

Task 1

PERSONAL PORTFOLIO

```
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>Muhammad Khan · CS portfolio</title>
7   <!-- Font Awesome 6 (free) for icons -->
8   <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0-beta3/css/all.min.css">
9   <style>
10     * {
11       margin: 0;
12       padding: 0;
13       box-sizing: border-box;
14     }
15     body {
16       background: #f4f8fe;
17       font-family: 'Inter', system-ui, -apple-system, BlinkMacSystemFont, 'Segoe UI', Roboto, sans-serif;
18       line-height: 1.6;
19       color: #1e293b;
20       padding: 2rem 1rem;
21     }
22     .container {
23       max-width: 1200px;
24       margin: 0 auto;
25       background: #fff;
26       border-radius: 2rem;
27       box-shadow: 0 25px 50px #00000015;
28       overflow: hidden;
29       padding: 2.5rem 2rem;
30     }
31     h1, h2, h3 {
32       font-weight: 600;
33       letter-spacing: -0.02em;
34     }
35     h2 {
36       font-size: 2rem;
37       margin-bottom: 1.5rem;
38       border-left: 6px solid #2563eb;
39       padding-left: 1rem;
40       color: #0f172a;
41     }
42     .section {
43       margin-bottom: 3.5rem;
44     }
45     /* intro flex */
46     .intro-flex {
47       display: flex;
48       flex-wrap: wrap;
49       gap: 2rem;
50       align-items: center;
51       justify-content: space-between;
52       background: linear-gradient(145deg, #f8f9fc 0%, #ffffff 100%);
53       border-radius: 1.8rem;
54       padding: 2rem 2rem;
55       margin-bottom: 2rem;
56       border: 1px solid #e2e8f0;
57     }
58     .intro-text h1 {
59       font-size: 2.8rem;
60       line-height: 1.2;
61       margin-bottom: 0.5rem;
62       color: #0f172a;
63     }
64     .intro-text .tagline {
65       font-size: 1.3rem;
66       color: #2563eb;
67       font-weight: 500;
68       margin-bottom: 1rem;
69     }
```

```

70     .intro-text p {
71         max-width: 600px;
72         color: #334155;
73     }
74     .intro-avatar {
75         width: 160px;
76         height: 160px;
77         border-radius: 50%;
78         box-shadow: 0 20px 25px -5px #37,99,235,0.3);
79         border: 4px solid #white;
80         overflow: hidden;
81     }
82     .intro-avatar img {
83         width: 100%;
84         height: 100%;
85         object-fit: cover;
86     }
87     /* grid helpers */
88     .grid-2, .grid-3 {
89         display: grid;
90         gap: 2rem;
91     }
92     .grid-2 { grid-template-columns: repeat(auto-fit, minmax(300px,1fr)); }
93     .grid-3 { grid-template-columns: repeat(auto-fit, minmax(260px,1fr)); }
94
95     .card {
96         background: #white;
97         border: 1px solid #e9eef3;
98         border-radius: 1.5rem;
99         padding: 1.5rem;
100        transition: 0.2s ease;
101        box-shadow: 0 4px 6px -2px #0,0,0,0.02);
102    }

```

```

103    .card:hover {
104        border-color: #b9d5fe;
105        box-shadow: 0 12px 20px -10px #59,130,246,0.15);
106    }
107    .badge {
108        background: #e6f0ff;
109        color: #1e4a8b;
110        padding: 0.25rem 0.8rem;
111        border-radius: 40px;
112        font-size: 0.8rem;
113        font-weight: 500;
114        display: inline-block;
115        margin-right: 0.5rem;
116        margin-bottom: 0.5rem;
117    }
118    .tech-stack {
119        margin: 1rem 0 0.5rem;
120    }
121    .icon {
122        color: #2563eb;
123        width: 2rem;
124        margin-right: 0.5rem;
125        text-align: center;
126    }
127    .flex-row {
128        display: flex;
129        align-items: center;
130        gap: 0.5rem;
131        flex-wrap: wrap;
132    }
133    hr {
134        border: 1px solid #eef2f6;
135        margin: 2rem 0;

