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Help Center

THE TEAM

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WHO ARE WE ?

- An online flight, hotel, and car rental comparison website .
- We allows our users to compare offers from over a thousand providers to find the cheapest, shortest, or most eco-friendly flights .
- Users can also identify the cheapest month or even day to travel and set up price alerts to book when the price is most attractive .

WHAT WE WANT

- A chatbot that could help the users through navigating the website
- A friendly interface
- An effective and precise chatbot thatgives right answers to users

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DATA COLLECTION

SCRAP THE DATA FROM THE WEBSITE'S FAQ

SCRAP DATA DESTINATIONS

USE GREETINGS DATASET

CONVERT DATA TO JSON FORMAT

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DATA CLEANING / DATA ENRICHMENT

CLEANING - TAG CHECK

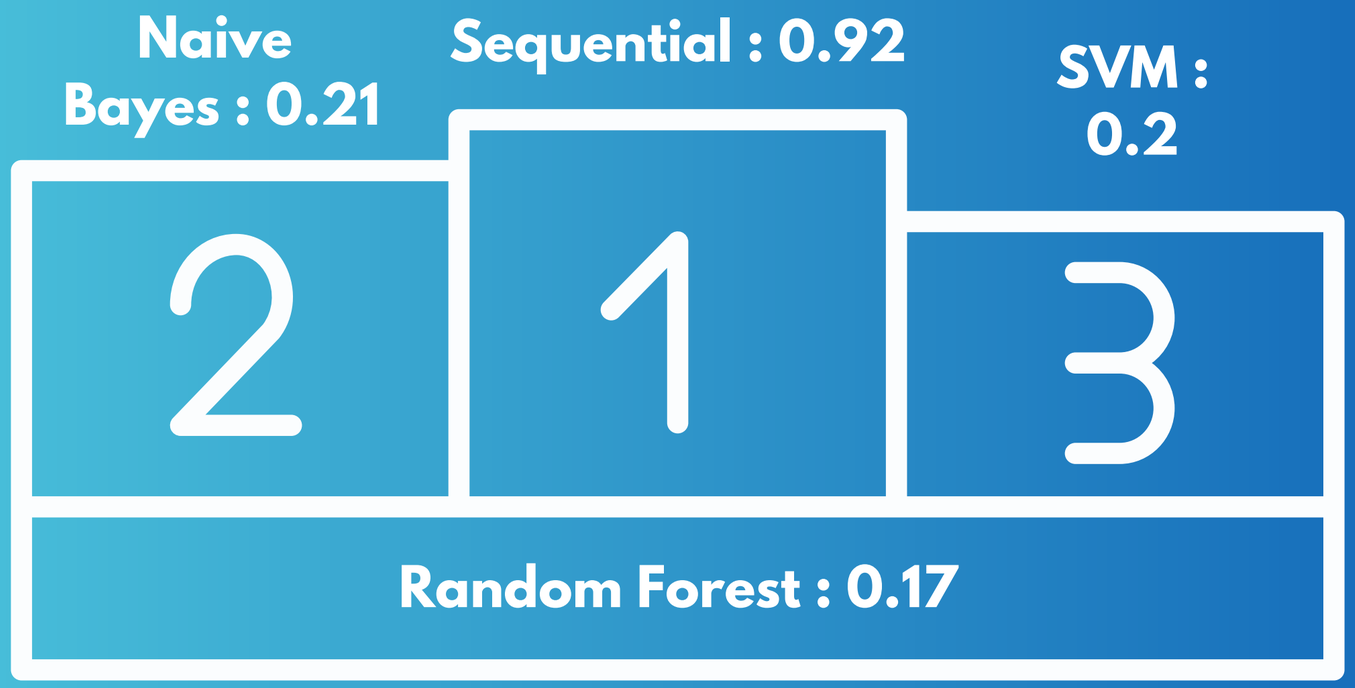
From 100 TAGS to 20

ENRICHMENT

- Paraphrase patterns
- Paraphrase responses

MACHINE LEARNING

TESTING ACCURACY OF DIFFERENT MODELS



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MODEL BUILDING/PREDICTION

- Creation of a sequential model, which allows for the stacking of layers one after another.
- The model is defined with two dense layers and two dropout layers. Dense layers are fully connected layers, and dropout layers help prevent overfitting by randomly deactivating a fraction of the neurons during training.
- The model is compiled with the stochastic gradient descent (SGD) optimizer, which is a widely used optimization algorithm. The categorical cross-entropy loss function is chosen for multi-class classification problems, and accuracy is used as the evaluation metric.
- The model is trained using the provided train_x and train_y data. It undergoes 200 epochs of training, with a batch size of 5. During training, the model's progress is displayed with verbose output.
- The final trained model is stored in hist, which can be used for further analysis or predictions.
- In summary, this code defines, compiles, and trains a neural network model for classification tasks using Keras and the SGD optimizer.

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IMPLEMENTATION