

Explanation of all the bugs found along with the approach to resolving the bugs of the note taking application.

Introduction

The note taking application is a simple app that takes in the records of various points entered by the user one-by-one and then returns as a list.

Programming tools used

1. Python as a programming language.
2. Flask as a framework.
3. HTML as a scripting language.

Task:

Given a note taking application with only one route (i.e. Home Route). This application is broken. Task is to refactor the code and try to make sure the application works properly. Document the bugs while fixing the app.

Bugs:

A) HTML

1. There was no POST method used in the html form.
2. No visual designing was there in the application to make the output feel better.

B) Flask

1. Returns none when tried to run the application.
2. Absence of a conditional statement inside the main function that checks for the POST method in the form.
3. No GET function in python script route function.

Improvements:

1. Added the GET method in the `@app.route()` decorator for fetching the data.
2. Added "POST" method in the HTML form.
3. Converted fetching method from args to form
4. Added a video as a background to give some colors to application
5. Added a conditional statement in the Python script for checking the POST method in HTML form.

Python Script:

Original Code:

```
Tasks > Task_9 > Original_file > note_taking_app > app.py > ...
1  from flask import Flask, render_template, request
2
3  app = Flask(__name__)
4
5  notes = []
6  @app.route('/', methods=["POST"])
7  def index():
8      note = request.args.get("note")
9      notes.append(note)
10     return render_template("home.html", notes=notes)
11
12
13 if __name__ == '__main__':
14     app.run(debug=True)
```

Modified Code:

```
Tasks > Task_9 > Improved > app.py > ...
1  from flask import Flask, render_template, request
2
3  app = Flask(__name__)
4
5  notes = []
6  @app.route('/', methods=['GET', "POST"])
7  def index():
8      if request.method == 'POST':
9          note = request.form.get("note")
10         notes.append(note)
11         print(notes)
12         return render_template("index.html", notes = notes)
13     return render_template("index.html")
14
15 if __name__ == '__main__':
16     app.run(debug=True)
```

HTML:

Original Code:

```
Tasks > Task_9 > Original_file > note_taking_app > templates > < home.html > ...
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width, initial-scale=1.0">
7      <title>Document</title>
8  </head>
9  <body>
10     <form action="">
11         <input type="text" name="note" placeholder="Enter a note">
12         <button>Add Note</button>
13     </form>
14
15     <ul>
16         {% for note in notes%}
17         <li>{{ note }}</li>
18         {% endfor %}
19     </ul>
20 </body>
21 </html>
```

Modified Code:

```
Tasks > Task_9 > Improved > templates > < index.html > < html > < head > < style > #videoBG
7      <style>
8          #videoBG {
9              position: fixed;
10             right: 0;
11             bottom: 0;
12             min-width: 100%;
13             min-height: 100%;
14         }
15     .content {
16         position: fixed;
17         top: 0;
18         background: rgba(0, 0, 0, 0.5);
19         color: #f1f1f1;
20         width: 100%;
21         padding: 20px;
22     }
23     h2{
24         text-align: center;
25     }
26 </style>
27 <title>Note Taking Application</title>
28 </head>
29 <body>
30     <div id="videoBC">
31         <video id="videoBG" poster="{{ url_for('static', filename='poster.JPG') }}" autoplay muted loop>
32             <source src="{{ url_for('static', filename='video.mp4') }}" type="video/mp4">
33         </video>
34     </div>
35     <div class="content">
36         <h2>Note taking application</h2>
37         <form align = 'center' action="", method="POST">
38             <label for="">Enter a note to add: </label><br>
39             <input type="text" name="note" placeholder="Enter a note">
40             <button>Add Note</button>
41         </form>
42
43     <ul>
```

Output Screenshots:

