



Student Engagement & Mentoring in Technology

Key Concepts Identified

- **Business continuity planning** is essential for resilience in the face of disruptions (natural or human-made).
 - **Business continuity** supports the security principle of **availability**, one of the three pillars of the **CIA triad** (Confidentiality, Integrity, Availability).
 - Disruptions may include **system failures**, **natural disasters**, or **human-made incidents** like cyberattacks.
 - Related topics include **fault tolerance** and **disaster recovery**.
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Three Interactive Design Ideas for a Website

1. Business Continuity Scenario Simulator

Function: An interactive simulation tool that lets learners choose from different types of disruptions (e.g., earthquake, hacker attack, power outage) and build a basic business continuity plan in response.

- **User Interaction:** Drag-and-drop elements (e.g., backup systems, emergency response teams, failover sites).
 - **Learning Outcome:** Helps learners understand which components are essential in a continuity plan and how their choices affect availability.
 - **Tech Stack Suggestion:** HTML5/CSS3 with JavaScript and optional backend (e.g., Firebase or Node.js) for progress tracking.
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2. CIA Triad Interactive Infographic

Function: A dynamic, clickable infographic where each element of the CIA triad (Confidentiality, Integrity, Availability) can be explored in depth, with a particular focus on **Availability** in the context of business continuity.

- **User Interaction:** Clicking on “Availability” could reveal real-world cases (e.g., Amazon outage, ransomware attacks) and ask students to match each case with the appropriate business continuity response.
- **Learning Outcome:** Reinforces conceptual understanding of how availability is maintained and why it matters in cybersecurity.
- **Tech Stack Suggestion:** SVG-based animations using JavaScript (D3.js or GSAP).



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3. Disaster Recovery Decision Tree Game

Function: A gamified decision-making tree where students face a series of branching questions to guide a company through a system outage or disaster.

- **User Interaction:** Multiple-choice paths with real-time feedback and consequences shown (e.g., “Your team did not back up their data. Now what?”).
- **Learning Outcome:** Demonstrates the value of proactive planning and highlights key steps in disaster recovery.
- **Tech Stack Suggestion:** React or Vue.js for frontend logic with modular components.