



FACULTY OF COMPUTER SCIENCE AND MATHEMATICS

WEB-BASED INTERFACE DESIGN

CSF3133

SEMESTER 1 SESSION 2025/2026

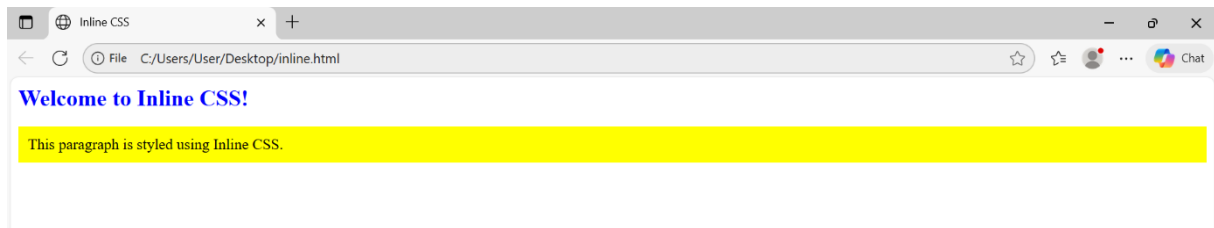
**BACHELOR OF COMPUTER SCIENCE (SOFTWARE ENGINEERING) WITH
HONOURS**

LAB MODULE 5

NAME	NO. MATRIC
NUR ALIYA FARHANI BINTI MOHD NASRI	S75663

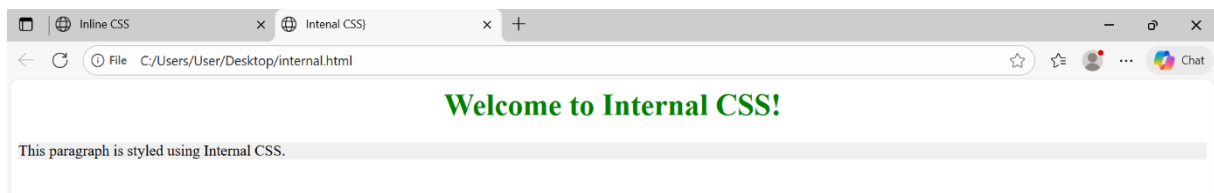
5.3 Inline CSS

Output:



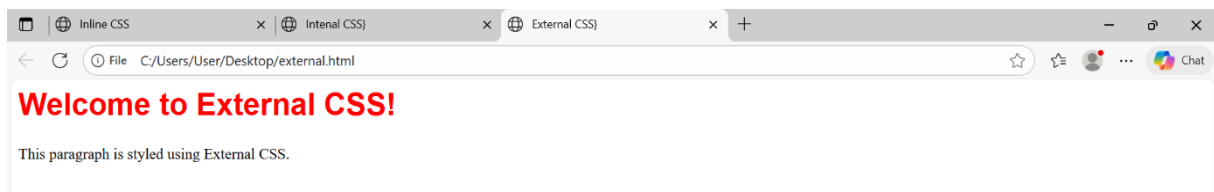
5.4 Internal CSS

Output:



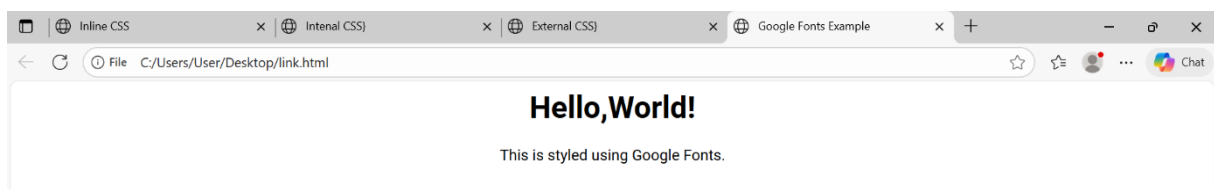
5.5 External CSS

Output:



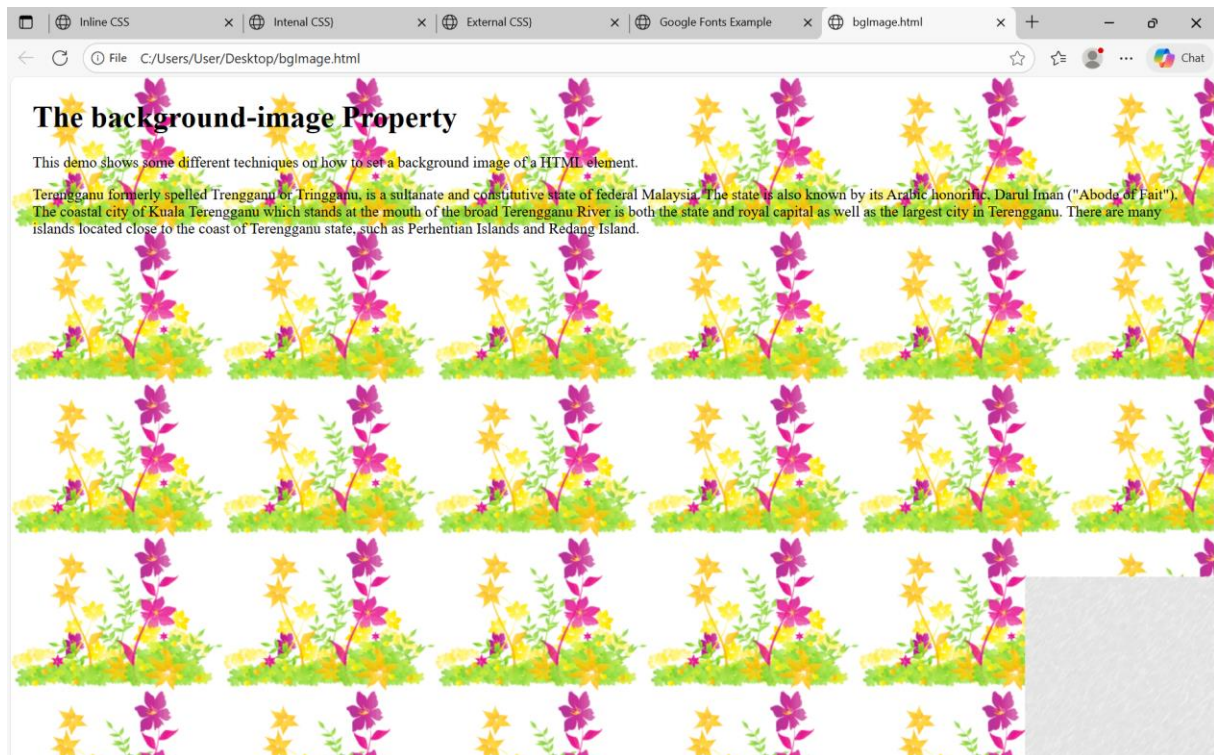
5.6 Link to file CSS

Output:



5.7 CSS Backgrounds

Output:



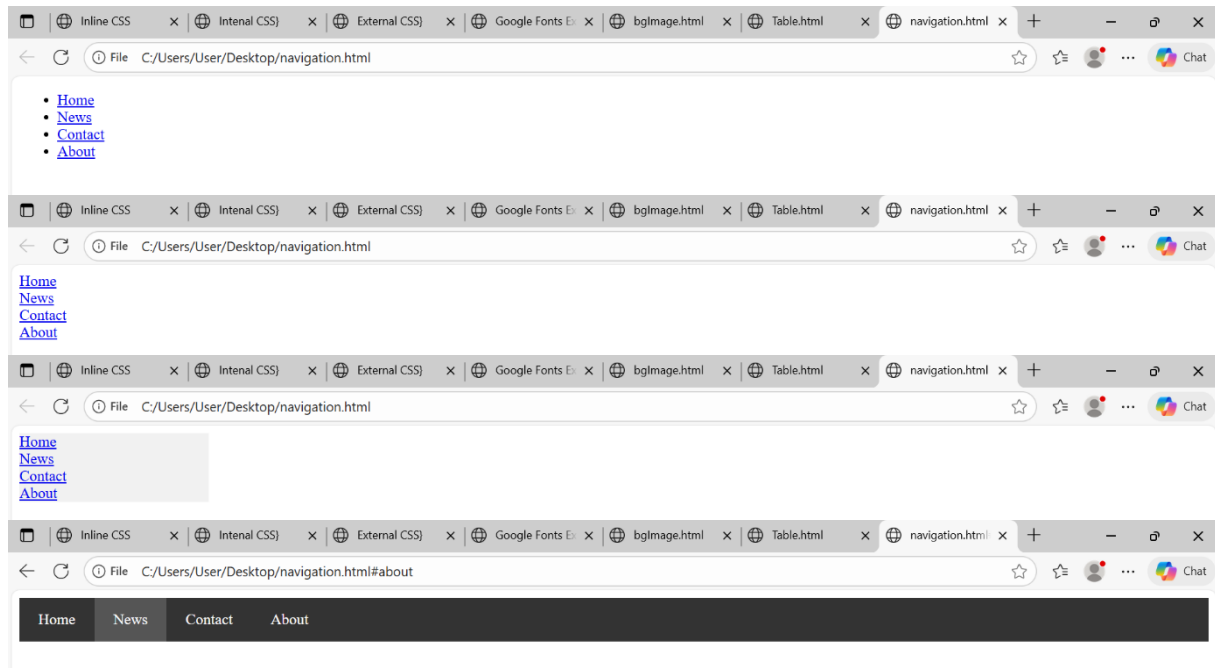
5.8 CSS Table

Output:

COMPANY	CONTACT	COUNTRY
Alfreds Futterkiste	Maria Anders	Germany
Ernst Handel	Roland Mendel	Austria
Island Trasing	Helen Bennett	Italy

5.9 CSS Navigation Bar

Output:



5.10 Lab Exercise 5

Source Code:

umt.html

```
C:\Users\User\Desktop\umt.html - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
inline.html internal.html style.css bgImage.html external.html link.html table.html navigation.html umt.html umt.css
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" />
6 <title>Universiti Malaysia Terengganu</title>
7
8 <!-- Google Font -->
9 <link href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600;700&display=swap" rel="stylesheet">
10
11 <!-- External CSS -->
12 <link rel="stylesheet" href="umt.css">
13 </head>
14 <body>
15 <!-- HEADER -->
16 <header class="site-header">
17 <div class="container header-inner">
18 <div class="brand">
19 
20 <div>
21 <h1>Universiti Malaysia Terengganu</h1>
22 <p class="subtitle">Centre of Excellence in Marine & Environmental Studies</p>
23 </div>
24 </div>
25
26 <button id="mobileMenuBtn" class="mobile-menu-btn" aria-label="Open menu">≡</button>
27 </div>
28 </header>
29
30 <!-- NAVIGATION -->
31 <nav class="main-nav" aria-label="Main navigation">
32 <div class="container">
33 <ul class="nav-list" id="navList">
34 <li class="nav-item has-sub">
35 <a href="#" class="nav-link">ABOUT UMT </a>
36 <ul class="sub-menu">
37 <li><a href="#history">History</a></li>
38 <li><a href="#vision">Vision & Mission</a></li>
39 <li><a href="#leadership">Leadership</a></li>
40 </ul>
41 </li>
42
43 <li class="nav-item has-sub">
44 <a href="#" class="nav-link">STUDY </a>
45 <ul class="sub-menu">
46 <li><a href="#undergrad">Undergraduate</a></li>
47 <li><a href="#postgrad">Postgraduate</a></li>
48 <li><a href="#intl">International Students</a></li>
49 </ul>
50 </li>
51
52 <li class="nav-item has-sub">
53 <a href="#" class="nav-link">RESEARCH </a>
54 <ul class="sub-menu">
55 <li><a href="#institutes">Institutes</a></li>
56 <li><a href="#pubs">Publications</a></li>
57 <li><a href="#innovation">Innovation</a></li>
58 </ul>
59 </li>
60
61 <li class="nav-item has-sub">
62 <a href="#" class="nav-link">CAMPUS LIFE </a>
63 <ul class="sub-menu">
64 <li><a href="#hostel">Hostel</a></li>
65 <li><a href="#clubs">Clubs</a></li>
66 <li><a href="#events">Events</a></li>
67 </ul>
68 </li>
69
70 <li class="nav-item"><a href="#contact" class="nav-link">CONTACT</a></li>
71 </ul>
72 </div>
73 </nav>
74
75 <!-- SLIDER -->
76 <section class="slider-section" aria-label="Image slider">
77 <div class="slider container" id="slider">
78 <div class="slides">
79 <div class="slide"></div>
80 <div class="slide"></div>
81 <div class="slide"></div>
82 </div>
83 </div>
84 </section>
85 </body>
86 </html>
```

```
CAUsers\User\Desktop\umt.html - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
inline.html internal.html style.css bgImage.html external.html link.html table.html navigation.html umt.html umt.css
73 </nav>
74
75 <!-- SLIDER -->
76 <section class="slider-section" aria-label="Image slider">
77 <div class="slider-container" id="slider">
78 <div class="slides">
79 <div class="slide"></div>
80 <div class="slide"></div>
81 <div class="slide"></div>
82 </div>
83
84 <button class="slider-btn prev" aria-label="Previous slide">&#10094;</button>
85 <button class="slider-btn next" aria-label="Next slide">&#10095;</button>
86
87 <div class="dots" id="dots"></div>
88 </div>
89 </section>
90
91 <!-- MAIN CONTENT -->
92 <main class="container content">
93 <section id="about">
94 <article>
95 <h2>About Universiti Malaysia Terengganu (UMT)</h2>
96 <p>
97 Universiti Malaysia Terengganu (UMT) is a public university located in Kuala Nerus, Terengganu, Malaysia.
98 It was initially established as the Centre for Fisheries and Marine Science of Universiti Putra Malaysia and later evolved
99 into an independent university with strong emphasis on marine science and environmental studies.
100 </p>
101
102 <p>
103 UMT offers a wide range of undergraduate and postgraduate programs in marine-related fields, environmental science,
104 food technology, engineering and social sciences. The university is actively involved in research, community engagement,
105 and international collaborations.
106 </p>
107 </article>
108 </section>
109
110 <section id="faculties" class="table-wrap">
111 <h3>UMT Main Faculties</h3>
112 <table class="styled-table" aria-describedby="faculty-list">
113 <thead>
114 <tr>
```

```
91 <!-- MAIN CONTENT -->
92 <main class="container content">
93 <section id="about">
94 <article>
95 <h2>About Universiti Malaysia Terengganu (UMT)</h2>
96 <p>
97 Universiti Malaysia Terengganu (UMT) is a public university located in Kuala Nerus, Terengganu, Malaysia.
98 It was initially established as the Centre for Fisheries and Marine Science of Universiti Putra Malaysia and later evolved
99 into an independent university with strong emphasis on marine science and environmental studies.
100 </p>
101
102 <p>
103 UMT offers a wide range of undergraduate and postgraduate programs in marine-related fields, environmental science,
104 food technology, engineering and social sciences. The university is actively involved in research, community engagement,
105 and international collaborations.
106 </p>
107 </article>
108 </section>
109
110 <section id="faculties" class="table-wrap">
111 <h3>UMT Main Faculties</h3>
112 <table class="styled-table" aria-describedby="faculty-list">
113 <thead>
114 <tr>
115 <th>Faculty</th>
116 <th>Programs</th>
117 <th>Focus Area</th>
118 </tr>
119 </thead>
120 <tbody>
121 <tr><td>Faculty of Science and Marine Environment</td><td>BSc / MSc / PhD</td><td>Marine Biology, Oceanography</td></tr>
122 <tr><td>Faculty of Fisheries and Food Science</td><td>BSc / MSc</td><td>Aquaculture, Fishery Management</td></tr>
