

Unit 4: Current Trends in Web Design

Content Area: **Computer Science**
Course(s):
Time Period: **Marking Period 3**
Length: **20-25 days**
Status: **Published**

Brief Summary of Unit

Technology is an ever-changing component of human society, and web design is no exception. As new advances in technology occur, applications of those advances are developed. These applications could take the form of new programs, protocols, or trends in layout and design among others. It is important for a web designer to periodically research any such changes in technology and trends, so that the users of the websites they develop can benefit from a streamlined web surfing experience.

Revised August 2020

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| CS.9-12.8.2.12.EC.1 | Analyze controversial technological issues and determine the degree to which individuals, businesses, and governments have an ethical role in decisions that are made. |
| CS.9-12.8.2.12.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. |
| CS.9-12.8.2.12.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. |
| CS.9-12.8.2.12.ETW.4 | Research historical tensions between environmental and economic considerations as driven by human needs and wants in the development of a technological product and present the competing viewpoints. |
| CS.9-12.EC | Ethics & Culture |
| WRK.K-12.P.7 | Plan education and career paths aligned to personal goals. |
| WRK.K-12.P.8 | Use technology to enhance productivity increase collaboration and communicate effectively. |
| WRK.K-12.P.9 | Work productively in teams while using cultural/global competence. |
| CAEP.9.2.12.C.3 | Identify transferable career skills and design alternate career plans. |
| TECH.8.1.12.A.2 | Produce and edit a multi-page digital document for a commercial or professional audience and present it to peers and/or professionals in that related area for review. |
| TECH.8.1.12.A.CS2 | Select and use applications effectively and productively. |
| TECH.8.1.12.B.CS1 | Apply existing knowledge to generate new ideas, products, or processes. |
| TECH.8.1.12.C.CS4 | Contribute to project teams to produce original works or solve problems. |
| TECH.8.1.12.D.5 | Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address personal, social, lifelong learning, and career needs. |
| TECH.8.2.12.A.3 | Research and present information on an existing technological product that has been repurposed for a different function. |

Essential Questions / Enduring Understandings

Essential Questions:

- How do you stay updated with current technology and programs?
- How do you learn new technology and programs?
- How do you decide if a change to your website is needed?
- How do you decide if a WYSIWYG (What You See Is What You Get) editor is right for your job?

Enduring Understandings:

- As a web designer, staying current in technology and programs is important.
- The decision to upgrade a website is multi-faceted.
- Periodically, it is wise to update your website to align to current trends. This helps your website to maintain an active web presence.

Objectives

Students Will Know:

- how to learn about updates in programs and technology to stay current.
- when it is important to update a site.

Students Will be Skilled at:

- obtaining information on programs and technology updates.
- making decisions as to when it is best to update a site.
- using a WYSIWYG editor, and the types of websites that lend themselves to such editors.

Learning Plan

- Discussion of key programs and technologies utilized on the CHS website
- Discussion on how to be aware of updates
- Students will conduct online research on current trends in web design. Research may focus on any of the following topics:
 - navigation
 - layout
 - load times
 - browser compatibility
 - WYSIWYG editors
- Students will bring back to the webmaster team any trends that they believe could be incorporated into the high school's website, and the team will discuss, as a whole, the merits of such incorporation.
- Discussion on the overall way of learning about new programs and technologies.

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
- [Activities/Assessments Folder](#)
- Presentations on current trends
- Incorporation of current trends into the high school's website where applicable and deemed appropriate.

Materials

Core instructional materials: [Core Book List](#)

Supplemental materials: CodeHS

- The Internet
- WYSIWYG editors

Integrated Accommodation and Modifications

[Web Team Accommodation and Modifications](#)

