

Front-End UI/UX Mini Project

1. Title Page

- Project Title: “UNIVERSITY DEPARTMENT INFO PAGE”

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- Date of Submission: 13/08/2025

2. Abstract

This project is a web-based information page developed for a specific university department (e.g., Computer Science). It aims to present structured academic content in a professional yet user-friendly layout. It uses only HTML and CSS

to create interactivity and adopts a design consistent with institutional branding.

3. Objectives

- **To structure academic content in a formal yet approachable layout.**
- **To incorporate CSS-only interactivity such as accordions, tabular data, and icon-based navigation.**
- **To apply consistent design systems that reflect institutional branding.**

4. Scope of the Project

- **Display faculty bios with accordion expanders.**
- **Create a course catalog using a responsive table with hover effects.**
- **Showcase research areas through icon-based navigational sections.**
- **Design a layout that is both academic and visually engaging.**

Boundaries: Server-side logic, backend databases, interactive scripting, or third-party integration features are explicitly excluded from this project.

5. Tools & Technologies Used

| <i>Tool/Technology</i> | <i>Purpose</i> |
|------------------------|----------------|
| | |

| | |
|----------------|-------------------------------|
| HTML5 | Markup and content structure |
| CSS3 | Styling and layout management |
| VS Code | Code editor |
| Chrome DevTool | Testing and debugging |

6. HTML Structure Overview

• *The structure includes semantic elements like <section>, <article>, and <nav> to organize content into clearly defined areas: Faculty Spotlight, Course Catalog, and Research Areas. Accordions are implemented using checkboxes and labels for toggling visibility.*

7. CSS Styling Strategy

- *Responsive grid and flexbox layout.*
- *Academic color scheme and typography.*
- *Accordion interactivity using :checked pseudo-class.*
- *Hover effects on tables for better UX.*
- *Consistent spacing, font styling, and visual hierarchy.*

8. Key Feature

| <i>Feature</i> | <i>Description</i> |
|-------------------------------|--|
| Responsive Design | Adapts seamlessly to all screen size |
| Smooth Navigation | Fixed top nav with anchor link |
| Project Cards | Flex-based layout |
| Contact Form (non-functional) | Placeholder layout for inputs and button |
| Accessible Fonts & Color | High contrast and readable typography |

9. Challenges Faced & Solution

| <i>Challenge</i> | <i>Solution</i> |
|--|--|
| Implementing accordion with only CSS | <u>Used :checked selector and sibling combinators.</u> |
| Maintaining a formal design with approachability | Balanced typography, spacing, and visual cues. |
| Making complex tables responsive | Used overflow, media queries, and flexible layouts. |

10. Outcome

The resulting website presents a structured and visually coherent department info page. It effectively demonstrates how CSS-only solutions can be used to deliver interactive and branded academic content.

11. Future Enhancements

- *Add JavaScript for improved interactivity.*
- *Backend integration for dynamic course and faculty data.*
- *Search/filter options in course catalog.*
- *Theming options for multiple departments.*
- *Accessibility improvements (ARIA roles, keyboard navigation).*

12. Sample Code-HTML Code

```

index.html > html > body > header.header > div.container > div.header-content > div.logo > h1
1  <!DOCTYPE html>
2  <html lang="en">
3
4  <head>
5    <meta charset="UTF-8">
6    <meta name="viewport" content="width=device-width, initial-scale=1.0">
7    <title>Computer Science Department - University</title>
8    <link rel="stylesheet" href="style.css">
9    <link href="https://cdn.jsdelivr.net/npm/font-awesome@6.0.0/css/all.min.css" rel="stylesheet">
10 </head>
11
12 <body>
13   <header class="header">
14     <div class="container">
15       <div class="header-content">
16         <div class="logo">
17           <i class="fas fa-graduation-cap"></i>
18           <h1>Computer Science Department</h1>
19         </div>
20         <nav class="nav">
21           <a href="#faculty">Faculty</a>
22           <a href="#courses">Courses</a>
23           <a href="#research">Research</a>
24           <a href="#contact">Contact</a>
25         </nav>
26       </div>
27     </div>
28   </header>
29
30   <main>
31     <section class="hero">
32       <div class="container">
33         <div class="hero-content">
34           <h2>Welcome to Our Department</h2>
35           <p>Advancing knowledge through innovative research and exceptional education in computer science</p>
36         </div>
37         
38       </div>
39     </section>