```

```

135     }
136   }
137   .testimonial {
138     background: #f1f6fe;
139     border-radius: 1.5rem;
140     padding: 1.8rem;
141     border: 1px solid #dbeafe;
142   }
143   .testimonial p {
144     font-style: italic;
145     font-size: 1.1rem;
146   }
147   .testimonial-footer {
148     margin-top: 1rem;
149     font-weight: 600;
150     color: #0f172a;
151   }
152   .blog-link, .achieve-item {
153     background: #f8fafc;
154     padding: 1rem 1.5rem;
155     border-radius: 2rem;
156     border: 1px solid #e0e7ff;
157     display: inline-block;
158     margin-right: 1rem;
159     margin-bottom: 1rem;
160     transition: 0.1s;
161     text-decoration: none;
162     color: #1e293b;
163   }
164   .blog-link i, .achieve-item i {
165     margin-right: 8px;
166     color: #2563eb;
167   }
168   .blog-link:hover {
169     background: #2563eb;

```

```

170     color: white;
171     border-color: #2563eb;
172   }
173   .blog-link:hover i {
174     color: white;
175   }
176   .contact-bar {
177     background: #0f172a;
178     color: white;
179     border-radius: 3rem;
180     padding: 2rem 2rem;
181     display: flex;
182     flex-wrap: wrap;
183     align-items: center;
184     justify-content: space-between;
185     gap: 1.5rem;
186   }
187   .contact-info a {
188     color: white;
189     text-decoration: none;
190     border-bottom: 1px solid #5588ff;
191     margin-left: 0.5rem;
192   }
193   .contact-info i {
194     font-size: 1.4rem;
195     margin-right: 0.5rem;
196     vertical-align: middle;
197   }
198   .linkedin-btn {
199     background: #2563eb;
200     padding: 0.8rem 2rem;
201     border-radius: 3rem;

```

```

202         font-weight: 600;
203         display: inline-flex;
204         align-items: center;
205         gap: 0.5rem;
206         color: white;
207         text-decoration: none;
208     }
209     .linkedin-btn:hover {
210         background: #1d4ed8;
211     }
212     .light-meta {
213         color: #64748b;
214         font-size: 0.9rem;
215     }
216     .achievement-grid {
217         display: flex;
218         flex-wrap: wrap;
219         gap: 0.8rem;
220     }
221     footer {
222         text-align: center;
223         margin-top: 2rem;
224         color: #64748b;
225     }
226     /* university software badges */
227     .sw-badge {
228         background: #dbeafe;
229         color: #1e3a8a;
230     }
231 </style>
232 </head>
233 <body>

```

```

233 <body>
234 <div class="container">
235
236     <!-- INTRODUCTION -->
237     <section class="section">
238         <div class="intro-flex">
239             <div class="intro-text">
240                 <h1>Muhammad Khan</h1>
241                 <div class="tagline"><h2>CS&IT student - 4th semester at UET Peshawar (Jalozai)</div>
242                 <p>I'm passionate about web development and low-level programming. My ambition is to become a full-stack developer and contribute to impactful open-source projects. Currently learning MERN stack while strengthening my C++ and Python skills.</p>
243             </div>
244             <div class="intro-avatar">
245                 
246             </div>
247         </div>
248     </section>
249
250     <!-- BACKGROUND : SSC, HSSC, university + GPA (years removed) -->
251     <section class="section">
252         <h2>Education Background</h2>
253         <div class="grid-2">
254             <div class="card">
255                 <div class="flex-row"><div class="fas fa-school icon"></div><div><h3>Matriculation & Intermediate</h3></div></div>
256                 <p><strong>SSC (Science)</strong> - Peshawar Model School <span class="light-meta">Grade: A</span></p>
257                 <p><strong>HSSC (Pre-Engineering)</strong> - Ghazi Model School Faisal <span class="light-meta">Grade: A</span></p>
258             </div>
259             <div class="card">
260                 <div class="flex-row"><div class="fas fa-university icon"></div><div><h3>University (current)</h3></div></div>
261                 <p><strong>B.Sc. CS & IT (4th semester)</strong> - UET Peshawar, Jalozai Campus</p>
262                 <p><span class="light-meta">GPA: 3.80 / 4.00</span></p>
263                 <p><strong>Relevant coursework</strong>: Data structures, OOP, Database, COA.</p>
264             </div>
265         </div>
266     </section>
267
268     <!-- SOFTWARE LEARNED / SKILLS (university + self) -->
269     <section class="section">
270         <h2>Technical skills & software</h2>
271         <div class="card">
272             <div class="fas fa-terminal"></div> worked with at university</div>
273             <div>
274                 <span class="badge sw-badge"><div class="fas fa-database"></div> MySQL</span>
275                 <span class="badge sw-badge"><div class="fas fa-code"></div> C/C++</span>
276                 <span class="badge sw-badge"><div class="fas fa-code"></div> C++</span>
277                 <span class="badge sw-badge"><div class="fab fa-python"></div> Python</span>

