



Cybersecurity Concepts

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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      <meta http-equiv="X-UA-Compatible" content="ie=edge">
8      <link rel="stylesheet" href="style.css" type="text/css" />
9      <link rel="preconnect" href="https://fonts.googleapis.com">
10     <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
11     <link href="https://fonts.googleapis.com/css2?family=Open+Sans:wght@300;400&display=swap" rel="stylesheet">
12     <title>Cybersecurity Concepts</title>
13 </head>
14
15 <body>
16     <header>
17         <h1>Cybersecurity Concepts</h1>
18     </header>
19
20     <section class="gallery">
21         <div class="post">
22             <h2>Defense in Depth</h2>
23             </img>
24             <p>A comprehensive strategy of including multiple layers of security within a system to
25                 stop the attack/unauthorized access. Examples:
26             </p>
27             <ol>
28                 <li>A castle is secured by a moat, a drawbridge, and guards at the gate.</li>
29                 <li>Your home computer is secured by locks on the door, an alarm system, and a
30                     firewall.</li>
31                 <li>Company data is secured by a firewall, passwords, and encryption.</li>
32             </ol>
33         </div> <!-- Close post 1 -->
34
35         <div class="post">
36             <h2>Confidentiality</h2>
37             </img>
38             <p>The property that information is not disclosed to individuals,
39                 devices, or processes unless they have been authorized to access the information.
40             </p>
41             <ul>
42                 <li>Student grades can only be accessed by specific individuals within the
43                     organization, such as authorized teachers and the principal.</li>
44                 <li>At a hospital, medical information about a patient is protected and only provided
45                     to authorized personnel.</li>
46                 <li>Salary information is typically only available to authorized personnel within the
47                     company, such as the supervisor and human resources.</li>
48             </ul>
49         </div> <!-- Close post 2 -->
50
51         <div class="post">

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52     <h2>Integrity</h2>
53     </img>
54     <p>The property that information, an information system, or a component of a
55         system has not been modified or destroyed in an unauthorized manner.
56     </p>
57     <ul>
58         <li>Student grades are accurate and have not been modified by an unauthorized user.
59         <li>A website is the entity it claims to be.</li>
60         <li>A computer system is virus-free and uncompromised.</li>
61     </ul>
62 </div> <!-- Close post 3 -->
63 <div class="post">
64     <h2>Availability</h2>
65     </img>
66     <p>The property that information or information systems are accessible
67         and usable upon demand.
68     </p>
69     <ul>
70         <li>A student's grades can be viewed by the student and principal and modified by
71             the teacher.
72         </li>
73         <li>A website for a store allows orders to be placed and viewed.
74         </li>
75         <li>A banking system is appropriately accessible by both customers and banking
76             employees.
77         </li>
78         <li>A Denial-of-Service attack can result in a system being unavailable and inaccessible.
79         </li>
80     </ul>
81 </div> <!-- Close post 4 -->
82 <div class="post">
83     <h2>Think Like an Adversary</h2>
84     </img>
85     <p>The strategy of putting yourself inside the mindset of a potential attacker that
86     </p>
87     <ul>
88         <li>In order to best protect a student's data, it is useful to think of potential
89             adversaries and their motivations, such as a student wishing harm on another
90             student seeking to modify his own data, and consider possible strategies - like
91             access, etc. and build your security strategy accordingly.
92         </li>
93         <li>Discussions on ethics of a cybersecurity professional must correlate with an
94             activity in which adversarial thinking is being modeled.
95         </li>
96     </ul>
97 </div> <!-- Close post 5 -->
98 <div class="post">
99     <h2>Keep It Simple</h2>
100    </img>
101    <p>The strategy of designing information and security systems to be
102        configured and operated as simply as possible; all systems perform best when they
103        are simple.
104    </p>
105    <ul>
106        <li>Simple systems are easier to understand, design, and implement.
107        </li>

