Flask : How create a responsive navbar

Elfao Follow

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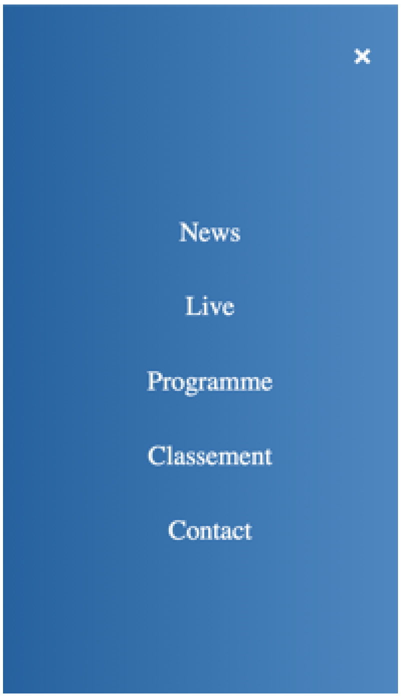
Here's a complete tutorial to learn how we can create a responsive navigation bar, that adapt their layouts to the viewport size, using Flask from scratch.

In this tutorial, we'll look into how use Bootstrap to create a responsive NavBar on Flask. Our navigation will have three different layouts, depending on the viewport size:

1. a **mobile layout** in which only the logo and a toggle button will be visible by default and users can open and close the menu using the toggle,

2. a **tablet layout** in which we will show two call-to-action buttons between the logo and toggle in the default state and the rest of the menu will remain toggleable,
3. a **desktop layout** in which all the menu items, except for the toggle button, will be visible on the screen.

So our navigation bar will contain 5 items and each item will be a page :



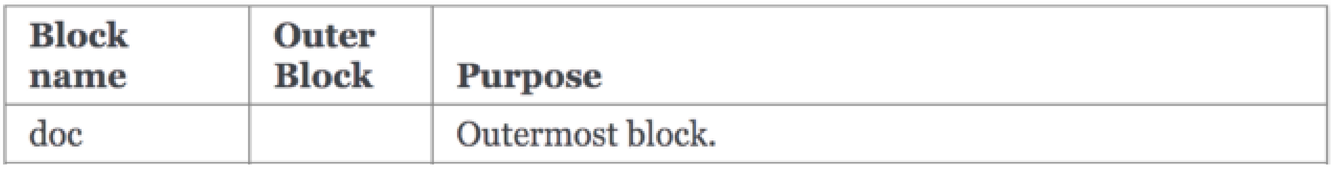
The all source code is there : https://github.com/Faouzizi/createNavigationBarFlask

I. Create the HTML

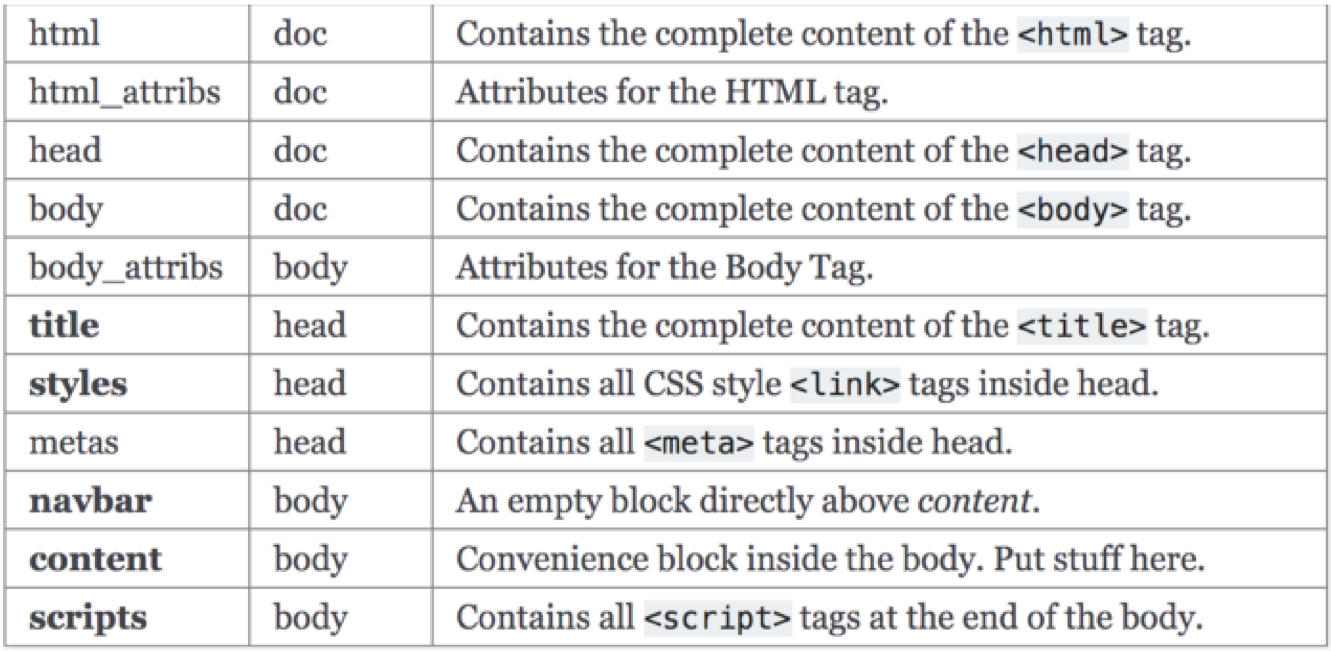
In this part, we will create HTML templates that our python code will call.
For that, we will create only Bootstrap-based template.
The first template that we will create is index.html and all others templates will be child templates.
Each child template is based on blocks (block like Title, navbar, …).

Jinja2's super() function gives you the option of amending blocks instead of replacing them.

Available blocks



Block name	Outer Block	Purpose
doc		Outermost block.



html	doc	Contains the complete content of the `<html>` tag.
html_attribs	doc	Attributes for the HTML tag.
head	doc	Contains the complete content of the `<head>` tag.
body	doc	Contains the complete content of the `<body>` tag.
body_attribs	body	Attributes for the Body Tag.
title	head	Contains the complete content of the `<title>` tag.
styles	head	Contains all CSS style `<link>` tags inside head.
metas	head	Contains all `<meta>` tags inside head.
navbar	body	An empty block directly above *content*.
content	body	Convenience block inside the body. Put stuff here.
scripts	body	Contains all `<script>` tags at the end of the body.

index.html:

```
<!-- Here we use bootstrap extension for our navigation Bar -->
{% extends "bootstrap/base.html" %}

<!----------------------------------------------------------------->
<!------------------      Nav bar start  -------------------------->
<!----------------------------------------------------------------->
{% block navbar %}
{{nav.top.render()}}
{% endblock %}
<!----------------------------------------------------------------->
<!------------------      Nav bar end  -------------------------->
<!----------------------------------------------------------------->
```

Then we create other child templates following the same logic.

Example: classement.html

```
{% extends "index.html" %}

{% block content %}
<p> Classements html page</p>
{% endblock %}
```

II. Create the Python Code

```
###############################################
#          Import some packages               #
###############################################
from flask import Flask, render_template
from flask_bootstrap import Bootstrap
from flask_nav import Nav
from flask_nav.elements import *
from dominate.tags import img


###############################################
#      Define navbar with logo                #
###############################################
logo = img(src='./static/img/logo.png', height="50", width="50",
style="margin-top:-15px")

#here we define our menu items
topbar = Navbar(logo,
                View('News', 'get_news'),
                View('Live', 'get_live'),
                View('Programme', 'get_programme'),
                View('Classement', 'get_classement'),
                View('Contact', 'get_contact'),
                )

# registers the "top" menubar
nav = Nav()
nav.register_element('top', topbar)


###############################################
#          Define flask app                   #
###############################################
app = Flask(__name__)
Bootstrap(app)

###############################################
#          Render Home page                   #
###############################################
@app.route('/news', methods=['GET'])
def get_news():
    return(render_template('news.html'))



###############################################
#          Render live page                   #
###############################################
@app.route('/live', methods=["GET"])
def get_live():
    return(render_template('live.html'))
```

```
###############################################
#          Render programme page              #
###############################################
@app.route('/programme', methods=["GET"])
def get_programme():
    return(render_template('programme.html'))


###############################################
#          Render Classement page             #
###############################################
@app.route('/classement', methods=["GET"])
def get_classement():
    return(render_template('classement.html'))


###############################################
#          Render contact page                #
###############################################
@app.route('/contact', methods=["GET"])
def get_contact():
    return(render_template('contact.html'))

###############################################
#             Init our app                    #
###############################################
nav.init_app(app)


###############################################
#                Run app                      #
###############################################
if __name__ == '__main__':
    app.run(debug=True)
```

IV. Conclusion

Now, you can install all packages (flask, flask_bootstrap , flask_nav) using pip install flask flask_bootstrap flask_nav.

You can run main.py and go to http://localhost:5000/live (http://127.0.0.1:5000/live) to see the result.

Now you are able to create your own navigation bar using Flask so enjoy :)

Photo by Clemens van Lay on Unsplash

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Navigation Bar Navbar Flask Python Responsive Design