```

```

278     <span class="badge sw-badge"><i class="fas fa-microchip"></i> Emu8086</span>
279   </p>
280   <p class="light-meta" style="margin-top:0.8rem;">+ additionally learning: HTML5, CSS, JavaScript, React (self-study web development).</p>
281 </div>
282 <div style="margin-top:1.5rem;" class="grid-2">
283   <div class="card">
284     <h3><i class="fas fa-laptop"></i> programming languages</h3>
285     <span class="badge">C++</span><span class="badge">C</span><span class="badge">Python (basic)</span><span class="badge">Assembly (emu8086)</span><span class="badge">SQL</span>
286   </div>
287   <div class="card">
288     <h3><i class="fas fa-tools"></i> developer tools</h3>
289     <span class="badge">VS Code</span><span class="badge">MySQL Workbench</span><span class="badge">Emu8086</span><span class="badge">Git/GitHub</span><span class="badge">Linux (Ubuntu)</span>
290   </div>
291 </div>
292 </section>
293
294 <!-- PROJECTS (university & personal) -->
295 <section class="section">
296   <h2>■ projects</h2>
297   <div class="grid-3">
298     <div class="card">
299       <h3>■ library management system</h3>
300       <p class="light-meta">role: database designer & C++ coder</p>
301       <p><small>Console-based app using C++ (OOP) and MySQL for book records. Implemented issue/return and fine calculation.</small></p>
302       <div class="tech-stack">
303         <span class="badge">C++</span><span class="badge">MySQL</span><span class="badge">VS Code</span>
304       </div>
305       <p><small><i class="fas fa-check-circle" style="color:#2563eb;"></i> outcome: term project, got A grade.</small></p>
306     </div>
307     <div class="card">
308       <h3>■ student result manager</h3>
309       <p class="light-meta">role: solo developer</p>
310       <p><small>Python script that reads CSV, computes grades, and generates result sheets. Used for course assignment.</small></p>
311       <div class="tech-stack">
312         <span class="badge">Python</span><span class="badge">pandas</span><span class="badge">CSV</span>
313       </div>
314       <p><small><i class="fas fa-check-circle" style="color:#2563eb;"></i> outcome: practiced file I/O and data handling.</small></p>
315     </div>
316     <div class="card">
317       <h3>👉 8086 calculator</h3>
318       <p class="light-meta">role: assembly programmer</p>
319       <p><small>Simple 4-function integer calculator using Emu8086. Handles user input and displays result on screen.</small></p>
320       <div class="tech-stack">
321         <span class="badge">Assembly</span><span class="badge">Emu8086</span>
322       </div>

