## Data Science and AI

Yamini Rao

Margriet Groenendijk



## Watson Assistant



- Using IBM Watson™ Assistant you can build your own live chatbot into any device or application
- An assistant, connects to the customer engagement resources to deliver an engaging, unified problem-solving experience to your customers.
- Users interact with the assistant through one or more **integration** points
  - Social Media Platform
  - Web Chat
  - Custom Application

## Chatbot best practices

#### Think about your users

- Reasons for building the chatbot
- Keep the Scope well defined
- Users will expect human-like behavior

#### **Conversational patterns**

- Acknowledge your limitations and don't be afraid to say
  "I don't know"
- Avoid Repetition
- Detect frustration, and handle it
- Slow down responses

#### **Intents**

Goals that you anticipate your users have when they interact with your assistant.

## What defines your chatbot

#### **Entities**

An entity represents a term or object that provides context for an intent.

#### **Dialog Flow**

The dialog flow is represented graphically as a tree, and incorporates your intents

### Auto AI process

#### Data pre-processing

- Analyse, clean, and prepare your raw data for machine learning
- Categorizes features based on data type, such as categorical or numerical

#### Automated model selection

- Testing and ranking candidate algorithms against small subsets of the data

## Automated feature engineering

- Transform the raw data into the combination of features

#### Hyperparameter optimization

-Algorithm optimized for evaluations such as model training and scoring that are typical in machine learning

# Thank you

# IBM