

# **Natural Language Processing**



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Teknologi yang digunakan adalah:

- scikit-learn (untuk TF-IDF)
- Flask sebagai Backend
- HTML + CSS sederhana untuk chat UI

No	Nama file	Fungsi
1.	App.py	Sebagai Backend menggunakan framework flask
2.	Intents.json	Intent dan respon
3.	Chatbot_logic.py	NLP Logic
4.	Templates/index.html	Tampilan chatbot

Contoh intents.json

```
{
  "intents": [
    {
      "tag": "greeting",
      "patterns": ["hi", "hello", "hey", "selamat pagi", "halo"],
      "responses": ["Halo! Ada yang bisa saya bantu?", "Hai, selamat datang!"]
    },
    ....
  ]
}
```

Contoh tangkapan layar file intents.json

```
dataset > {} intents_health_eye.json > [ ] intents > {} 3 > [ ] patterns
1 {
2   "intents": [
3     > { ...
22   },
23   > { ...
70   },
71   {
72     "tag": "gejala katarak",
73     "patterns": [
74       "apa itu katarak?",
75       "Gejala katarak",
76       "apa saja gejala katarak",
77       "apa gejala katarak",
78       "gejala katarak?"
79     ],
80     "responses": [
81       "Penglihatan kabur, perubahan warna, s
82     ],
83     "context": [
84       ""
85     ]
86   },
87   {
88     "tag": "diagnosis katarak",
89     "patterns": [
90       "Bagaimana katarak terdiagnosis?",
91       "cara mendiagnosis katarak",
92       "cara mengetahui katarak",
93       "gimana mengetahui katarak?"
94     ],
95     "responses": [
96       "Umumnya Dokter mata akan melakukan pe
97     ],
98     "context": [
99       ""
100    ]
101  },
```

Jalankan app.py dengan perintah "python app.py" kemudian buka <http://127.0.0.1:5000>

```
$ python app.py
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 448-289-594
127.0.0.1 - - [05/May/2025 13:34:17] "GET / HTTP/1.1" 200 -
```

Tampilan website chatbot



Selesai.