```

```

323
324   <h3><i class="fas fa-check-circle" style="color:#2563eb;"></i> outcome: understood registers & interrupts.</h3>
325 </div>
326 <p style="margin-top:1.5rem;" class="card"><i class="fas fa-globe"></i> <strong>web development journey:</strong> currently building a personal portfolio site (the one you're viewing!) and a small to-do app with HTML/CSS/JS. planning to add React soon.</p>
327 </section>
328
329 <!-- EXPERIENCE (academic projects / volunteer) -->
330 <section class="section">
331   <h2>■ experience & contributions</h2>
332   <div class="card" style="margin-bottom:1rem;">
333     <div class="flex-row"><i class="fas fa-chalkboard-teacher icon"></i></div><div>teaching assistant (volunteer) - UET Jalozai</div>
334     <ul style="margin-left:2rem; list-style-type: none;">
335       <li><small>assist first-year students with C programming and problem solving.</small></li>
336       <li><small>conduct weekly debug sessions and explain basic algorithms.</small></li>
337     </ul>
338   </div>
339   <div class="card">
340     <div class="flex-row"><i class="fas fa-code-branch icon"></i></div><div>open-startup contributor (self)</div>
341     <ul style="margin-left:2rem; list-style-type: none;">
342       <li><small>Contributed to a friend's Github repo (student management system) - bug fixes and documentation.</small></li>
343       <li><small>learning collaborative workflow via pull requests and issues.</small></li>
344     </ul>
345   </div>
346 </section>
347
348 <!-- ACHIEVEMENTS (academic / honor) - years removed -->
349 <section class="section">
350   <h2>■ achievements</h2>
351   <div class="achievement-grid">
352     <span class="blog-link achieve-item"><i class="fas fa-star"></i> SSC A grade (Peshawar Model School)</span>
353     <span class="blog-link achieve-item"><i class="fas fa-star"></i> HSC A grade (Uzair Model)</span>
354     <span class="blog-link achieve-item"><i class="fas fa-trophy"></i> 3.06 CGPA - 4th semester</span>
355     <span class="blog-link achieve-item"><i class="fas fa-award"></i> perfect attendance certificate (UET)</span>
356   </div>
357 </section>
358
359 <!-- BLOG / ARTICLES (communication) -->
360 <section class="section">
361   <h2>■ blog & writings</h2>
362   <div style="display:flex; flex-wrap:wrap; gap:1rem;">
363     <a href="#" class="blog-link"><i class="fab fa-dev"></i> "My first week with 8086 assembly" (dev.to clone)</a>
364     <a href="#" class="blog-link"><i class="fas fa-pen"></i> "Why I chose UET Peshawar for CS" (personal blog)</a>
365     <a href="#" class="blog-link"><i class="fas fa-note-sticky"></i> "Study tips for programming labs" (LinkedIn article)</a>
366   </div>
367   <p class="light-meta" style="margin-top:1rem;">■ I'm building a habit of documenting my learning journey.</p>
368 </section>
369
370 <!-- TESTIMONIALS (teachers/peers) -->
371 <section class="section">
372   <h2>■ testimonials</h2>
373   <div class="grid-2">
374     <div class="testimonial">
375       <p><small>Muhammad is a dedicated and curious student. He asks insightful questions in programming labs and helps classmates understand pointers and memory allocation.</small></p>
376       <p class="testimonial-footer">— Sir Irfan Khan, CS instructor, UET Jalozai</p>

```

```

377     </div>
378     <div class="testimonial">
379       <p>"I worked with Muhammad on a database project. He's organized, writes clean code, and always meets deadlines. A reliable teammate."</p>
380     <div class="testimonial-footer">— Hira Ali, classmate & project partner</div>
381   </div>
382 </div>
383 </section>
384
385 <!-- CONTACT with exact email, LinkedIn, Github and location Banda Nabi, Pabbi, Nowshera -->
386 <section class="section">
387   <h2>contact & profiles</h2>
388   <div class="contact-bar">
389     <div class="contact-info">
390       <i class="fas fa-envelope"></i>
391       <a href="mailto:muhammadkhan321banda@gmail.com">muhammadkhan321banda@gmail.com</a><br>
392       <i class="fab fa-github"></i>
393       <a href="https://github.com/Muhammad-khan-dev" target="_blank">github.com/Muhammad-khan-dev</a><br>
394       <i class="fab fa-linkedin"></i>
395       <a href="https://www.linkedin.com/in/muhammadkhan-mk/" target="_blank">https://www.linkedin.com/in/muhammadkhan-mk/</a>
396     </div>
397     <a href="https://www.linkedin.com/in/muhammadkhan-mk/" target="_blank" class="linkedin-btn"><i class="fab fa-linkedin"></i> LinkedIn profile</a>
398   </div>
399   <p style="margin-top:1rem;"><i class="fas fa-map-pin"></i> <strong>Banda Nabi, Pabbi, Nowshera</strong> · available for remote collaboration.</p>
400 </section>
401
402 <hr>
403 <footer>
404   <span>© 2025 Muhammad Khan — built as personal portfolio (HTML/CSS) · 4th semester CS&IT</span>
405 </footer>
406 </div>
407 <!-- end container -->
408 </body>
409 </html>

```

Muhammad Khan

CS&IT student · 4th semester at UET Peshawar (Jalozai)

I'm passionate about web development and low-level programming. My ambition is to become a full-stack developer and contribute to impactful open-source projects. Currently learning MERN stack while strengthening my C++ and Python skills.

Muhammad Khan
CS Student

education background

matriculation & intermediate

SSC (Science) — Peshawar Model School

Grade: A

HSSC (Pre-Engineering) — Ghazi Model School Pabbi

Grade: A

university (current)

B.Sc. CS & IT (4th semester) — UET Peshawar, Jalozai Campus

CGPA: 3.00 / 4.00

</> Relevant coursework: Data structures, OOP, Database, COAL.

technical skills & software

>_ worked with at university

MySQL </> C </> C++ Python Emu8086

+ additionally learning: HTML5, CSS, JavaScript, React (self-study web development).

programming languages

C++ C Python (basic) Assembly (emu8086) SQL

developer tools

VS Code MySQL Workbench Emu8086 Git/GitHub
Linux (Ubuntu)

projects

library management system

role: database designer & C++ coder

Console-based app using C++ (OOP) and MySQL for book records. Implemented issue/return and fine calculation.

C++ MySQL VS Code

✓ outcome: term project, got A grade.

student result manager

role: solo developer

Python script that reads CSV, computes grades, and generates result sheets. Used for course assignment.

Python pandas CSV

✓ outcome: practiced file I/O and data handling.


8086 calculator

role: assembly programmer

Simple 4-function integer calculator using Emu8086. Handles user input and displays result on screen.

Assembly Emu8086

✓ outcome: understood registers & interrupts.

 **web development journey:** currently building a personal portfolio site (the one you're viewing!) and a small to-do app with HTML/CSS/JS. planning to add React soon.

experience & contributions

teaching assistant (volunteer) · UET Jalozai

- Assist first-year students with C programming and problem solving.
- Conduct weekly debug sessions and explain basic algorithms.

open-startup contributor (self)

- Contributed to a friend's GitHub repo (student management system) — bug fixes and documentation.
- Learning collaborative workflow via pull requests and issues.

🏆 achievements

★ SSC A grade (Peshawar Model School)

★ HSSC A grade (Ghazi Model)

🏆 3.00 CGPA · 4th semester

📅 perfect attendance certificate (UET)

📝 blog & writing

📄 "My first week with 8086 assembly" (dev.to clone)

✍️ "Why I chose UET Peshawar for CS" (personal blog)

📄 "Study tips for programming labs" (LinkedIn article)

📖 I'm building a habit of documenting my learning journey.

🗣️ testimonials

"Muhammad is a dedicated and curious student. He asks insightful questions in programming labs and helps classmates understand pointers and memory allocation."

— Sir Imran Khan, CS instructor, UET Jalozaï

"I worked with Muhammad on a database project. He's organized, writes clean code, and always meets deadlines. A reliable teammate."

— Hira Ali, classmate & project partner

📧 contact & profiles

✉️ muhammadkhan321banda@gmail.com

🐙 github.com/Muhammad-khan-dev

🌐 linkedin.com/in/muhammadkhan-mk

🌐 [LinkedIn profile](#)

📍 Banda Nabi, Pabbi, Nowshera · available for remote collaboration.

Task 2

TO-DO-LIST

- Build a simple to-do list application that allows users to add, edit, and delete tasks.
- You can use HTML, CSS, and JavaScript for the front-end and store the

tasks in local storage or a simple backend server using technologies like Node.js or Flask

```
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>Muhammad Khan · to-do list (local storage)</title>
7    <!-- Font Awesome 6 (free) for icons -->
8    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/font-awesome@6.0.0-beta3/css/all.min.css">
9    <style>
10     * {
11       margin: 0;
12       padding: 0;
13       box-sizing: border-box;
14       font-family: 'Inter', system-ui, -apple-system, BlinkMacSystemFont, 'Segoe UI', Roboto, sans-serif;
15     }
16     body {
17       background: linear-gradient(145deg, #e9f0fc 0%, #f1f7ff 100%);
18       min-height: 100vh;
19       display: flex;
20       justify-content: center;
21       align-items: center;
22       padding: 1.5rem;
23     }
24     .todo-wrapper {
25       max-width: 750px;
26       width: 100%;
27       background: rgba(255,255,255,0.75);
28       backdrop-filter: blur(8px);
29       border-radius: 2.5rem;
30       box-shadow: 0 25px 45px -12px rgba(0,40,100,0.25);
31       border: 1px solid rgba(255,255,255,0.5);
32       overflow: hidden;
33       padding: 2rem 2rem 2.5rem;
34     }
35     /* header */
36     .todo-header {
37       display: flex;
38       align-items: center;
39       gap: 0.75rem;
40       margin-bottom: 2rem;
41     }
42     .todo-header i {
43       font-size: 2rem;
44     }
```

```

43     font-size: 2.2rem;
44     color: #2563eb;
45     background: white;
46     padding: 0.6rem;
47     border-radius: 1.5rem;
48     box-shadow: 0 8px 12px -6px #b0c9ff;
49 }
50 .todo-header h1 {
51     font-size: 2.2rem;
52     font-weight: 650;
53     background: linear-gradient(130deg, #1e293b, #2563eb);
54     -webkit-background-clip: text;
55     -webkit-text-fill-color: transparent;
56     background-clip: text;
57     letter-spacing: -0.02em;
58 }
59 .greeting {
60     margin-bottom: 1.8rem;
61     font-size: 1.2rem;
62     color: #0f172a;
63     display: flex;
64     align-items: center;
65     gap: 0.5rem;
66     background: #dbeafe;
67     padding: 0.8rem 1.5rem;
68     border-radius: 3rem;
69     width: fit-content;
70 }
71 .greeting i {
72     color: #2563eb;
73 }
74 /* add task row */
75 .add-task {
76     display: flex;
77     flex-wrap: wrap;
78     gap: 0.8rem;

```

```

79     gap: 0.8rem;
80     margin-bottom: 2.5rem;
81 }
82 .add-task input {
83     flex: 1 1 250px;
84     padding: 1rem 1.5rem;
85     border: 2px solid white;
86     border-radius: 3rem;
87     font-size: 1.1rem;
88     background: rgba(255,255,255,0.8);
89     backdrop-filter: blur(4px);
90     box-shadow: 0 2px 6px rgba(0,0,0,0.03);
91     outline: none;
92     transition: 0.15s;
93 }
94 .add-task input:focus {
95     border-color: #2563eb;
96     background: white;
97     box-shadow: 0 8px 18px -10px #2563eb;
98 }
99 .add-task button {
100     background: #2563eb;
101     border: none;
102     color: white;
103     padding: 1rem 2.2rem;
104     border-radius: 3rem;
105     font-size: 1.1rem;
106     font-weight: 600;
107     display: flex;
108     align-items: center;
109     gap: 0.5rem;
110     cursor: pointer;
111     transition: 0.15s;

```

```

110     transition: 0.15s;
111     border: 1px solid rgba(255,255,255,0.3);
112     box-shadow: 0 12px 18px -12px #1e4fbb;
113   }
114   .add-task button:hover {
115     background: #1d4ed8;
116     transform: scale(1.02);
117   }
118   /* stats */
119   .stats {
120     display: flex;
121     justify-content: space-between;
122     margin-bottom: 1.2rem;
123     font-weight: 500;
124     color: #334155;
125     background: rgba(255,255,255,0.6);
126     padding: 0.8rem 1.5rem;
127     border-radius: 3rem;
128     backdrop-filter: blur(2px);
129   }
130   .stats span {
131     background: #ffffffb3;
132     padding: 0.2rem 1rem;
133     border-radius: 30px;
134     color: #0f172a;
135   }
136   /* task list */
137   .task-list {
138     list-style: none;
139     display: flex;
140     flex-direction: column;
141     gap: 0.9rem;
142     margin-top: 1rem;

```

```

143     margin-top: 1.5rem;
144     max-height: 400px;
145     overflow-y: auto;
146     padding-right: 0.3rem;
147   }
148   .task-list li {
149     background: white;
150     padding: 0.8rem 1.2rem 0.8rem 1.8rem;
151     border-radius: 3rem;
152     display: flex;
153     align-items: center;
154     justify-content: space-between;
155     gap: 1rem;
156     box-shadow: 0 4px 8px rgba(0,0,0,0.02);
157     border: 1px solid #e2e8f0;
158     transition: 0.15s;
159   }
160   .task-list li:hover {
161     border-color: #a7c8ff;
162     box-shadow: 0 8px 16px -10px #2563eb;
163   }
164   .task-content {
165     display: flex;
166     align-items: center;
167     gap: 1rem;
168     flex: 1;
169   }
170   .task-check {
171     width: 1.4rem;
172     height: 1.4rem;
173     accent-color: #2563eb;
174     cursor: pointer;

```

```

175     .task-text {
176         font-size: 1.2rem;
177         font-weight: 500;
178         color: #0f172a;
179         word-break: break-word;
180         padding-right: 0.5rem;
181     }
182     .completed-task .task-text {
183         text-decoration: line-through;
184         color: #64748b;
185     }
186     .task-actions {
187         display: flex;
188         gap: 0.4rem;
189         align-items: center;
190     }
191     .task-actions button {
192         background: none;
193         border: none;
194         font-size: 1.4rem;
195         cursor: pointer;
196         width: 2.5rem;
197         height: 2.5rem;
198         border-radius: 50%;
199         display: flex;
200         align-items: center;
201         justify-content: center;
202         transition: 0.1s;
203         color: #4b5563;
204     }
205     .edit-btn:hover {
206         background: #e6f0ff;
207         color: #1e4a8b;

