Unit 5: Compliance

Content Area: **Computer Science**
Course(s):
Time Period: **Marking Period 4**
Length: **20-25 days**
Status: **Published**

Brief Summary of Unit

Website technologies have been updating rapidly in order to accommodate anyone viewing them. Authors of websites must make their web content more accessible to individuals with disabilities. The Americans with Disabilities Act (ADA) includes websites as "places of public accommodation" and has outlined Web Content Accessibility Guidelines (WCAG) that need to be followed, by law, in order to ensure that people with disabilities are able to view all of the content on the site easily and accurately. These rules may change year to year, and our site must remain as compliant as possible to ensure all viewers are able to navigate and read our site.

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P.1	Act as a responsible and contributing community members and employee.
1	Developing Questions and Planning Inquiry
2	Gathering and Evaluating Sources
P.6	Model integrity, ethical leadership and effective management.
4	Developing Claims and Using Evidence
6	Engaging in Civil Discourse and Critiquing Conclusions
7	Taking Informed Action
	Engineering design evaluation, a process for determining how well a solution meets requirements, involves systematic comparisons between requirements, specifications, and constraints.
8.2.12.ED.5	Evaluate the effectiveness of a product or system based on factors that are related to its requirements, specifications, and constraints (e.g., safety, reliability, economic considerations, quality control, environmental concerns, manufacturability, maintenance and repair, ergonomics).
8.2.12.ED.6	Analyze the effects of changing resources when designing a specific product or system (e.g., materials, energy, tools, capital, labor).
8.2.12.ITH.1	Analyze a product to determine the impact that economic, political, social, and/or cultural factors have had on its design, including its design constraints.
	Engineers use science, mathematics, and other disciplines to improve technology. Increased collaboration among engineers, scientists, and mathematicians can improve their work and designs. Technology, product, or system redesign can be more difficult than the original design.
8.2.12.ETW.1	Evaluate ethical considerations regarding the sustainability of environmental resources that are used for the design, creation, and maintenance of a chosen product.
8.2.12.EC.2	Assess the positive and negative impacts of emerging technologies on developing countries and evaluate how individuals, non-profit organizations, and governments have

	responded.
8.2.12.EC.3	Synthesize data, analyze trends, and draw conclusions regarding the effect of a technology on the individual, culture, society, and environment and share this information with the appropriate audience.

Essential Questions / Enduring Understandings

Essential Questions:

- What is ADA compliance?
- How do we adjust the website to follow the WCAG?
- What new technologies exist that we must plan for?

Enduring Understandings:

- Ensuring that websites are readable by people with disabilities in fact makes the website more readable to everyone. This is something all webmasters strive for.

Objectives

Students Will Know:

- what ADA compliance means.
- how to make decisions and updates with all viewers in mind.

Students Will be Skilled at:

- using tools to search for non-compliant parts of a website.

Learning Plan

- Review ADA rules and structure.
- Develop plan for analysis of our site and updates to errors/recommendations.
- Utilize tools in order to identify issues within our site.
- Correct those mistakes within the site to make the site compliant.
- Create a plan for future updates to the site in order to maintain compliance.

Assessment

Assessments

- Formative: Daily assessments using examples from class notes and CodeHS.com, AP Classroom/Albert Checks for Understanding
- Summative: Teacher-created assessments/projects and CodeHS Computer Science Projects, AP Classroom/Albert Unit Assessments
- Benchmark: Check for understanding benchmark assessments on CodeHS, AP Classroom/Albert/Khan Academy Diagnostics
- Alternative Assessments: Student-centered activities such as a doorbell coding project, game design projects, and other activities involving real world applications
- Analysis of the site utilizing the ADA compliance tools available
- CHS Website updates

Materials

Core instructional materials: Core Book List

Supplemental materials: CodeHS

WAVE - Web Accessibility Evaluation Tool - https://wave.webaim.org/

Integrated Accommodation and Modifications

Web Team Accommodation and Modifications