123 <tr><td>Faculty of Ocean Engineering Technology</td><td>BEng</td><td>Naval Architecture, Marine Engineering</td></tr>
124 <tr><td>Faculty of Computer Science and Mathematics</td><td>BSc</td><td>Software Engineering, Mobile Computing, Data Analytics, Mathematics</td></tr>
125 <tr><td>Faculty of Maritime Studies</td><td>BSc</td><td>Marine and Maritime Industry</td></tr>
126 <tr><td>Faculty of Business, Economics and Social Development</td><td>BSc</td><td>Business Studies, Economics, Management, Finance, Account
```

```
CAUsers\User\Desktop\umt.html - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
inline.html internal.html style.css bgImage.html external.html link.html table.html navigation.html umt.html umt.css

130 </main>
131
132 <!-- FOOTER -->
133 <footer class="site-footer">
134 <div class="container">
135 <p>© 2025 Universiti Malaysia Terengganu. All rights reserved.</p>
136 </div>
137 </footer>
138
139 <!-- SCRIPTS: slider + mobile menu + dropdown mobile toggle + swipe -->
140 <script>
141 /* ===== Mobile menu toggle ===== */
142 const mobileBtn = document.getElementById('mobileMenuBtn');
143 const navList = document.getElementById('navList');
144 mobileBtn.addEventListener('click', () => {
145   navList.classList.toggle('open');
146 });
147
148 /* ===== Dropdown: enable click-to-toggle on small screens ===== */
149 document.querySelectorAll('.nav-item.has-sub > .nav-link').forEach(link => {
150   link.addEventListener('click', (e) => {
151     // On small screens, clicking top-level should toggle submenu instead of navigating
152     if (window.innerWidth <= 900) {
153       e.preventDefault();
154       const parent = link.parentElement;
155       parent.classList.toggle('open-sub');
156     }
157   });
158 });
159
160 /* ===== Slider logic (arrows, dots, autoplay, swipe) ===== */
161 (function() {
162   const slider = document.getElementById('slider');
163   const slidesWrap = slider.querySelector('.slides');
164   const slides = slider.querySelectorAll('.slide');
165   const prevBtn = slider.querySelector('.prev');
166   const nextBtn = slider.querySelector('.next');
167   const dotsContainer = document.getElementById('dots');
168
169   let idx = 0;
170   const total = slides.length;
171   let autoplay = null;
```

```
Hyper Text Markup Language file length: 8,480 lines: 218 Ln: 121 Col: 76 Pos: 4,488 Windows (CR LF) UTF-8 INS
28° ENG US 7:24 PM 26/11/2025

CAUsers\User\Desktop\umt.html - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
inline.html internal.html style.css bgImage.html external.html link.html table.html navigation.html umt.html umt.css

172 const interval = 4000;
173
174 // create dots
175 for (let i=0;i<total;i++){
176   const d = document.createElement('button');
177   d.className = 'dot';
178   d.setAttribute('aria-label', 'Go to slide ' + (i+1));
179   d.dataset.index = i;
180   dotsContainer.appendChild(d);
181 }
182 const dots = dotsContainer.querySelectorAll('.dot');
183
184 function goTo(n){
185   idx = (n + total) % total;
186   slidesWrap.style.transform = 'translateX(' + (-idx * 100) + '%)';
187   dots.forEach((dot,i)>=> dot.classList.toggle('active', i===idx));
188 }
189
190 function next() { goTo(idx+1); }
191 function prev() { goTo(idx-1); }
192
193 nextBtn.addEventListener('click', next);
194 prevBtn.addEventListener('click', prev);
195 dots.forEach(d => d.addEventListener('click', () => goTo(Number(d.dataset.index)) ));
196
197 // autoplay
198 function startAuto() { autoplay = setInterval(next, interval); }
199 function stopAuto() { clearInterval(autoplay); autoplay = null; }
200 slider.addEventListener('mouseenter', stopAuto);
201 slider.addEventListener('mouseleave', startAuto);
202
203 // touch / swipe
204 let startX = 0;
205 slidesWrap.addEventListener('touchstart', e => startX = e.changedTouches[0].clientX);
206 slidesWrap.addEventListener('touchend', e => {
207   const diff = e.changedTouches[0].clientX - startX;
208   if (Math.abs(diff) > 40) diff > 0 ? prev() : next();
209 });
210
211 // init
212 goTo(0);
213 startAuto();
```



```
C:\Users\User\Desktop\umt.html - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
inline.html internal.html style.css bgImage.html external.html link.html table.html navigation.html umt.html umt.css

184 function goTo(n){
185     idx = (n + total) % total;
186     slidesWrap.style.transform = 'translateX(' + (-idx * 100) + '%)';
187     dots.forEach((dot,i)=> dot.classList.toggle('active', i===idx));
188 }
189
190 function next(){ goTo(idx+1); }
191 function prev(){ goTo(idx-1); }
192
193 nextBtn.addEventListener('click', next);
194 prevBtn.addEventListener('click', prev);
195 dots.forEach(d => d.addEventListener('click', ()=> goTo(Number(d.dataset.index)) ));
196
197 // autoplay
198 function startAuto(){ autoplay = setInterval(next, interval); }
199 function stopAuto(){ clearInterval(autoplay); autoplay = null; }
200 slider.addEventListener('mouseenter', stopAuto);
201 slider.addEventListener('mouseleave', startAuto);
202
203 // touch / swipe
204 let startX = 0;
205 slidesWrap.addEventListener('touchstart', e => startX = e.changedTouches[0].clientX);
206 slidesWrap.addEventListener('touchend', e => {
207     const diff = e.changedTouches[0].clientX - startX;
208     if (Math.abs(diff) > 40) diff > 0 ? prev() : next();
209 });
210
211 // init
212 goTo(0);
213 startAuto();
214 })();
215 </script>
216 </body>
217 </html>
218

Hyper Text Markup Language file length: 8,480 lines: 218 Ln: 121 Col: 76 Pos: 4,488 Windows (CR LF) UTF-8 INS
28° 7:24 PM 26/11/2025
```