```

```

207         color: #1e4a8b;
208     }
209     .delete-btn:hover {
210         background: #fee2e2;
211         color: #b91c1c;
212     }
213     .save-btn {
214         background: #22c55e !important;
215         color: white !important;
216     }
217     .edit-input {
218         font-size: 1.2rem;
219         padding: 0.3rem 1rem;
220         border-radius: 3rem;
221         border: 2px solid #2563eb;
222         outline: none;
223         width: 100%;
224         max-width: 350px;
225     }
226     .empty-message {
227         text-align: center;
228         color: #6b7a93;
229         padding: 2rem;
230         font-size: 1.2rem;
231         background: #f0f7ff;
232         border-radius: 4rem;
233         margin-top: 1rem;
234     }
235     footer {
236         margin-top: 2rem;
237         text-align: center;
238         color: #4b5563;
239         font-size: 0.95rem;

```

```

239     font-size: 0.95rem;
240   }
241   footer i {
242     color: #2563eb;
243   }
244   /* scroll */
245   .task-list::-webkit-scrollbar {
246     width: 6px;
247   }
248   .task-list::-webkit-scrollbar-track {
249     background: #eef2f6;
250     border-radius: 10px;
251   }
252   .task-list::-webkit-scrollbar-thumb {
253     background: #b3c9f0;
254     border-radius: 10px;
255   }
256 </style>
257 </head>
258 <body>
259
260 <div class="todo-wrapper">
261   <!-- header with name -->
262   <div class="todo-header">
263     <i class="fas fa-check-double"></i>
264     <h1>Muhammad's tasks</h1>
265   </div>
266   <!-- personal greeting -->
267   <div class="greeting">
268     <i class="fas fa-map-pin"></i> Banda Nabi, Pabbi • 4th semester UET
269   </div>
270
271   <!-- ADD TASK SECTION -->

```

```

272   <div class="add-task">
273     <input type="text" id="taskInput" placeholder="e.g., finish 8086 lab report ..." autocomplete="off">
274     <button id="addTaskBtn"><i class="fas fa-plus-circle"></i> Add task</button>
275   </div>
276
277   <!-- stats counter -->
278   <div class="stats">
279     <span><i class="fas fa-list"></i> total: <span id="totalTasks">0</span></span>
280     <span><i class="fas fa-check-circle" style="color:#2563eb;"></i> done: <span id="completedTasks">0</span></span>
281   </div>
282
283   <!-- TASK LIST -->
284   <ul class="task-list" id="taskListContainer">
285     <!-- dynamic items will be injected by js -->
286     <li class="empty-message">🌟 no tasks yet – add one above 🌟</li>
287   </ul>
288
289   <footer>
290     <i class="fas fa-database"></i> saved in local storage • edit • delete • check
291   </footer>
292 </div>
293
294 <script>
295   (function() {
296     // ----- data -----
297     let tasks = [];
298
299     // DOM elements
300     const taskInput = document.getElementById('taskInput');
301     const addBtn = document.getElementById('addTaskBtn');
302     const taskListEl = document.getElementById('taskListContainer');
303     const totalSpan = document.getElementById('totalTasks');
304     const completedSpan = document.getElementById('completedTasks');

```

```

305         const completedSpan = document.getElementById('completed-count');
306         // Load from localStorage
307         function loadTasks() {
308             const stored = localStorage.getItem('muhammad_todo');
309             if (stored) {
310                 try {
311                     tasks = JSON.parse(stored);
312                 } catch (e) {
313                     tasks = [];
314                 }
315             } else {
316                 // start with two example tasks (optional)
317                 tasks = [
318                     { id: Date.now() + 1, text: 'review C++ pointers', completed: false },
319                     { id: Date.now() + 2, text: 'push code to GitHub', completed: true },
320                 ];
321             }
322         }
323
324         // Save to localStorage
325         function saveTasks() {
326             localStorage.setItem('muhammad_todo', JSON.stringify(tasks));
327         }
328
329         // render the whole list
330         function render() {
331             if (!taskListEl) return;
332
333             // update counters first
334             totalSpan.innerText = tasks.length;
335             const doneCount = tasks.filter(t => t.completed).length;
336             completedSpan.innerText = doneCount;