```

```

40   </div>
41 </section>
42
43 <section id="faculty" class="faculty-section">
44   <div class="container">
45     <h2><i class="fas fa-users"></i> Faculty Spotlight</h2>
46     <div class="faculty-grid">
47       <div class="faculty-card">
48         <div class="faculty-header" onclick="toggleAccordion(this)">
49           
50           <div class="faculty-info">
51             <h3>Dr. Sarah Johnson</h3>
52             <p>Professor of Artificial Intelligence</p>
53           </div>
54           <i class="fas fa-chevron-down accordion-icon"></i>
55         </div>
56         <div class="faculty-content">
57           <p><strong>Research Areas:</strong> Machine Learning, Neural Networks, Computer Vision</p>
58           <p><strong>Education:</strong> Ph.D. in Computer Science, MIT</p>
59           <p><strong>Publications:</strong> 50+ peer-reviewed papers in top-tier conferences</p>
60         </div>
61       </div>
62     </div>
63
64     <div class="faculty-card">
65       <div class="faculty-header" onclick="toggleAccordion(this)">
66         
67         <div class="faculty-info">
68           <h3>Dr. Michael Chen</h3>
69           <p>Associate Professor of Software Engineering</p>
70         </div>
71         <i class="fas fa-chevron-down accordion-icon"></i>
72       </div>
73     </div>

```

```

73         </div>
74         <div class="faculty-content">
75             <p><strong>Research Areas:</strong> Software Architecture, Distributed Systems, Cloud
76               Computing</p>
77             <p><strong>Education:</strong> Ph.D. in Computer Science, Stanford University</p>
78             <p><strong>Industry Experience:</strong> Former Senior Engineer at Google</p>
79         </div>
80     </div>
81
82     <div class="faculty-card">
83         <div class="faculty-header" onclick="toggleAccordion(this)">
84             
86             <div class="faculty-info">
87                 <h3>Dr. Emily Rodriguez</h3>
88                 <p>Assistant Professor of Cybersecurity</p>
89             </div>
90             <i class="fas fa-chevron-down accordion-icon"></i>
91         </div>
92         <div class="faculty-content">
93             <p><strong>Research Areas:</strong> Network Security, Cryptography, Privacy Protection</p>
94             <p><strong>Education:</strong> Ph.D. in Computer Science, Carnegie Mellon University</p>
95             <p><strong>Awards:</strong> NSF CAREER Award Recipient</p>
96         </div>
97     </div>
98 </div>
99 </div>
100 </section>
101
102 <section id="courses" class="courses-section">
103     <div class="container">
104         <h2><i class="fas fa-book"></i> Course Catalog</h2>
105         <div class="table-container">
106             <table class="courses-table">

```

```

107         <thead>
108             <tr>
109                 <th>Course Code</th>
110                 <th>Course Title</th>
111                 <th>Credits</th>
112                 <th>Prerequisites</th>
113                 <th>Instructor</th>
114             </tr>
115         </thead>
116         <tbody>
117             <tr>
118                 <td>CS 101</td>
119                 <td>Introduction to Programming</td>
120                 <td>3</td>
121                 <td>None</td>
122                 <td>Dr. Johnson</td>
123             </tr>
124             <tr>
125                 <td>CS 201</td>
126                 <td>Data Structures & Algorithms</td>
127                 <td>4</td>
128                 <td>CS 101</td>
129                 <td>Dr. Chen</td>
130             </tr>
131             <tr>
132                 <td>CS 301</td>
133                 <td>Database Systems</td>
134                 <td>3</td>
135                 <td>CS 201</td>
136                 <td>Dr. Rodriguez</td>
137             </tr>
138             <tr>
139                 <td>CS 401</td>

