



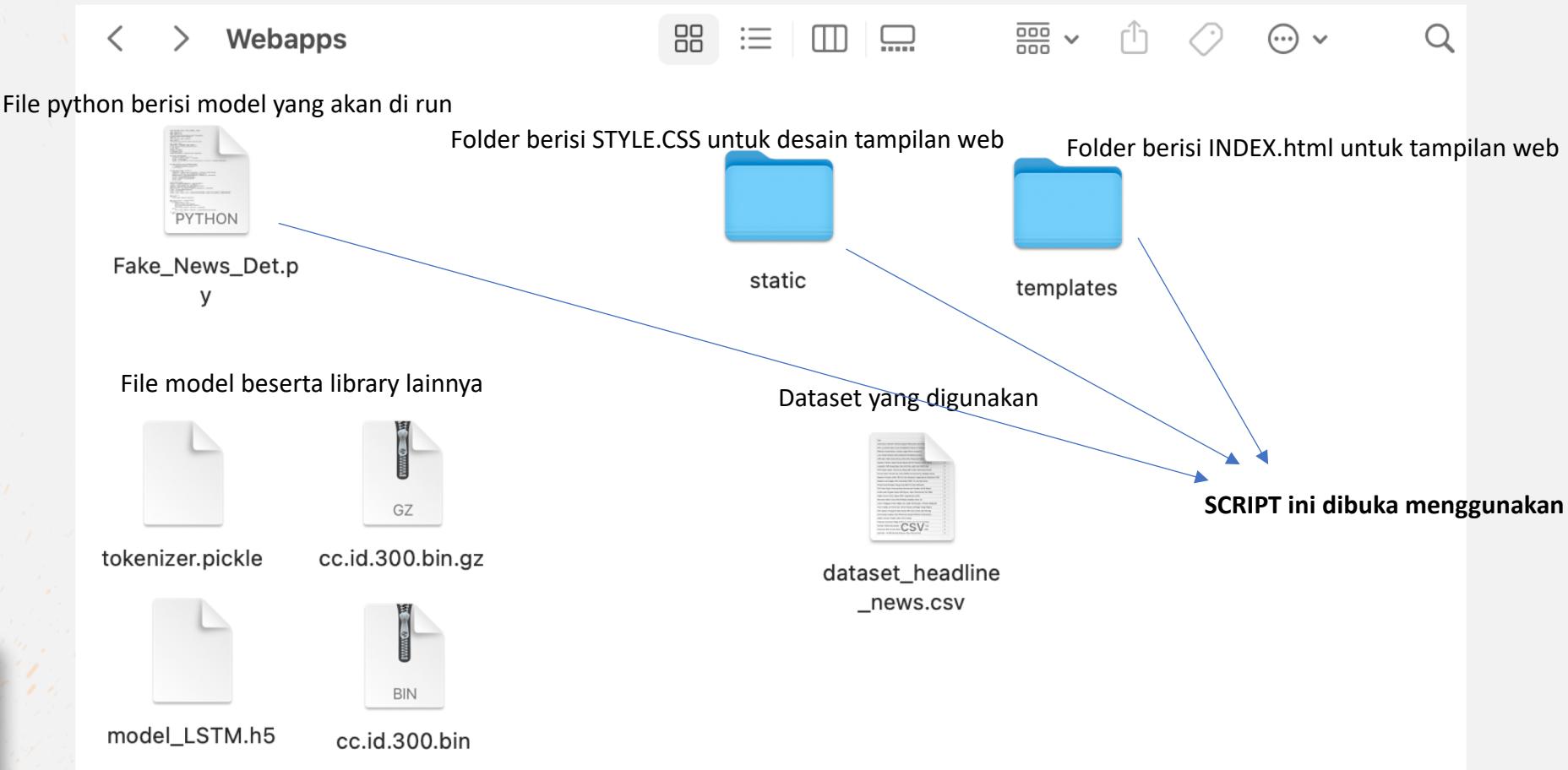
TURNAMEN SAINS DATA NASIONAL 2023

# Dokumentasi WebApps AI Fake News Detection

By  
Bayez

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# File yang dibutuhkan untuk menjalankan WebApps





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# Script (front end) untuk menjalankan tampilan web apps

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="UTF-8">
5   <title>Fake News Detector</title>
6   <link href='https://fonts.googleapis.com/css?family=Pacifico' rel='stylesheet' type='text/css'>
7   <link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet' type='text/css'>
8   <link href='https://fonts.googleapis.com/css?family=Hind:300' rel='stylesheet' type='text/css'>
9   <link href='https://fonts.googleapis.com/css?family=Orbitron' rel='stylesheet' type='text/css'>
10  <link rel="stylesheet" href="{{ url_for('static', filename='style.css') }}>
11
12 </head>
13
14 <body>
15   <div class="login">
16     
17     <h1>Fake News Detector</h1>
18
19     <form action="{{ url_for('predict') }}" method="POST">
20       <textarea name="message" rows="10" cols="50" required="required" style="font-size: 12pt; border: none; width: 100%; height: 100%; margin-bottom: 10px;"></textarea>
21       <br> <br>
22       <button type="submit" class="btn btn-primary btn-block btn-large">VALID CHECKING</button>
23
24       <div class="results">
25         {% if 1 in y_pred %}
26           <h2 style="color:red;">HATI-HATI! Konten ini terindikasi HOAX ATAU FAKE! </h2>
27         {% elif 0 in y_pred %}
28           <h2 style="color:green;"><b>TENANG, konten ini ASLI</b></h2>
29         {% endif %}
30       </div>
31
32     </form>
33
34   </div>
35
36 </body>
```

Index.html digunakan untuk menampilkan tampilan web pada website, segala yang ditampilkan di web akan ada di script ini

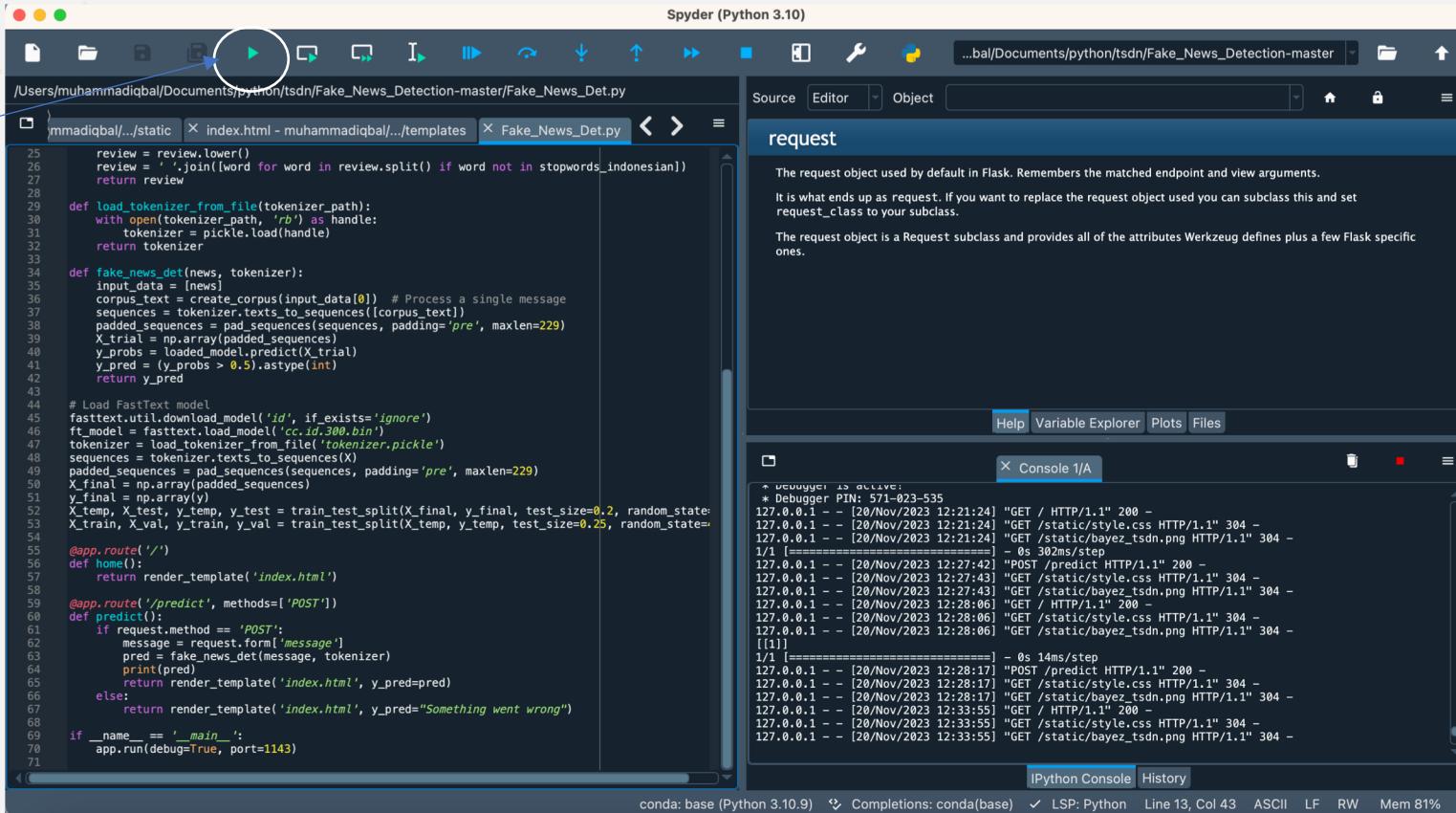
```
1 @import url(https://fonts.googleapis.com/css?family=Open+Sans);
2 .btn { display: inline-block; *display: inline; padding: 4px 10px 4px; margin-bottom: 0; border-radius: 5px; font-family: 'Open Sans', sans-serif; }
3 .btn:hover, .btn:active, .btn:disabled, .btn:disabled { background-color: #e6e6e6; color: #333333; text-decoration: none; border: 1px solid #e6e6e6; }
4 .btn-large { padding: 9px 14px; font-size: 15px; line-height: normal; -webkit-border-radius: 5px; border-radius: 5px; }
5 .btn-primary, .btn-primary:hover { color: #333333; text-decoration: none; background-color: #e6e6e6; border: 1px solid #e6e6e6; }
6 .btn-primary, .btn-primary:hover { text-shadow: 0 -1px 0 rgba(0, 0, 0, 0.25); color: #fffffe; }
7 .btn-primary:active { color: rgba(255, 255, 255, 0.75); }
8 .btn-primary { background-color: #842B01; background-image: -moz-linear-gradient(top, #6eb6de, #842B01); border: 1px solid #842B01; border-radius: 5px; }
9 .btn-primary:hover, .btn-primary:active, .btn-primary:disabled, .btn-primary:disabled { background-color: #842B01; border: 1px solid #842B01; border-radius: 5px; }
10 .btn-block { width: 100%; display: block; }
11
12 * { -webkit-box-sizing:border-box; -moz-box-sizing:border-box; -ms-box-sizing:border-box; -o-box-sizing:border-box; box-sizing: border-box; }
13
14 html { width: 100%; height:100%; overflow:hidden; }
15
16 body {
17   width: 100%; height:100%; font-family: 'Orbitron'; background: #E5E4FD; color: #fff; font-size: 18px; text-align:center; letter-spacing:1.2px; }
18   background: -moz-radial-gradient(0% 100%, ellipse cover, rgba(62, 29, 109, 0.4) 10%, rgba(138, 57, 173, 0.25) 0%, rgba(42, 60, 87, 0.4) 100%); -moz-linear-gradient(-45deg, #670d10 0%, #092756 100%); -webkit-linear-gradient(-45deg, #f4ebfe 0%, #fff 100%); -o-radial-gradient(0% 100%, ellipse cover, rgba(62, 29, 109, 0.4) 10%, rgba(138, 57, 173, 0.25) 0%, rgba(42, 60, 87, 0.4) 100%); -linear-gradient(-45deg, #670d10 0%, #092756 100%); background: -ms-radial-gradient(% 100%, ellipse cover, rgba(62, 29, 109, 0.4) 10%, rgba(138, 57, 173, 0.25) 0%, rgba(42, 60, 87, 0.4) 100%); -ms-linear-gradient(-45deg, #670d10 0%, #092756 100%); filter: progid:DXImageTransform.Microsoft.gradient( startColorstr='#02AABD', endColorstr='#002060' ); }
19
20 .login {
21   position: absolute; top: 40%; left: 50%; margin: -150px 0 0 -150px; width:400px; height:400px; }
22
23 .login h1 { color: #000000; text-shadow: 0 0 10px rgba(0.0.0.0.3); letter-spacing:1px; text-align: center; font-size: 24px; font-weight: bold; }
24 .login p { color: #000000; text-align: center; font-size: 14px; margin-top: 10px; }
25 .login input { width: 100%; height: 40px; border: 1px solid #ccc; border-radius: 5px; padding: 0 10px; margin-bottom: 10px; }
26 .login button { width: 100%; height: 40px; border: 1px solid #000; border-radius: 5px; background-color: #000; color: #fff; font-size: 16px; font-weight: bold; }
27 .login button:disabled { background-color: #ccc; color: #000; border: 1px solid #ccc; }
28
29 .login .text { color: #000000; text-align: center; font-size: 12px; margin-top: 10px; }
30
31 .login .text a { color: #000000; text-decoration: underline; }
32
33 .login .text a:hover { color: #000000; text-decoration: underline; }
34
35 .login .text a:active { color: #000000; text-decoration: underline; }
36
37 .login .text a:disabled { color: #000000; text-decoration: underline; }
38
39 .login .text a:disabled:active { color: #000000; text-decoration: underline; }
40
41 .login .text a:disabled:active:disabled { color: #000000; text-decoration: underline; }
42
43 .login .text a:disabled:disabled { color: #000000; text-decoration: underline; }
44
45 .login .text a:disabled:disabled:active { color: #000000; text-decoration: underline; }
46
47 .login .text a:disabled:disabled:disabled { color: #000000; text-decoration: underline; }
```

Style.css digunakan untuk mengatur dan mempercantik desain seperti warna, tulisan, font pada tampilan web yang ada pada index.html

SAVE SEMUA PERUBAHAN YANG TERJADI PADA SETIAP SCRIPT

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# Script (Backend) untuk menjalankan web apps



The screenshot shows the Spyder Python IDE interface. On the left, the code editor displays `Fake_News_Det.py` with several lines of Python code. A blue arrow points from the text "Tombol run" to the play button icon in the toolbar above the code editor. The right side of the interface includes a documentation pane for the `request` module, a variable explorer, and a console window titled "Console 1/A" showing a log of network requests. At the bottom, the IPython console shows the command `app.run(debug=True, port=1143)` being run.

```

25     review = review.lower()
26     review = ' '.join([word for word in review.split() if word not in stopwords_indonesian])
27     return review
28
29 def load_tokenizer_from_file(tokenizer_path):
30     with open(tokenizer_path, 'rb') as handle:
31         tokenizer = pickle.load(handle)
32     return tokenizer
33
34 def fake_news_det(news, tokenizer):
35     input_data = [news]
36     corpus_text = create_corpus(input_data[0]) # Process a single message
37     sequences = tokenizer.texts_to_sequences([corpus_text])
38     padded_sequences = pad_sequences(sequences, padding='pre', maxlen=229)
39     X_trial = np.array(padded_sequences)
40     y_probs = loaded_model.predict(X_trial)
41     y_pred = (y_probs > 0.5).astype(int)
42     return y_pred
43
44 # Load FastText model
45 fasttext.util.download_model('id', if_exists='ignore')
46 ft_model = fasttext.load_model('cc.id.300.bin')
47 tokenizer = load_tokenizer_from_file('tokenizer.pickle')
48 sequences = tokenizer.texts_to_sequences(X)
49 padded_sequences = pad_sequences(sequences, padding='pre', maxlen=229)
50 X_final = np.array(padded_sequences)
51 y_final = np.array(y)
52 X_temp, X_test, y_temp, y_test = train_test_split(X_final, y_final, test_size=0.2, random_state=42)
53 X_train, X_val, y_train, y_val = train_test_split(X_temp, y_temp, test_size=0.25, random_state=42)
54
55 @app.route('/')
56 def home():
57     return render_template('index.html')
58
59 @app.route('/predict', methods=['POST'])
60 def predict():
61     if request.method == 'POST':
62         message = request.form['message']
63         pred = fake_news_det(message, tokenizer)
64         print(pred)
65         return render_template('index.html', y_pred=pred)
66     else:
67         return render_template('index.html', y_pred="Something went wrong")
68
69 if __name__ == '__main__':
70     app.run(debug=True, port=1143)

```

File `Fake_News_Det.py` dibuka menggunakan spyder, segala proses mesin yang terjadi pada website diatur pada script ini. Termasuk memanggil dataset, model dan algoritma untuk dihubungkan dengan `index.html`.

**Setelah selesai, run script ini sampai muncul link port local host**

# Console (localhost) untuk menjalankan web apps

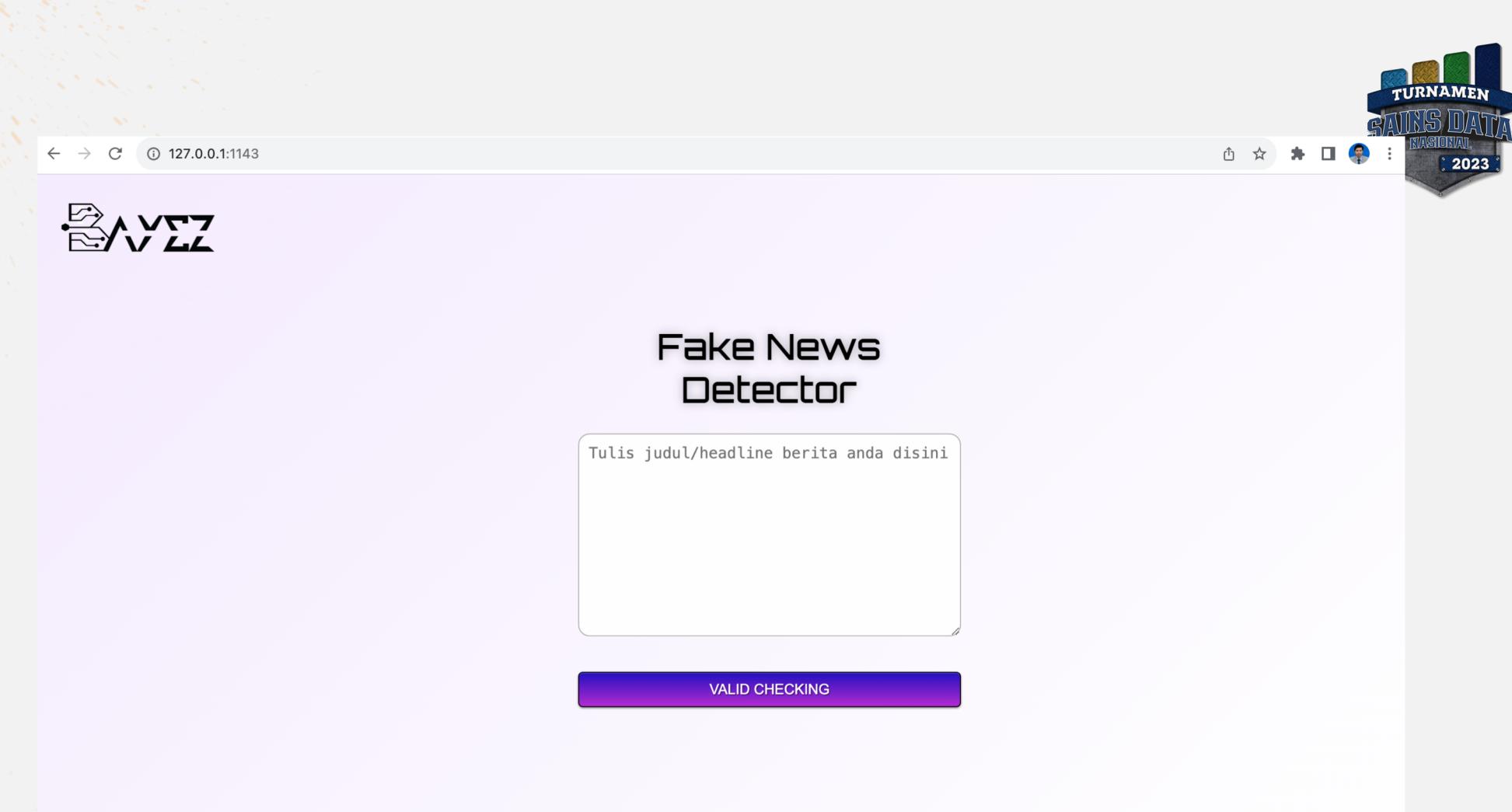


```
Console 1/A
127.0.0.1 - - [20/Nov/2023 10:35:04] "GET /static/style.css HTTP/1.1" 304 -
127.0.0.1 - - [20/Nov/2023 10:35:04] "GET /static/bayez_tsdn.png HTTP/1.1" 304 -

In [3]: runfile('/Users/muhammadiqbal/Documents/python/tsdn/Fake_News_Detection-master/Fake_News_Det.py', wdir='/Users/muhammadiqbal/Documents/python/tsdn/Fake_News_Detection-master')
Warning : `load_model` does not return WordVectorModel or SupervisedModel any more, but a `FastText` object which is very similar.
* Serving Flask app 'Fake_News_Det'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:1143
Press CTRL+C to quit
* Restarting with watchdog (fsevents)
Warning : `load_model` does not return WordVectorModel or SupervisedModel any more, but a `FastText` object which is very similar.
* Debugger is active!
```

Pada console, jika setelah di run muncul kode local host, user bisa copy link tersebut dan di paste di browser mana pun

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The image shows a web browser window with the URL 127.0.0.1:1143. The page title is "Fake News Detector". On the left, there is a logo consisting of a stylized 'B' and 'V' with circuit board patterns. The main content area features a text input field with the placeholder "Tulis judul/headline berita anda disini" and a purple button labeled "VALID CHECKING". The browser's address bar and various control icons are visible at the top.

Ini merupakan tampilan awal webapps, menggunakan flask, webapps saat ini masih dijalankan via local host, namun sangat bisa di improve untuk dibuat menjadi public host atau aplikasi.

Senin, 20 November 2023

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## Ahmad Dhani Meninggal karena Kecelakaan Tragis

Ginanjar Saputra , Ginanjar Saputra Senin, 26 Juni 2023 - 16:06 WIB

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### Fake News Detector

Ahmad Dhani Meninggal karena Kecelakaan Tragis

Dengan menulis langsung (atau copy paste) headline atau judul berita, user bisa langsung memprediksi berita tersebut dengan klik "valid checking"

VALID CHECKING



### Fake News Detector

Tulis judul/headline berita anda disini

VALID CHECKING

HATI-HATI! Konten ini terindikasi HOAX ATAU FAKE!

Webapps akan langsung menunjukkan hasilnya, Apakah konten tersebut hoax atau tidak, Ini merupakan contoh konten "HOAX"



Dabetes Bukan Dari Makanan Manis! Temui Musuh Utama Diabetes

Diabetes Treatment



Menurunkan Berat Badan dengan Mudah dengan Mengkonsumsi Inil

Filtration



Luna Maya Sepertinya Berhasil Angkat Kutukan Amaranyal



Gejala Prostatitis? Penyakitnya akan Hilang dalam 1 Hari!

20/11/2023, 10:59 WIB



Kenaikan UMP DKI 2024 Diperkirakan Tak Sampai 5 Persen, Pakar: Mana Sanggup Buruh Hadapi Tekanan Inflasi?

Inflasi



Kalau naiknya UMP di bawah lima persen, buruh dinilai tak akan bisa menghadapi tingkat inflasi yang tinggi di Jakarta.

20/11/2023, 10:55 WIB



Soal Tekanan Kekuasaan, Muhamaim Singgung Anies yang Batal Isi Kuliah di UGM

Cawapres nomor urut 1, Muhamaim Iskandar menyindir larangan UGM bagi Anies Baswedan untuk mengisi kuliah di kampus itu baru-baru ini.

20/11/2023, 10:55 WIB



Amnesty Internasional Desak Pemerintah Terima Pengungsi Rohingya

Cawapres nomor urut 1, Muhamaim Iskandar menyindir larangan UGM bagi Anies Baswedan untuk mengisi kuliah di kampus itu baru-baru ini.

20/11/2023, 10:55 WIB



Baca berita tanpa iklan. Gabung Kompas.com+ Mata Mahal, kalau Tau Ini Sama Ampuhnya

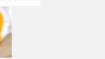


Diabetes Bukan Dari Makanan Manis! Temui Musuh Utama Diabetes

Diabetes Treatment



Menurunkan Berat



Amnesty Internasional Desak Pemerintah Terima Pengungsi Rohingya



## Fake News Detector

Amnesty Internasional Desak Pemerintah Terima Pengungsi Rohingya

VALID CHECKING



## Fake News Detector

Tulis judul/headline berita anda disini

VALID CHECKING

TENANG, konten ini ASLI

Berikut adalah contoh untuk konten berita yang diprediksi ASLI



**TERIMA KASIH**  
**SEKIAN**