



TASK NAME

CODE REFACTORING  
AND BUG-FIXING

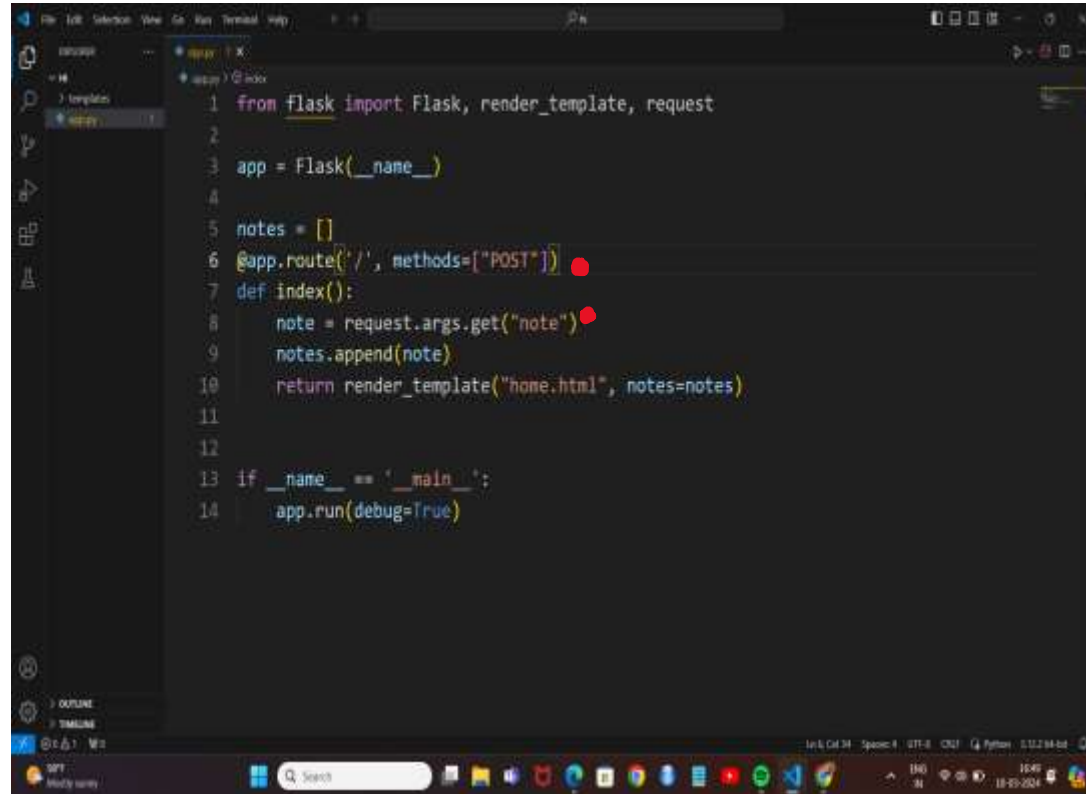
## Scenario:

A team of enthusiastic data scientists embarked on a mission to develop a Note Taking Application using Python, Flask, and HTML. However, their lack of experience in backend development has led to challenges in making the application fully functional. Recognizing your proficiency in backend development, you have been tasked with fixing the broken code and ensuring the application works seamlessly.

## Task:

Refactor the existing codebase and ensure the proper functioning of the Note Taking Application. Document all identified bugs during the debugging process. Remember, the task is not about recreating the app from scratch. Your goal is to fix the already existing codebase and make the application work as intended.

