1) Document type & html tag

<!doctype html>

<html lang="en">

- 1. Declares HTML5 document type so browsers render consistently.
- 2. lang="en" helps accessibility and search engines know the document language.

2) <head>: charset, viewport, and title

<head>

```
<meta charset="utf-8">
```

<meta name="viewport" content="width=device-width,initial-scale=1">

<title>{{ title|default("AI-AgroBot Pro v2") }}</title>

- 1. meta charset="utf-8" prevents encoding problems (emojis, non-ASCII).
- 2. viewport ensures responsive scaling on phones/tablets.
- 3. {{ title|default(...) }} Jinja2 variable. If your route passes title="Chat", it'll show that; otherwise the default string appears.

Flask usage example:

return render_template("chat.html", title="Chat with AgroBot")

3) Favicons and static CSS

- 1. url for('static', filename='...') builds correct static file URLs.
- 2. Keep favicon.ico and style.css in your Flask static/ folder.

4) <body> start and header wrapper

<body>

<header class="topbar">

- 1. header is semantic HTML good for accessibility and layout.
- 2. class="topbar" is purely for CSS styling in style.css.

5) Branding block (logo + title)

```
<div class="brand">
  <img src="{{ url_for('static', filename='bot.png') }}" class="logo" alt="bot">
  <div>
  <h1>AI-AgroBot</h1>
  <small>Pocket agronomist</small>
  </div>
  </div>
```

- 1. Image bot.png should be in static/. alt helps screen readers.
- 2. h1 is main site title; small is subtitle.

6) Navigation (dynamic with current_user)

- 1. current_user is from **Flask-Login**. is_authenticated returns True for logged-in users.
- 2. Show/hide links conditionally (e.g., Admin only appears when current_user.role == 'admin').
- 3. url_for('index') etc. should match your Flask route function names.

Minimal Flask routes example:

```
@app.route('/')
def index(): return render_template('chat.html')
```

```
@app.route('/profile')
@login_required
def profile(): ...
```

7) Main content & flash messages

```
<main class="main">
{% with msgs = get_flashed_messages(with_categories=true) %}
{% if msgs %}
 <div class="flashes">
   {% for cat,msg in msgs %}
    <div class="flash {{cat}}">{{msg}}</div>
   {% endfor %}
 </div>
{% endif %}
{% endwith %}
{% block content %}{% endblock %}
</main>
  1. get_flashed_messages(with_categories=true) returns [(category, message), ...].
```

- 2. {{cat}} inserts the category as a CSS class: useful to show green vs red messages (.flash.success, .flash.error).
- 3. {% block content %} placeholder for child templates to inject page-specific HTML.

Flask flash usage:

```
from flask import flash, redirect, url_for
flash("Saved successfully!", "success")
return redirect(url_for("profile"))
Child template example (chat.html):
```

```
{% extends "base.html" %}
{% block content %}
<h2>Chat with AgroBot</h2>
<!-- chat UI here -->
```

8) Footer and JavaScript

```
<footer class="footer">© 2025 Al-AgroBot Pro</footer>
<script src="{{ url_for('static', filename='script.js') }}"></script>
</body>
</html>
```

- 1. Footer is static text update the year if you want to make it dynamic.
- 2. script.js lives in static/. Put DOM-ready code or event listeners there (e.g., chat send button handler).

Optional: dynamic year in footer

```
<footer class="footer">© {{ current_year }} AI-AgroBot Pro</footer>
```

And in your route:

from datetime import datetime

return render_template("chat.html", current_year=datetime.now().year)