```

```

140         <td>Machine Learning</td>
141         <td>4</td>
142         <td>CS 201, MATH 220</td>
143         <td>Dr. Johnson</td>
144     </tr>
145     <tr>
146         <td>CS 450</td>
147         <td>Software Engineering</td>
148         <td>3</td>
149         <td>CS 301</td>
150         <td>Dr. Chen</td>
151     </tr>
152     <tr>
153         <td>CS 480</td>
154         <td>Cybersecurity</td>
155         <td>3</td>
156         <td>CS 301</td>
157         <td>Dr. Rodriguez</td>
158     </tr>
159 </tbody>
160 </table>
161 </div>
162 </div>
163 </section>
164
165 <section id="research" class="research-section">
166     <div class="container">
167         <h2><i class="fas fa-flask"></i> Research Areas</h2>
168         <div class="research-grid">
169             <div class="research-card">
170                 <div class="research-icon">
171                     <i class="fas fa-brain"></i>
172                 </div>
173                 <h3>Artificial Intelligence</h3>

```

```

174                 <p>Cutting-edge research in machine learning, deep learning, and neural networks to solve
175                     complex real-world problems.</p>
176             </div>
177             <div class="research-card">
178                 <div class="research-icon">
179                     <i class="fas fa-shield-alt"></i>
180                 </div>
181                 <h3>Cybersecurity</h3>
182                 <p>Advanced security protocols, cryptography, and privacy protection systems for the digital
183                     age.</p>
184             </div>
185             <div class="research-card">
186                 <div class="research-icon">
187                     <i class="fas fa-code"></i>
188                 </div>
189                 <h3>Software Engineering</h3>
190                 <p>Innovative approaches to software development, testing, and maintenance for large-scale
191                     systems.</p>
192             </div>
193             <div class="research-card">
194                 <div class="research-icon">
195                     <i class="fas fa-database"></i>
196                 </div>
197                 <h3>Data Science</h3>
198                 <p>Big data analytics, data mining, and statistical modeling to extract insights from comple
199                     datasets.</p>
200             </div>
201         </div>
202     </div>
203 </section>
204 </main>
205
206 <footer id="contact" class="footer">

```

```

206     <footer id="contact" class="footer">
207         <div class="container">
208             <div class="footer-content">
209                 <div class="footer-section">
210                     <h3><i class="fas fa-map-marker-alt"></i> Contact Information</h3>
211                     <p>Computer Science Department</p>
212                     <p>University Building, Room 301</p>
213                     <p>123 University Ave, City, State 12345</p>
214                 </div>
215                 <div class="footer-section">
216                     <h3><i class="fas fa-phone"></i> Get in Touch</h3>
217                     <p>Phone: 8086204350</p>
218                     <p>Email: cs-dept@university.edu</p>
219                     <p>Fax: 8086520435</p>
220                 </div>
221                 <div class="footer-section">
222                     <h3><i class="fas fa-clock"></i> Office Hours</h3>
223                     <p>Monday - Friday: 9:00 AM - 5:00 PM</p>
224                     <p>Saturday: 10:00 AM - 2:00 PM</p>
225                     <p>Sunday: Closed</p>
226                 </div>
227             </div>
228             <div class="footer-bottom">
229                 <p>&copy; 2024 University Computer Science Department. All rights reserved.</p>
230             </div>
231         </div>
232     </footer>
233
234     <script src="script.js"></script>
235 </body>
236
237 </html>

```

CSS Code-

```

# style.css > body
1  * {
2      margin: 0;
3      padding: 0;
4      box-sizing: border-box;
5  }
6
7  body {
8      font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
9      line-height: 1.6;
10     color: #333;
11     background-color: #f8f9fa;
12 }
13
14 .container {
15     max-width: 1200px;
16     margin: 0 auto;
17     padding: 0 20px;
18 }
19
20 /* Header Styles */
21 .header {
22     background: linear-gradient(135deg, #1e3c72 0%, #2a5298 100%);
23     color: white;
24     padding: 1rem 0;
25     box-shadow: 0 2px 10px rgba(0,0,0,0.1);
26 }
27
28 .header-content {
29     display: flex;
30     justify-content: space-between;
31     align-items: center;
32     flex-wrap: wrap;
33 }
34
35 .logo {
36     display: flex;
37     align-items: center;
38     gap: 15px;
39 }

