MLK DAY 2023 Workshop Proposal

On Monday, January 16th, Phillips Academy will celebrate the life and legacy of Martin Luther King, Jr. In the morning we will welcome a special guest speaker during All School Meeting; and in the afternoon, uppers, seniors and postgraduates will participate in workshops led by their peers.`

In keeping with our mission to provide opportunities for students to explore and discuss issues relating to diversity, multiculturalism and the school's commitment to equity, inclusion, and belonging, we welcome workshops that explore issues including (but not limited to) race, class, gender, sexual identity, ability, ethnicity, intersectionality, etc.

Please note that workshops run between 60-90 minutes in length (but can be longer if necessary) and should include some time for content sharing and discussion. All workshops MUST be grounded in historical context and presenters must work with a faculty advisor in developing and executing their workshop.

If you have any questions, please don't hesitate to contact any member of the CAMD Team.

All proposals are due on Sunday, December 4, 2022 at midnight.

All the best,

The CAMD Team

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Workshop Presenter(s): