

```
1 import spacy
2
3 nlp = spacy.load("en_core_web_sm")
4
5 def analyze_text(text):
6     doc = nlp(text)
7     # Example: Extract entities
8     for entity in doc.ents:
9         print(entity.text, entity.label_)
10
11 Integrate Reasoning into Web Application
12
13 Flask app structure:
14
15 from flask import Flask, request, jsonify
16 app = Flask(__name__)
17
18 @app.route('/reason', methods=['POST'])
19 def reason():
20     data = request.json
21     text = data.get('text')
```

```
23     # Process text and perform reasoning
24     result = analyze_text(text)
25
26     return jsonify(result=result)
27
28 if __name__ == '__main__':
29     app.run(debug=True)
30
31 5. Create the Frontend
32
33 Use HTML, CSS, and JavaScript to build a user
34 interface.
35 For dynamic content, consider using frameworks like
36 React or Vue.js.
37 Example HTML form:
38
39 <!DOCTYPE html>
40 <html lang="en">
41 <head>
42     <meta charset="UTF-8">
```

```
43      <title>Reasoning Website</title>
44  </head>
45  <body>
46    <form id="reasonForm">
47      <textarea id="inputText" placeholder="Enter
text
48 here..."></textarea>
49      <button type="submit">Analyze</button>
50    </form>
51
52    <div id="result"></div>
53
54    <script>
55      document.getElementById('reasonForm').onsubmit
= async
56      function(event) {
57        event.preventDefault();
58
59        const text =
document.getElementById('inputText').value;
60        const response = await fetch('/reason', {
61          method: 'POST',
```

```
62         headers: {'Content-Type':  
63             'application/json'},  
64             body: JSON.stringify({text})  
65         });  
66  
66     const result = await response.json();  
67  
67 document.getElementById('result').innerText =  
68     result.result;  
69     };  
69 </script>  
70 </body>  
71 </html>
```