

## **Innovation Report:**

*Write a 2-3 paragraph report stating the Use of HTML, CSS, JS, GitHub and other technologies learned in this class for innovation in Library and Information Services.*

Over the many years that libraries have existed, the world has become increasingly digital. Where once a library's collection and resources were entirely physical and housed on-site, significant portions of a library's collection and many of a library's resources are now digital. Where once people first turned to books for their answers, people now turn first to the internet and online resources for their answers. Ultimately, the internet and online resources are simply easier, quicker, and more convenient than physical books and resources. Given that libraries are keepers of knowledge and information, it is crucial, then, that libraries adapt to the changed needs and desire of their patrons in the digital age. Libraries must now not only incorporate internet technologies and applications into their services, but do so exceedingly well and with comprehensive knowledge of both areas if libraries wish to stay competitive and relevant.

Libraries cannot merely generally incorporate knowledge of internet technologies and applications into their repertoire. Ensuring that staff have specific knowledge about HTML, CSS, and JS is crucial because it helps libraries and library staff to better serve both themselves and their patrons. For staff, knowledge of HTML, CSS, and JS is a means for them and their libraries to gain the kind of independence and self-sufficiency they would not otherwise have in a digital age without knowledge in these areas. One of the most important core resources that libraries offer their patrons nowadays, for example, are library websites. Without staff knowledgeable in HTML, CSS and JS, libraries would be forced to hire outside help by the way of freelance programmers to help maintain or fix the library's website. Ultimately, this reliance on external professionals would bring more problems than solutions. Given the importance to patrons of functional library websites and all the important resources housed on them, any delay caused

by waiting for a freelance programmer to sufficiently fix the website would immensely inconvenience patrons who rely on the website. Furthermore, the website will always need to be maintained, updated and fixed; as such, libraries will continually have to rely on outside help to manage the website, leading only to further inconveniences for patrons. On top of the inconvenience to patrons, every time a library has to hire an outside professional it costs the library money—which, for most libraries, is a resource on which they are tight. Libraries are also frequently tight on time, given how much they set out to do for their patrons; knowledge of GitHub in staff, as such, would also serve to benefit libraries because staff would be able to take advantage of storing different versions of their code for important resources, or access code written by other people and used in other libraries—ensuring that staff would rarely have to write or rewrite code from scratch thanks to GitHub's cloud storage.

Library staff having knowledge of HTML, CSS, and JS is also important for library staff to effectively serve patrons in the digital age. Given that the entire world has become increasingly digital, knowledge of HTML, CSS, and JS allows library staff to help patrons who come in with questions about the internet—whether those questions are from a less internet-savvy patron who wants to know why a website is not working for them, or from a patron familiar with the internet who wants to get started building their own website or needs help fixing the code of a broken website on which the patron is working. Furthermore, having knowledge of HTML, CSS, and JS enables libraries and their staff to give their patrons access to more resources than patrons would otherwise be able to access if staff did not have that knowledge. HTML, CSS, and JS, for example, would allow patrons to create online resources, such as specialized reference websites or web pages, tailor-made to meet the needs and desires of their patrons. Alternatively, staff knowledge about HTML, CSS, and JS would also allow staff to create accurate and effective library programming specifically on the topics of HTML, CSS, and

JS—ultimately ensuring that their patrons will be better prepared for life in the digital age without the added cost of hiring an outside professional for the program. Staff knowledge of GitHub is similarly important because such knowledge enables staff to connect their patrons to useful knowledge, information, and resources found in the vast amount of open-access code written by other people and organizations and hosted in public repositories across GitHub. This open-access code is another useful, modern resource to which patrons would not necessarily have access—or to which they would know they have access—if staff were not able to direct them to it. Furthermore, staff knowledge of GitHub and familiarity of using it also provides staff with an additional means to connect their patrons with resources the library and staff themselves have created for the patrons, particularly those patrons in rural areas who live far from their local libraries. Given that libraries and GitHub have overlapping stances on the importance of open access to knowledge, incorporating GitHub into library services and staff knowledge is important, logical, and beneficial—just as is the same incorporation of knowledge of HTML, CSS, and JS in any staff member's knowledge base or in any library's resources if those libraries seek continued existence in the digital age.