# FINDING BUG IN SERVER APPLICATION



```
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)
```

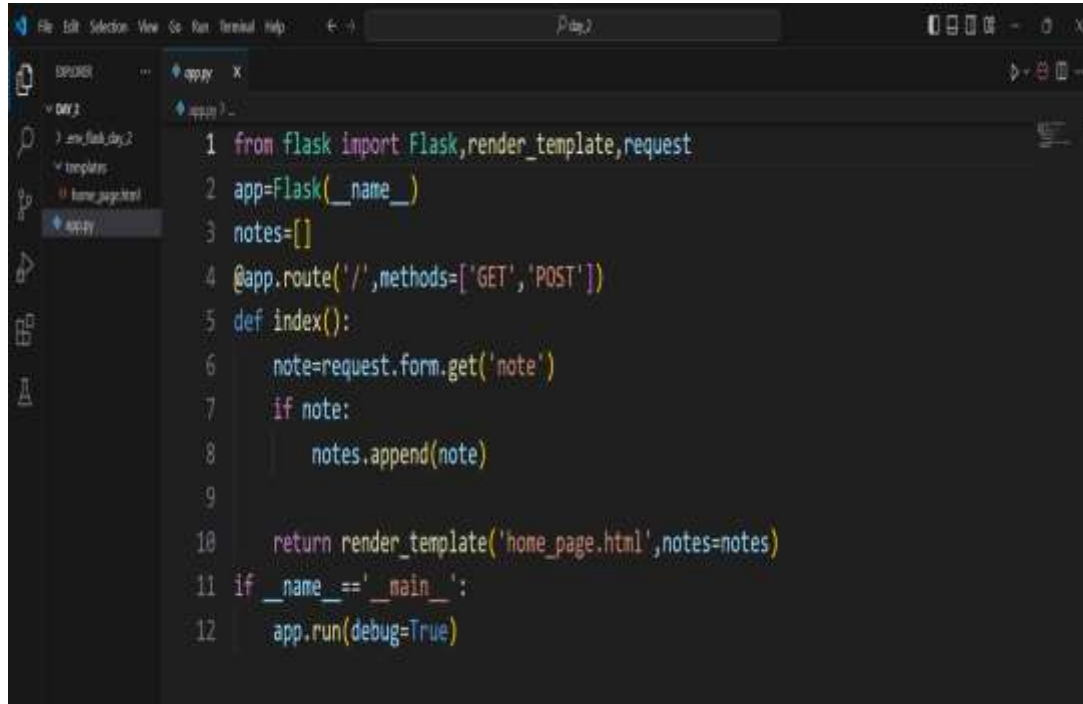
The screenshot shows a code editor with a Python Flask application. The code is as follows:

```
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)
```

Red dots are placed on line 6 and line 8, indicating the focus of the analysis.

- HERE WE NOTICE THAT in 6<sup>th</sup> line ONLY **POST** METHOD IS GIVEN BUT POST METHOD ONLY WRITES DATA BY USING REQUEST . BUT HERE WE NEED ACCESS TO READ
- In 8<sup>th</sup> line we notice that the data is not flowing through URL . Actually it is happening using HTML

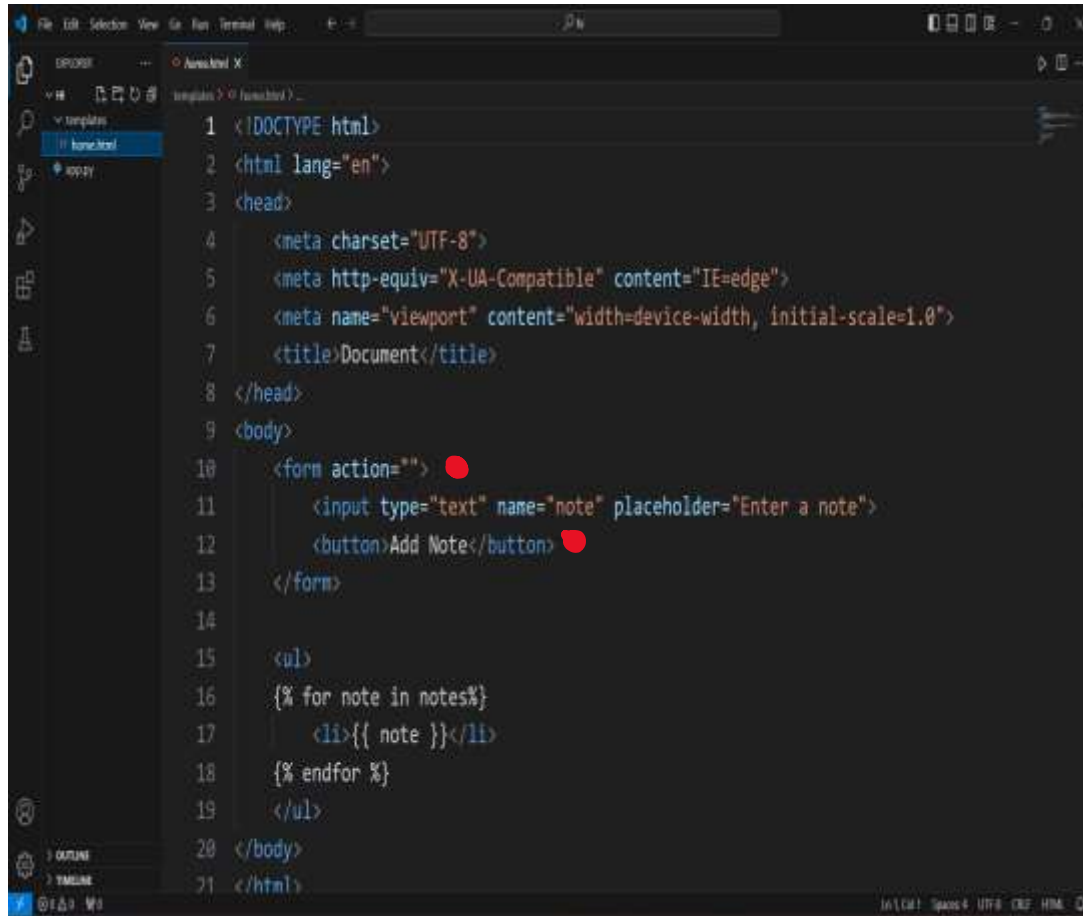
# Fixing Bug In Application Server



```
1 from flask import Flask,render_template,request
2 app=Flask(__name__)
3 notes=[]
4 @app.route('/',methods=['GET','POST'])
5 def index():
6     note=request.form.get('note')
7     if note:
8         notes.append(note)
9
10    return render_template('home_page.html',notes=notes)
11 if __name__=='__main__':
12     app.run(debug=True)
```

