

## Notes App Refactor - Bug Report & Fix Approach

### Project summary:

A simple Flask notes app with a Home route to add and list notes.

### Bugs found and fixes:

#### 1) Home route only accepted POST requests

Bug: `@app.route('/', methods=['POST'])` blocks normal page load.

Impact: Opening `http://127.0.0.1:5000/` in a browser gives 405 Method Not Allowed.

Fix: Allow both GET and POST -> `methods=['GET','POST']`.

#### 2) Reading note from the wrong place

Bug: `note = request.args.get('note')` reads querystring params.

Impact: Submitting the form sends data in the POST body, so note becomes None.

Fix: Use `request.form.get('note')` for POST form data.

#### 3) HTML form did not specify method/action

Bug: `<form action="">` defaults to GET and may not hit the expected route.

Impact: App expects POST submission but browser uses GET.

Fix: Set `<form action="/" method='POST'>`.

#### 4) Empty/None notes were being appended

Bug: The code appended note even if it was None or empty.

Impact: UI shows blank list items.

Fix: Strip input and only append when note is not empty.

#### 5) Duplicate submissions on refresh

Bug: Returning a template directly after POST can re-submit on browser refresh.

Impact: Same note gets added multiple times.

Fix: Use Post/Redirect/Get pattern (redirect to GET after adding note).

### Template handling note:

- Flask looks for HTML templates inside a 'templates/' folder.
- Solution: Move `home.html` into `templates/home.html`.

### Final behavior:

- GET / shows the input + Add Note button + existing notes.
- POST / adds the note and redirects back to GET /.