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108         <ul>
109             <li>A complex alarm system can have many points of failure, including the hardware
110                 and the software.
111
112             </li>
113             <li>A complex computer system has many points of access and may be difficult to
114                 secure. A simple solution is often the best strategy.
115
116
117
118
119             </li>
120
121         </ul>
122     </div> <!-- Close post 5 -->
123 </section> <!-- Close gallery -->
124
125 <footer>
126     <div class="source">
127         <cite>Content by:</cite>
128         <p><a href="https://www.gen-cyber.com">GenCyber Academy</a></p>
129     </div><br>
130     <div class="source">
131         <cite>Mobile Phone</cite>
132         <p>Image by <a href="https://pixabay.com/users/funkyfocus-3900817/?utm_source=link-attribution&utm_medium=referral">funkyfocus</a> from <a href="https://pixabay.com/?utm_source=link-attribution&utm_medium=referral">Pixabay</a></p>
133     </div><br>
134     <div class="source">
135         <cite>Digitization</cite>
136         <p>Image by <a href="https://pixabay.com/users/geralt-9301/?utm_source=link-attribution&utm_medium=referral">geralt</a></p>
137     </div><br>
138     <div class="source">
139         <cite>Stamp</cite>
140         <p>Image by <a href="https://pixabay.com/users/tayebmezahdia-4194100/?utm_source=link-attribution&utm_medium=referral">tayebmezahdia</a></p>
141     </div><br>
142     <div class="source">
143         <cite>Availability</cite>
144         <p>Image by <a href="https://pixabay.com/users/geralt-9301/?utm_source=link-attribution&utm_medium=referral">geralt</a></p>
145     </div><br>
146     <div class="source">
147         <cite>Think Like an Adversary</cite>
148         <p>Image by <a href="https://pixabay.com/users/geralt-9301/?utm_source=link-attribution&utm_medium=referral">geralt</a></p>
149     </div><br>
150     <div class="source">
151         <cite>Keep It Simple</cite>
152         <p>Image by <a href="https://pixabay.com/users/janbaby-3005373/?utm_source=link-attribution&utm_medium=referral">janbaby</a></p>
153     </div>
154 </div>
155 </div>
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161 </div>
162 </div>
163 </div>
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```
164 </body>
165
166 </html>
167
168 /* Color Palette:
169 primary: #FFFBEB
170 seconday: #495579
171 tertiary: #263159
172 accent: #251749
173 */
174
175
176
177 html {
178     margin: 0;
179     padding: 0;
180     box-sizing: border-box;
181 }
182
183 body {
184     background-color: #251749;
185     font-family: 'Open Sans', sans-serif;
186 }
187
188 header {
189     background-color: #495579;
190     color: #fff;
191     padding: 1.5rem;
192     margin: 1.2rem;
193 }
194
195 footer {
196     background-color: #FFFBEB;
197     margin: 1.2rem;
198     padding: 1.5rem;
199     font-size: 0.55rem;
200 }
201
202 h1,
203 h2 {
204     text-align: center;
205 }
206
207 img {
208     max-width: 100%;
209     height: auto;
210     border-radius: 2rem;
211 }
212
213 li {
214     padding: 0.2rem;
215 }
216
217 .post {
218     background-color: #FFFBEB;
219     margin: 1.2rem;
```

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220     padding: 1.5rem;
221     line-height: 2rem;
222 }
223
224 .post p {
225     text-indent: 1.2rem;
226 }
227
228 .source {
229     letter-spacing: 0.5px
230 }
231
232
233 .source a {
234     text-decoration: none;
235     color: #495579;
236 }
237
238
239 @media (min-width: 800px) {
240     .gallery {
241         display: flex;
242         flex-wrap: wrap;
243         justify-content: space-around;
244     }
245
246     .post {
247         width: 25%;
248         font-size: 1.1rem;
249     }
250
251     footer {
252         display: flex;
253         justify-content: space-around;
254         align-items: center;
255         font-size: 0.7rem;
256     }
257 }
```