```



```

41 .logo i {
42   font-size: 2rem;
43   color: #ffd700;
44 }
45
46 .logo h1 {
47   font-size: 1.8rem;
48   font-weight: 600;
49 }
50
51 .nav {
52   display: flex;
53   gap: 30px;
54 }
55
56 .nav a {
57   color: white;
58   text-decoration: none;
59   font-weight: 500;
60   padding: 8px 16px;
61   border-radius: 5px;
62   transition: background-color 0.3s ease;
63 }
64
65 .nav a:hover {
66   background-color: rgba(255,255,255,0.2);
67 }
68
69 /* Hero Section */
70 .hero {
71   background: linear-gradient(135deg, #667eea 0%, #764ba2 100%);
72   color: white;
73   padding: 4rem 0;
74   text-align: center;
75 }
76
77 .hero-content h2 {
78   font-size: 3rem;
79   margin-bottom: 1rem;

```

```

79   margin-bottom: 1rem;
80   font-weight: 700;
81 }
82
83 .hero-content p {
84   font-size: 1.2rem;
85   margin-bottom: 2rem;
86   max-width: 600px;
87   margin-left: auto;
88   margin-right: auto;
89 }
90
91 .hero-image {
92   max-width: 100%;
93   height: 300px;
94   object-fit: cover;
95   border-radius: 15px;
96   box-shadow: 0 10px 30px rgba(0,0,0,0.3);
97 }
98
99 /* Faculty Section */
100 .faculty-section {
101   padding: 4rem 0;
102   background-color: white;
103 }
104
105 .faculty-section h2 {
106   text-align: center;
107   font-size: 2.5rem;
108   margin-bottom: 3rem;
109   color: #2c3e50;
110 }
111
112 .faculty-section h2 i {
113   color: #3498db;
114   margin-right: 15px;
115 }

```

```

79     margin-bottom: 1rem;
80     font-weight: 700;
81 }
82
83 .hero-content p {
84     font-size: 1.2rem;
85     margin-bottom: 2rem;
86     max-width: 600px;
87     margin-left: auto;
88     margin-right: auto;
89 }
90
91 .hero-image {
92     max-width: 100%;
93     height: 300px;
94     object-fit: cover;
95     border-radius: 15px;
96     box-shadow: 0 10px 30px rgba(0,0,0,0.3);
97 }
98
99 /* Faculty Section */
100 .faculty-section {
101     padding: 4rem 0;
102     background-color: white;
103 }
104
105 .faculty-section h2 {
106     text-align: center;
107     font-size: 2.5rem;
108     margin-bottom: 3rem;
109     color: #2c3e50;
110 }
111
112 .faculty-section h2 i {
113     color: #3498db;
114     margin-right: 15px;
115 }

```

```

116
117 .faculty-grid {
118     display: grid;
119     grid-template-columns: repeat(auto-fit, minmax(350px, 1fr));
120     gap: 2rem;
121 }
122
123 .faculty-card {
124     background: white;
125     border-radius: 15px;
126     box-shadow: 0 5px 20px rgba(0,0,0,0.1);
127     overflow: hidden;
128     transition: transform 0.3s ease, box-shadow 0.3s ease;
129 }
130
131 .faculty-card:hover {
132     transform: translateY(-5px);
133     box-shadow: 0 10px 30px rgba(0,0,0,0.15);
134 }
135
136 .faculty-header {
137     display: flex;
138     align-items: center;
139     padding: 1.5rem;
140     cursor: pointer;
141     background: linear-gradient(135deg, #f8f9fa 0%, #e9ecef 100%);
142 }
143
144 .faculty-header img {
145     width: 80px;
146     height: 80px;
147     border-radius: 50%;
148     object-fit: cover;
149     margin-right: 1rem;
150 }
151
152 .faculty-info h3 {
153     color: #2c3e50;