umt.css

```
1  /* ===== UMT ===== */
2  :root{
3    --umt-purple: #4a0072;
4    --umt-dark: #3c0066;
5    --muted: #6b6b6b;
6    --container: 1100px;
7  }
8  *{box-sizing:border-box}
9  html,body{height:100%}
10 body{
11   margin:0;
12   font-family:"Poppins",system-ui,Arial;
13   color:#222;
14   background: linear-gradient(180deg,#f8f8ff 0%, #efe6ff 100%);
15   -webkit-font-smoothing:antialiased;
16 }
17
18 /* ===== CONTAINER ===== */
19 .container{
20   width:90%;
21   max-width:var(--container);
22   margin:0 auto;
23 }
24
25 /* ===== HEADER ===== */
26 .site-header{background:white; box-shadow:0 2px 10px rgba(0,0,0,0.06)}
27 .header-inner{display:flex;align-items:center;justify-content:space-between;padding:18px 0}
28 .brand{display:flex;gap:14px;align-items:center}
29 .logo{width:70px;height:auto}
30 .brand h1{font-size:20px;color:var(--umt-dark);margin:0}
31 .subtitle{margin:3px 0 0;color:var(--muted);font-size:13px}
32
33 /* mobile menu button */
34 .mobile-menu-btn{
35   display:none;
36   background:transparent;border:0;font-size:22px;padding:6px 10px;cursor:pointer;color:var(--umt-dark)
37 }
38
39 /* ===== NAVIGATION ===== */
40 .main-nav{background:var(--umt-purple)}
41 .main-nav .container{padding:0}
42 .nav-list{
43   display:flex;
44   list-style:none;
45   gap:26px;
46   align-items:center;
47   margin:0;
48   padding:12px 0;
49 }
50 .nav-item{position:relative}
51 .nav-link{color:#fff;text-decoration:none;font-weight:600;padding:6px 4px;display:inline-block}
52 .nav-link:hover{color:#ffe6ff}
53 .has-sub .nav-link::after{content:''}
54
55 /* SUBMENU (desktop) */
56 .sub-menu{
57   position:absolute;
58   top:100%;
59   left:0;
60   background:white;
61   min-width:200px;
62   box-shadow:0 8px 20px rgba(0,0,0,0.12);
63   border-radius:6px;
64   padding:8px 0;
65   display:none;
66   z-index:50;
67 }
68 .sub-menu li{list-style:none}
69 .sub-menu a{display:block;padding:10px 14px;color:var(--umt-dark);text-decoration:none;font-weight:500}
70 .sub-menu a:hover{background:#f6e9ff}
71
72 /* show submenu on hover (desktop) */
73 @media (min-width:901px){
74   .nav-item.has-sub:hover > .sub-menu{display:block}
75 }
76
77 /* open class for mobile toggles */
78 .nav-list.open{flex-direction:column;gap:0}
```

```
CAUsers\User\Desktop\umt.css - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
inline.html internal.html style.css bgImage.html external.html link.html table.html navigation.html umt.html umt.css

76
77 /* open class for mobile toggles */
78 .nav-list.open{flex-direction:column;gap:0}
79 .nav-list.open .nav-item{width:100%}
80 .nav-list.open .nav-link{padding:14px 12px;border-top:1px solid rgba(255,255,255,0.06);display:flex;justify-content:space-between;align-items:center}
81 .nav-item.open-sub > .sub-menu{display:block;position:relative;box-shadow:none;background:#fff;border-left:4px solid var(--umt-purple)}
82
83 /* ===== SLIDER ===== */
84 .slider-section{padding:18px 0}
85 .slider{position:relative;overflow:hidden}
86 .slides{display:flex;transition:0.5s ease}
87 .slide{min-width:100%;flex-shrink:0}
88
89 /* ===== FIXED SLIDE IMAGE ===== */
