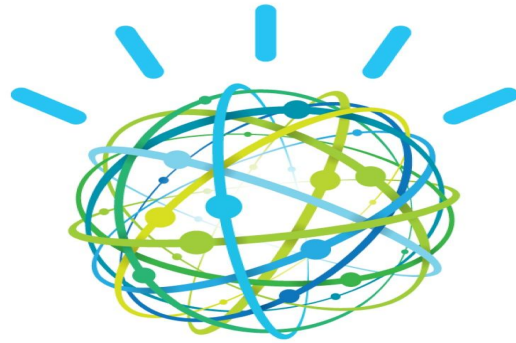


Problem definition and Design thinking

Chatbot with Watson



IBM **Watson**™

Abstract:

- This paper used IBM Watson assistant to create dialog for a friendly chat what for supporting eagerly people who have to live alone.
- The accuracy was 93.44 percentage in the case of talking with the different words in dialogues having the same meaning.



DESIGN THINKING

Design Thinking

- Data collection
- Data preprocessing
- Feature engineering
- Model selection
- Model training
- Evaluation

Data collection:

- It is process of collecting and availability information or data from multiple source to find answers to research problems answer questions evaluate outcomes and force caste trends and probability
- It is an essential face in all types of research analysis and destination making including that done in the social science business and healthcare
- Accurate data collections is necessary to make informed business destination ensure quality and assure and keep research integrity

Data Processing

- It can be define as a process of converting raw data into a format that is understandable and useable for further analysis
- It is an important step in the data processing stage
- It ensures that the outcome of the analysis is accuracy complete and consistent

Features Engineering:

- It is the process of transforming raw data into features that are suitable for machine learning models
- In other words it is the process of selecting extracting and transforming the most relevant features from the available data to build more accurate and efficient machine learning models
- The success of machine learning models heavily depends on the quality of the features used to train them

Model selection:

- It is the task of selecting a model from among various candidates on the basis of performance criterion to choose the best one.
- This may be the selection of statistical model from a set of candidate models given data.
- In the simplest case where a free existing set of data is considered
- that task can also involve the design of experiments such that the data collected is well suited to the problem of model selection.

Model training:

- A training modal is a dataset that is used to train and ml algorithm
- It consists of the sample output data and the corresponding sets of input data that have a influence on the output
- The training model is used to run the input data through the algorithm to corrlate the processed output against the sample output.

Evaluation:

- Evaluation is the process of figures out how well the model performance at guessing something
- Is it wrong a lot? What stores of gases those it get right or wrong?
- This evaluation is usually handled with a test dataset.



Thank you