```

```

154     font-size: 1.3rem;
155     margin-bottom: 0.5rem;
156 }
157
158 .faculty-info p {
159     color: #7f8c8d;
160     font-weight: 500;
161 }
162
163 .accordion-icon {
164     margin-left: auto;
165     color: #3498db;
166     transition: transform 0.3s ease;
167 }
168
169 .faculty-content {
170     padding: 0 1.5rem;
171     max-height: 0;
172     overflow: hidden;
173     transition: max-height 0.3s ease, padding 0.3s ease;
174 }
175
176 .faculty-content.active {
177     max-height: 300px;
178     padding: 1.5rem;
179 }
180
181 .faculty-content p {
182     margin-bottom: 1rem;
183     color: #555;
184 }
185
186 .faculty-content strong {
187     color: #2c3e50;
188 }
189
190 /* Courses Section */

```

```

191 .courses-section {
192     padding: 4rem 0;
193     background: linear-gradient(135deg, #f8f9fa 0%, #e9ecef 100%);
194 }
195
196 .courses-section h2 {
197     text-align: center;
198     font-size: 2.5rem;
199     margin-bottom: 3rem;
200     color: #2c3e50;
201 }
202
203 .courses-section h2 i {
204     color: #e74c3c;
205     margin-right: 15px;
206 }
207
208 .table-container {
209     background: white;
210     border-radius: 15px;
211     overflow: hidden;
212     box-shadow: 0 5px 20px rgba(0,0,0,0.1);
213 }
214
215 .courses-table {
216     width: 100%;
217     border-collapse: collapse;
218 }
219
220 .courses-table th {
221     background: linear-gradient(135deg, #34495e 0%, #2c3e50 100%);
222     color: white;
223     padding: 1rem;
224     text-align: left;
225     font-weight: 600;
226 }
227

```

```

228 .courses-table td {
229     padding: 1rem;
230     border-bottom: 1px solid #ecf0f1;
231 }
232
233 .courses-table tr:hover {
234     background-color: #f8f9fa;
235 }
236
237 .courses-table tr:last-child td {
238     border-bottom: none;
239 }
240
241 /* Research Section */
242 .research-section {
243     padding: 4rem 0;
244     background-color: white;
245 }
246
247 .research-section h2 {
248     text-align: center;
249     font-size: 2.5rem;
250     margin-bottom: 3rem;
251     color: #2c3e50;
252 }
253
254 .research-section h2 i {
255     color: #9b59b6;
256     margin-right: 15px;
257 }
258
259 .research-grid {
260     display: grid;
261     grid-template-columns: repeat(auto-fit, minmax(280px, 1fr));
262     gap: 2rem;
263 }
264

```

```

265 .research-card {
266     background: white;
267     padding: 2rem;
268     border-radius: 15px;
269     text-align: center;
270     box-shadow: 0 5px 20px rgba(0,0,0,0.1);
271     transition: transform 0.3s ease, box-shadow 0.3s ease;
272 }
273
274 .research-card:hover {
275     transform: translateY(-5px);
276     box-shadow: 0 10px 30px rgba(0,0,0,0.15);
277 }
278
279 .research-icon {
280     width: 80px;
281     height: 80px;
282     margin: 0 auto 1.5rem;
283     background: linear-gradient(135deg, #667eea 0%, #764ba2 100%);
284     border-radius: 50%;
285     display: flex;
286     align-items: center;
287     justify-content: center;
288 }
289
290 .research-icon i {
291     font-size: 2rem;
292     color: white;
293 }
294
295 .research-card h3 {
296     color: #2c3e50;
297     font-size: 1.5rem;
298     margin-bottom: 1rem;
299 }
300

