**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>