1) Working Lightweight Web Page

```html
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <title>Lightweight Task Tracker</title>
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <style>
  body {
   font-family: system-ui, Arial, sans-serif;
   margin: 20px;
   background: #f9f9f9;
  }
  .box {
   max-width: 400px;
   margin: auto;
   background: #fff;
   padding: 16px;
   border-radius: 8px;
   box-shadow: 0 2px 5px rgba(0,0,0,0.1);
  }
  input, button {
   width: 100%;
   padding: 8px;
   margin-top: 8px;
  }
  ul {
   padding-left: 18px;
  }
  li {
```

```
      margin: 6px 0;
    }
  </style>
</head>
<body>

<div class="box">
  <h2>Task Tracker</h2>
  <input type="text" id="taskInput" placeholder="Enter a task">
  <button onclick="addTask()">Add Task</button>
  <ul id="taskList"></ul>
</div>
<script>
  function addTask() {
    const input = document.getElementById("taskInput");
    const text = input.value.trim();
    if (!text) return;


    const li = document.createElement("li");
    li.textContent = text;
    document.getElementById("taskList").appendChild(li);
    input.value = "";
  }
</script>
</body>
</html>
```

2) Steps Taken to Make It Lightweight

1. No Frameworks
   - Did not use Bootstrap, React, or other heavy libraries
   - Only plain HTML, CSS, and JavaScript

2. Minimal CSS

    o   Small amount of inline CSS

    o   No large stylesheets

3. No Images or Videos

    o   Avoided images to reduce page size

    o   Used text-only UI

4. Single File Design

    o   HTML, CSS, and JS in one file

    o   Reduces extra file requests

5. Simple JavaScript

    o   Only one function

    o   No complex logic or loops

6. System Fonts

    o   Used system default fonts

    o   No external font downloads

Result:

- Very small file size

- Fast loading

- Works even on slow internet

3) Test Cases

A) Feature Test Cases

No	Test Item	Purpose	Steps	Expected Result
1	Page Load	Check page opens	Open index.html in browser	Page loads correctly
2	Input Field	Check typing	Type text in input	Text appears
3	Add Button	Add task	Type task → Click Add	Task appears in list
4	Empty Input	Prevent blank task	Click Add without text	Nothing is added
5	Multiple Tasks	Add many tasks	Add 3–4 tasks	All show correctly

B) Performance / Lightweight Test Cases

No	Test Item	Purpose	Key Checkpoints	Expected Result
1	File Size	Keep page small	Check file size	File under few KB
2	Load Time	Fast loading	Open on slow net	Loads instantly
3	Network Requests	Reduce requests	Open DevTools → Network	Only 1 file loaded
4	No External Files	Avoid heavy files	Check no CDN/fonts	No external requests
5	JS Performance	Simple logic	Add many tasks	No lag or freeze