```

```

301 .research-card p {
302     color: #7f8c8d;
303     line-height: 1.6;
304 }
305
306 /* Footer */
307 .footer {
308     background: linear-gradient(135deg, #2c3e50 0%, #34495e 100%);
309     color: white;
310     padding: 3rem 0 1rem;
311 }
312
313 .footer-content {
314     display: grid;
315     grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));
316     gap: 2rem;
317     margin-bottom: 2rem;
318 }
319
320 .footer-section h3 {
321     margin-bottom: 1rem;
322     color: #ffd700;
323 }
324
325 .footer-section h3 i {
326     margin-right: 10px;
327 }
328
329 .footer-section p {
330     margin-bottom: 0.5rem;
331     color: #bdc3c7;
332 }
333
334 .footer-bottom {
335     text-align: center;
336     padding-top: 2rem;
337     border-top: 1px solid #34495e;
338     color: #95a5a6;
339 }

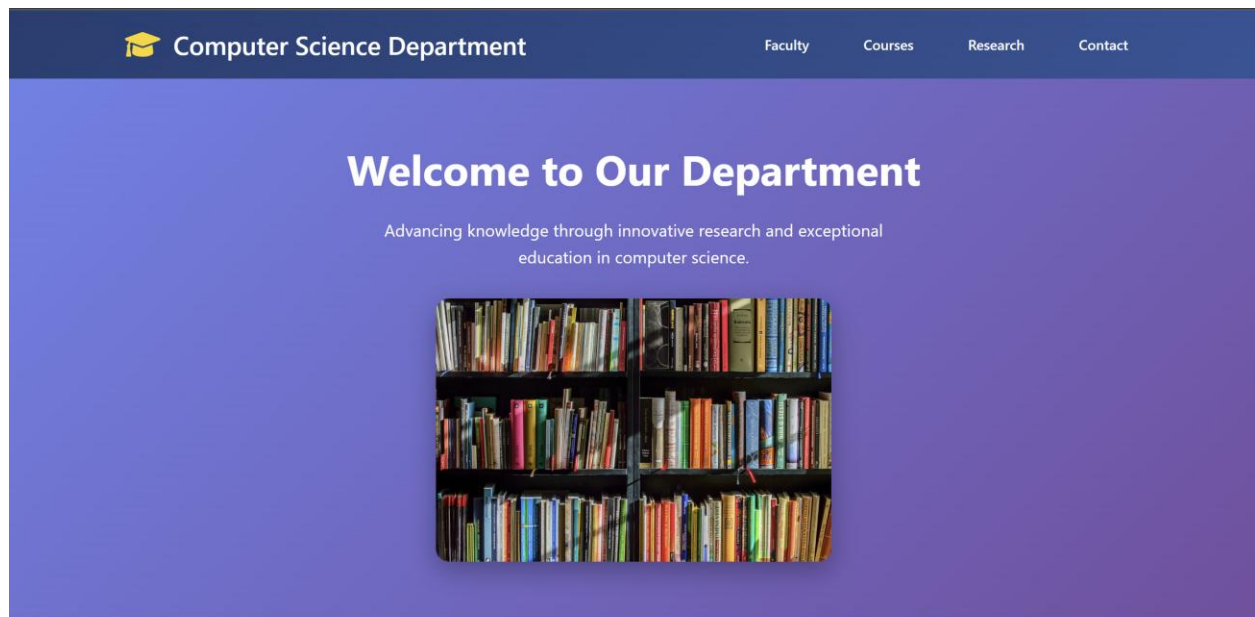
```

```

340
341 /* Responsive Design */
342 @media (max-width: 768px) {
343     .header-content {
344         flex-direction: column;
345         gap: 1rem;
346     }
347
348     .nav {
349         gap: 15px;
350     }