90 .slide img {
91   width: 100%;
92   height: 500px; /* global height desktop */
93   object-fit: cover;
94   display: block;
95   border-radius: 8px;
96 }
97
98 /* arrows */
99 .slider-btn{position:absolute;top:50%;transform:translateY(-50%);background:rgba(0,0,0,0.45);color:#fff;border:0;padding:10px 14px;border-radius:6px;
100 .prev{left:14px}
101 .next{right:14px}
102
103 /* dots */
104 .dots{position:absolute;left:50%;transform:translateX(-50%);bottom:18px;display:flex;gap:8px}
105 .dot{width:10px;height:10px;border-radius:50%;background:rgba(255,255,255,0.6);border:0;cursor:pointer}
106 .dot.active{background:var(--umt-purple)}
107
108 /* ===== CONTENT ===== */
109 .content{padding:28px 0 60px}
110 .content h2{color:var(--umt-dark);margin-bottom:12px}
111 .content p{color:#333;line-height:1.75;margin-bottom:12px}
112
113 /* TABLE */
114 .table-wrap{margin-top:18px}
115 .table-wrap h3{color:var(--umt-dark);margin-bottom:10px}
116 .styled-table{width:100%;border-collapse:collapse;background:white;border-radius:8px;overflow:hidden;box-shadow:0 6px 18px rgba(0,0,0,0.06)}
117 .styled-table th, .styled-table td{padding:14px 16px;text-align:left;border-bottom:1px solid #f0e7ff}

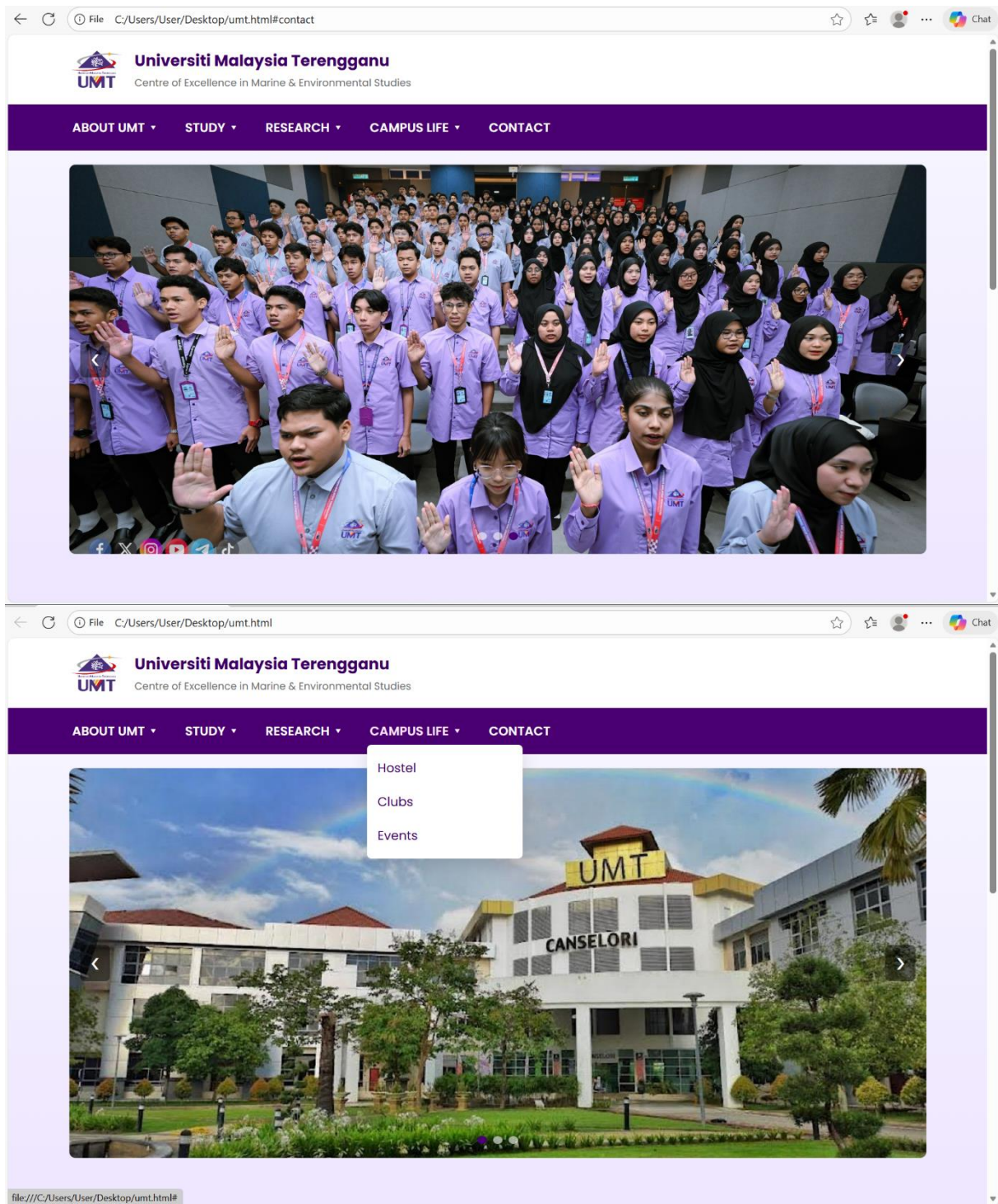
Cascade Style Sheets File length: 4,760 lines: 147 Ln: 147 Col: 1 Pos: 4,761 Windows (CR LF) UTF-8 INS
28° ENG US 7:26 PM 26/11/2025
```

```
CAUsers\User\Desktop\umt.css - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
inline.html internal.html style.css bgImage.html external.html link.html table.html navigation.html umt.html umt.css

112
113 /* TABLE */
114 .table-wrap{margin-top:18px}
115 .table-wrap h3{color:var(--umt-dark);margin-bottom:10px}
116 .styled-table{width:100%;border-collapse:collapse;background:white;border-radius:8px;overflow:hidden;box-shadow:0 6px 18px rgba(0,0,0,0.06)}
117 .styled-table th, .styled-table td{padding:14px 16px;text-align:left;border-bottom:1px solid #f0e7ff}
118 .styled-table th{background:var(--umt-dark);color:#fff;font-weight:600}
119 .styled-table tbody tr:nth-child(even){background:#f6f6ff}
120 .styled-table tbody tr:hover{background:#efe0ff}
121
122 /* FOOTER */
123 .site-footer{background:var(--umt-purple);color:#fff;padding:18px 0;text-align:center}
124
125 /* ===== RESPONSIVE ===== */
126 @media (max-width:900px){
127   .mobile-menu-btn{display:block}
128   .nav-list{display:none;flex-direction:column;gap:0}
129   .nav-list.open{display:flex;background:var(--umt-purple);padding:10px 0}
130   .sub-menu{display:none;position:relative;box-shadow:none;background:#fff;border-left:4px solid var(--umt-purple)}
131
132   /* responsive slider height */
133   .slide img{height:260px}
134
135   .brand h1{font-size:18px}
136   .logo{width:56px}
137   .dots{bottom:10px}
138   .slider-btn{padding:6px 10px;font-size:18px}
139 }
140
141 /* smaller phones */
142 @media (max-width:420px){
143   .container{width:94%}
144   .content{padding:18px 0}
145   .subtitle{display:none}
146 }
147

Cascade Style Sheets File length: 4,760 lines: 147 Ln: 147 Col: 1 Pos: 4,761 Windows (CR LF) UTF-8 INS
28° ENG US 7:26 PM 26/11/2025
```

