

Bug Report and Resolution for Note Taking Application

Bug 1: Form Submission Issue

- **Symptoms:** When adding a note through the form and clicking the "Add Note" button, the note is not displayed.
- **Probable Cause:** The form action attribute is empty, leading to the form submission to the same route causing the notes list not to update.
- **Resolution:** Update the form action attribute to point to the root route ("/").

```
<form action="/" method="POST">
```

Bug 2: Retrieving Note Data from Request

- **Symptoms:** Despite fixing the form submission issue, no notes are being added to the list.
- **Probable Cause:** The note data is retrieved from `request.args`, but it should be retrieved from `request.form` since it's a POST request.
- **Resolution:** Change `request.args.get("note")` to `request.form.get("note")` to correctly retrieve the note data from the form.

```
note = request.form.get("note")
```

Bug 3: Displaying Notes in the Template

- **Symptoms:** Even after adding notes, they are not displayed on the page.
- **Probable Cause:** The template variable `notes` is not being passed correctly to the `render_template` function.
- **Resolution:** Pass the `notes` variable explicitly to the `render_template` function.

```
return render_template("home.html", notes=notes)
```

Bug 4: Unordered List not Updated

- **Symptoms:** Although notes are being added, they are not displayed in an unordered list format.
- **Probable Cause:** The unordered list in the HTML template is not updated dynamically.
- **Resolution:** Enclose the unordered list inside the form to ensure it is updated dynamically after each note addition.

```
<form action="/" method="POST">
  <input type="text" name="note" placeholder="Enter a note">
  <button>Add Note</button>

  <ul>
    {% for note in notes %}
      <li>{{ note }}</li>
    {% endfor %}
  </ul>
</form>
```

Final Code -:

```
from flask import Flask, render_template, request

app = Flask(__name__)

notes = []

@app.route('/', methods=["GET", "POST"])
def index():
    if request.method == "POST":
        note = request.form.get("note")
        notes.append(note)
        return render_template("home.html", notes=notes)

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

Html -:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Note Taking App</title>
</head>
<body>
    <form action="/" method="POST">
        <input type="text" name="note" placeholder="Enter a note">
        <button>Add Note</button>

        <ul>
            {% for note in notes %}
                <li>{{ note }}</li>
            {% endfor %}
        </ul>
    </form>
</body>
</html>
```