```

13. Screenshots of Final Output

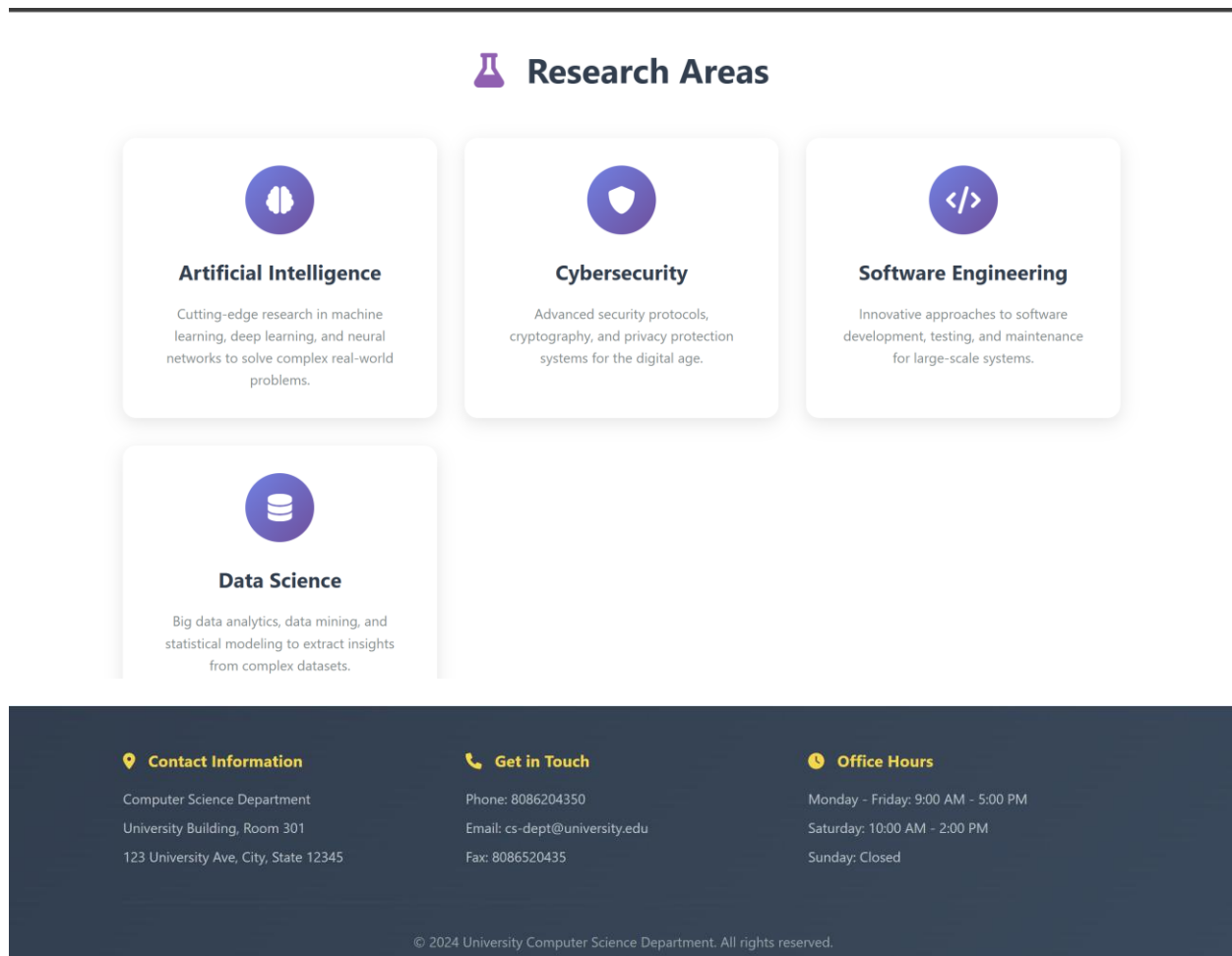


Faculty Spotlight



Course Catalog

| Course Code | Course Title | Credits | Prerequisites | Instructor |
|-------------|------------------------------|---------|------------------|---------------|
| CS 101 | Introduction to Programming | 3 | None | Dr. Johnson |
| CS 201 | Data Structures & Algorithms | 4 | CS 101 | Dr. Chen |
| CS 301 | Database Systems | 3 | CS 201 | Dr. Rodriguez |
| CS 401 | Machine Learning | 4 | CS 201, MATH 220 | Dr. Johnson |
| CS 450 | Software Engineering | 3 | CS 301 | Dr. Chen |
| CS 480 | Cybersecurity | 3 | CS 301 | Dr. Rodriguez |



11. Conclusion

This project successfully showcases how academic information can be structured and styled using HTML and CSS with minimal JavaScript. It emphasizes the potential of CSS-only design patterns in creating interactive, branded educational web pages.

12. References

1. *MDN Web Docs – HTML & CSS*
2. *W3Schools – CSS Accordions & Tables*
3. *CSS Tricks – Accordion Techniques*