```

```

337
338         if (tasks.length === 0) {
339             taskListEl.innerHTML = `<li class="empty-message">📭 your to-do list is empty – add a task</li>`;
340             return;
341         }
342
343         let html = '';
344         tasks.forEach(task => {
345             const taskClass = task.completed ? 'completed-task' : '';
346             const checkedAttr = task.completed ? 'checked' : '';
347
348             html += `
349                 <li data-id="${task.id}">
350                     <div class="task-content">
351                         <input type="checkbox" class="task-check" ${checkedAttr} onchange="toggleTask(${task.id})">
352                         <span class="task-text ${taskClass}">${escapeHTML(task.text)}</span>
353                     </div>
354                     <div class="task-actions">
355                         <button class="edit-btn" onclick="editTask(${task.id})" title="edit"><i class="fas fa-pen"></i></button>
356                         <button class="delete-btn" onclick="deleteTask(${task.id})" title="delete"><i class="fas fa-trash"></i></button>
357                     </div>
358                 </li>
359             `;
360         });
361         taskListEl.innerHTML = html;
362     }
363
364     // small escape to prevent XSS
365     function escapeHTML(str) {
366         return str.replace(/&lt;&gt;"/g, function(m) {
367             if (m === '&') return '&amp;';
368             if (m === '<') return '&lt;';

```

```

368         if (m === '<') return '&lt;';
369         if (m === '>') return '&gt;';
370         if (m === '"') return '&quot;';
371         return m;
372     });
373 }
374
375 // ----- CORE FUNCTIONS (exposed globally for onclick) -----
376 window.toggleTask = function(id) {
377     const task = tasks.find(t => t.id === id);
378     if (task) {
379         task.completed = !task.completed;
380         saveTasks();
381         render();
382     }
383 };
384
385 window.deleteTask = function(id) {
386     tasks = tasks.filter(t => t.id !== id);
387     saveTasks();
388     render();
389 };
390
391 window.editTask = function(id) {
392     const task = tasks.find(t => t.id === id);
393     if (!task) return;
394
395     // find the li element
396     const li = document.querySelector(`li[data-id="${id}"]`);
397     if (!li) return;
398
399     const taskContentDiv = li.querySelector('.task-content');
400     const oldText = task.text;

```

```

401     // replace content with an input + save button
402     taskContentDiv.innerHTML = `
403         <input type="text" id="edit-input-${id}" class="edit-input" value="${escapeHTML(oldText)}" autofocus>
404     `;
405
406     // change action buttons: hide edit, show a save button (or repurpose)
407     const actionsDiv = li.querySelector('.task-actions');
408     actionsDiv.innerHTML = `
409         <button class="save-btn" onclick="saveEdit(${id})" title="save"><i class="fas fa-check"></i></button>
410         <button class="delete-btn" onclick="deleteTask(${id})" title="delete"><i class="fas fa-trash"></i></button>
411     `;
412 };
413
414
415 window.saveEdit = function(id) {
416     const inputField = document.getElementById(`edit-input-${id}`);
417     if (!inputField) return;
418
419     const newText = inputField.value.trim();
420     if (newText === '') {
421         alert('task cannot be empty');
422         return;
423     }
424
425     const task = tasks.find(t => t.id === id);
426     if (task) {
427         task.text = newText;
428         saveTasks();
429         render();
430     }
431 };
432

```

```

433     // add new task
434     function addNewTask() {
435         const text = taskInput.value.trim();
436         if (text === '') {
437             alert('please write something before adding');
438             return;
439         }
440
441         const newTask = {
442             id: Date.now() + Math.floor(Math.random()*1000),
443             text: text,
444             completed: false
445         };
446         tasks.push(newTask);
447         saveTasks();
448         render();
449         taskInput.value = ''; // clear input
450         taskInput.focus();
451     }
452
453     // event listener for add button
454     addBtn.addEventListener('click', addNewTask);
455     taskInput.addEventListener('keypress', (e) => {
456         if (e.key === 'Enter') addNewTask();
457     });
458
459     // initialise
460     loadTasks();
461     render();
462
463     // If the empty message is not needed, we ensure consistency
464     // Also handle potential undefined calls
465     // Expose functions globally (already with window)

```


```

466     })();
467 </script>
468
469 <!-- ensure functions are globally reachable even after rerender (they are attached to window) -->
470 </body>
471 </html>

```





Muhammad's tasks

 Banda Nabi, Pabbi · 4th semester UET

e.g., finish 8086 lab report ...

 Add task

 total: 2

 done: 1

☐ review C++ pointers



☒ push code to GitHub



 saved in local storage · edit · delete · check