- In order to fix the bug at 6<sup>th</sup> line  
Here iam adding GET in the  
methods parameter of route
- For fixing bug In 8<sup>th</sup> line that to  
read data from HTML use  
Request.form.get('note')

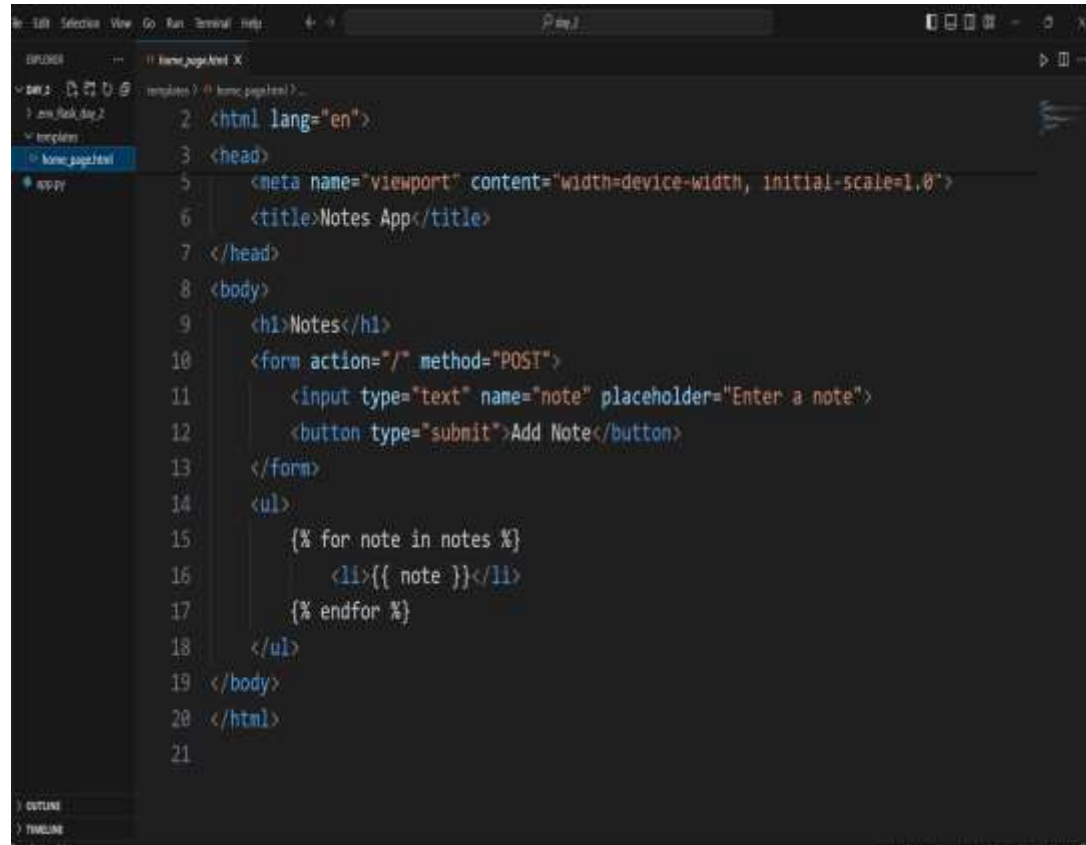
# Finding Bug In HTML



```
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>
```

- Here in form Element method not mentioned
- In button tag type parameter is not mentioned

# Bug Fixing In HTML

A screenshot of a code editor window with a dark theme. The editor shows an HTML file named 'home\_page.html'. The code is as follows:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Notes App</title>
7 </head>
8 <body>
9   <h1>Notes</h1>
10  <form action="/" method="POST">
11    <input type="text" name="note" placeholder="Enter a note">
12    <button type="submit">Add Note</button>
13  </form>
14  <ul>
15    {% for note in notes %}
16    <li>{{ note }}</li>
17    {% endfor %}
18  </ul>
19 </body>
20 </html>
21
```

The left sidebar shows a file explorer with a project named 'app.py' and a file 'home\_page.html' selected. The bottom of the editor has tabs for 'OUTLINE' and 'TIMELINE'.

- Take method 'POST'
- Also give type='submit' in button tag

# Output After Fixing Bug

## Notes

## Notes

- books
- vegetables
- fee

THANK YOU