" : 100213,
  "user_id": 222222,
  "event_type": "hate",
  "relates_to": {

```

```

    "domain": "restaurant",
    "class": "restaurant",
    "object": {
      "yelp_id": "spittleleck-berlin",
      "name": "Spittleleck",
      "is_closed": false,
      "category": ["german"],
      "rating": 3,
      "latitude": 52.5111994,
      "longitude": 13.4028,
      "price": "$$",
      "city": "Berlin",
      "zip_code": "10117",
      "country": "DE",
      "state": "BE",
      "distance": 652.459473818992
    }
  }
}

```

The following response is displayed. In this case, John has a strong negative reaction to the restaurant. His dislike for the restaurant is shown in the magnitude score of 0.36 for German restaurants and medium-priced restaurants. His strong feel towards the restaurant is reflected in a confidence score of 1.

```

{
  "userId": 222222,
  "response": [
    {
      "confidence": 1,
      "key": [
        {
          "name": "german",
          "class": "category"
        }
      ],
      "magnitude": 0.3666666666666667
    },
    {
      "confidence": 1,
      "key": [
        {
          "name": "$$",
          "class": "price"
        }
      ],
      "magnitude": 0.3666666666666667
    }
  ]
}

```

```
}
```

Step 4: Send a request to the profile service to rate and sort a list of restaurants.

Pass the following JSON object to the `/ratings` endpoint to rank and sort the restaurants according to John Smiths preferences.

```
{
  "class": "restaurant",
  "domain": "restaurant",
  "objects": [
    {
      "yelp_id": "fresh-salt-new-york",
      "name": "Fresh Salt",
      "is_closed": false,
      "category": [
        "bars",
        "german",
        "italian"
      ],
      "rating": 3,
      "latitude": 40.707077,
      "longitude": -74.002464,
      "price": "$$",
      "city": "New York",
      "zip_code": "10038",
      "country": "US",
      "state": "NY",
      "distance": 711.704497503942
    },
    {
      "yelp_id": "aaa-salt-haifa",
      "name": "Aaa Haifa",
      "is_closed": false,
      "category": [
        "bars",
        "newamerican",
        "italian"
      ],
      "rating": 3,
      "latitude": 40.707077,
      "longitude": -74.002464,
      "price": "$$",
      "city": "New York",
      "zip_code": "10038",
      "country": "US",
      "state": "NY",
      "distance": 100
    },
  ]
}
```

```
    "yelp_id": "carmiel-best",
    "name": "Wau Carmiel",
    "is_closed": true,
    "category": [
      "german",
      "newamerican",
      "italian"
    ],
    "rating": 3,
    "latitude": 40.707077,
    "longitude": -74.002464,
    "price": "$$",
    "city": "New York",
    "zip_code": "10038",
    "country": "US",
    "state": "NY",
    "distance": 100
  }
],
"user_id": "222222"
}
```

The following response is displayed:

```
{
  "userId": "222222",
  "signals": [
    {
      "rank": 1,
      "id": "carmiel-best",
      "rating": 1.0
    },
    {
      "rank": 2,
      "id": "fresh-salt-new-york",
      "rating": 0.6123979928024736
    },
    {
      "rank": 3,
      "id": "aaa-salt-haifa",
      "rating": 0.0
    }
  ]
}
```

A German restaurant, carmiel-best, is top of the list.

What to do next?

- Read about [cognitive profiling](#).