Neural Chatbot

Yogyakarta Smart City Chatbot

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Kelompok Bersahaja
Grup D

Sebuah sistem atau program yang secara otomatis menjawab atau memberikan output atas input yang diberikan oleh user

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE 2: Python

```
2021-05-12 09:47:01.708186: E tensorflow/stream_executor/cuda/cuda_driver.cc:328] failed call to cuInit: CUDA_ERROR_UNKNOWN: unknown error
2021-05-12 09:47:01.711835: I tensorflow/stream_executor/cuda/cuda_diagnostics.cc:169] retrieving CUDA diagnostic information for host: DESKTOP-P7MQDAH
2021-05-12 09:47:01.712461: I tensorflow/stream_executor/cuda/cuda_diagnostics.cc:176] hostname: DESKTOP-P7MQDAH
2021-05-12 09:47:01.715912: I tensorflow/core/platform/cpu_feature_guard.cc:142] This TensorFlow binary is optimized with oneAPI Deep Neural Network Library (oneDNN) to u
following CPU instructions in performance-critical operations:  AVX AVX2
To enable them in other operations, rebuild TensorFlow with the appropriate compiler flags.
Start talking with the bot (type quit to stop)!
You: & C:/Users/Owner/AppData/Local/Programs/Python/Python39/python.exe "e:/Documents/TI/New Beginning/try-chatbot/main.py"
Hey!
You: Hi
Hello!
You: Hello
What can I do for You?
You: What is your name?
I'm Neural!
You: your name
You can call me Neural!
You: what is the name of this city
Yogyakarta City
You: city name
Yogyakarta City
You: how old is this city?
264 years
You: goodbye
Sad to see you go :(
You:
```

The experiment

Software

- Text Editor (Visual Studio Code)
- Python 3.92

Basis Pengetahuan

intents.json

```
{
    "intents": [{
            "tag": "greetings",
            "patterns": ["hello", "hey", "hi", "good day", "Greetings", "what's up?", "how is it going"],
            "responses": ["Hello!", "Hey!", "What can I do for You?"]
        },
        {
            "tag": "goodbye",
            "patterns": ["cya", "See you later", "Goodbye", "I am leaving", "Have a Good Day", "bye", "cao", "See ya"],
            "responses": ["Sad to see you go :(", "Talk to you later", "Goodbye!"]
        },
        {
            "tag": "age",
            "patterns": ["how old", "how old is eldad", "what is your age", "how old are you", "age"],
            "responses": ["My owner Eldad is 21 years old!", "21 years!"]
        },
        {
            "tag": "name",
            "patterns": ["what is your name", "what should I call you", "whats your name", "who are you", "can you tell me your name"],
            "responses": ["You can call me Neural!", "I'm Neural!"]
        },
        {
            "tag": "city",
            "patterns": ["what is the name of this city", "the name of city", "city name"],
            "responses": ["Yogyakarta City", "Daerah Istimewa Yogyakarta"]
        },
        {
            "tag": "city_age",
            "patterns": ["how old is this city", "age of this city", "city age"],
            "responses": ["264 years"]
        }
    ]
}
```

Metode Representasi Pengetahuan
&
Algoritma

List

Metode representasi pengetahuan yang digunakan dalam kasus chatbot kami adalah list

List sangat cocok digunakan untuk chatbot karena list mengelompokkan data sesuai dengan hubungannya.

Misalnya ...

- Greetings[“hi”,”hello”,”what’s up”] Menandakan bahwa hi,hello, dan what’s up memiliki hubungan yang sama yaitu sebagai kata salam.

Algoritma

Algoritma yang digunakan dalam chatbot ini adalah Best First Search

Algoritma ini mengambil nilai terbaik atau probabilitas terbaik yang dihasilkan, sehingga dapat menampilkan output sesuai yang diinginkan user.

Tujuan Aplikasi

- Mendukung penerapan smart city di Yogyakarta
- Memberikan kemudahan akses bagi pengunjung dari luar kota maupun luar negeri untuk mengetahui lebih dalam mengenai Yogyakarta
- Dapat menjadi akses belajar bagi anak sekolah maupun kuliah mengenai Yogyakarta maupun aplikasi itu sendiri

Terimakasih