Output:





UMT offers a wide range of undergraduate and postgraduate programs in marine-related fields, environmental science, food technology, engineering and social sciences. The university is actively involved in research, community engagement, and international collaborations.

Faculty	Programs	Focus Area
Faculty of Science and Marine Environment	BSc / MSc / PhD	Marine Biology, Oceanography
Faculty of Fisheries and Food Science	BSc / MSc	Aquaculture, Fishery Management
Faculty of Ocean Engineering Technology	BEng	Naval Architecture, Marine Engineering
Faculty of Computer Science and Mathematics	BSc	Software Engineering, Mobile Computing, Data Analytics, Mathematical Sciences (Applied & Financial Math), Maritime Informatics

offer a wide range of undergraduate and postgraduate programs in marine related fields such as marine biology, oceanography, engineering and social sciences. The university is actively involved in research, community engagement, and international collaborations.

Faculty	Programs	Focus Area
Faculty of Science and Marine Environment	BSc / MSc / PhD	Marine Biology, Oceanography
Faculty of Fisheries and Food Science	BSc / MSc	Aquaculture, Fishery Management
Faculty of Ocean Engineering Technology	BEng	Naval Architecture, Marine Engineering
Faculty of Computer Science and Mathematics	BSc	Software Engineering, Mobile Computing, Data Analytics, Mathematical Sciences (Applied & Financial Math), Maritime Informatics
Faculty of Maritime Studies	BSc	Marine and Maritime Industry
Faculty of Business, Economics and Social Development	BSc	Business Studies, Economics, Management, Finance, Accounting, Marketing, Tourism & Hospitality