



# CompTIA Flashcard Web App: Step-by-Step (Ubuntu Guide)



## What You're Building

A simple offline flashcard app that:

- Shows a **question image**
  - Reveals the **answer image** when you click a button
  - Cycles through 3 starter questions/answers
- 



## Step 1: Set Up Your Folder

1. Open your terminal.
2. Create the project directory and go into it:

```
mkdir ~/comptia-study
cd ~/comptia-study
```

3. Add your flashcard image files:

- o question1.png, answer1.png
- o question2.png, answer2.png
- o question3.png, answer3.png

Put them directly in ~/comptia-study

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## Step 2: Create the Flashcard Web Page

Create a file called `index.html`:

```
nano index.html
```

Paste this HTML code into the file:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0"/>
  <title>Flashcard Practice</title>
  <style>
    body { font-family: sans-serif; text-align: center; background: #f4f4f4; padding:
2em; }
    img { max-width: 90%; border-radius: 12px; border: 2px solid #aaa; margin: 1em 0; }
    button { padding: 10px 20px; margin: 10px; font-size: 1em; border-radius: 6px;
cursor: pointer; background: #0069ed; color: white; border: none; }
    button:hover { background: #004ba8; }
  </style>
</head>
<body>
```

```

<h1>CompTIA Flashcard Practice</h1>

<br />
<button onclick="toggleAnswer()">Show Answer</button>
<button onclick="nextCard()">Next Card</button>

<script>
  const cards = [
    { question: 'question1.png', answer: 'answer1.png' },
    { question: 'question2.png', answer: 'answer2.png' },
    { question: 'question3.png', answer: 'answer3.png' },
  ];
  let currentIndex = 0;
  let showingAnswer = false;

  function toggleAnswer() {
    showingAnswer = !showingAnswer;
    document.getElementById('cardImage').src = showingAnswer
      ? cards[currentIndex].answer
      : cards[currentIndex].question;
  }

  function nextCard() {
    currentIndex = (currentIndex + 1) % cards.length;
    showingAnswer = false;
    document.getElementById('cardImage').src = cards[currentIndex].question;
  }
</script>
</body>
</html>

```

Save the file and exit:

- Press CTRL+O → Enter to save
- Press CTRL+X to exit

## ✅ Step 3: Create the Python Web Server

Create a simple server file:

```
nano comptia-study.py
```

Paste this code:

```

import http.server
import socketserver
import socket

PORT = 8000
hostname = socket.gethostname()
local_ip = socket.gethostbyname(hostname)

Handler = http.server.SimpleHTTPRequestHandler

with socketserver.TCPServer(("", PORT), Handler) as httpd:
    print(f"✅ Server is running at: http://{local_ip}:{PORT}")
    print("🌐 Open it in your browser (or your phone if it's on the same Wi-Fi)")

```

```
print("🔴 Press Ctrl+C to stop the server.")  
httpd.serve_forever()
```

Save and exit like before.

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## ✅ Step 4: Run Your Web App

In the terminal:

```
python3 comptia-study.py
```

If your IP is 192.168.1.10, open:

```
cpp  
CopyEdit  
http://192.168.1.10:8000
```

📱 You can open this on your **phone or tablet**, as long as it's on the **same Wi-Fi**.

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## 🖋️ Step 5: Add Your Own Questions

Replace `question1.png` and `answer1.png` with your own CompTIA-style graphics. Use **Canva**, **PowerPoint**, or **handwritten notes** saved as PNGs.

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## ✅ You're All Set!

Now you've got:

- A working **offline study tool**
- Full control to expand it with new flashcards
- A simple setup you can share with others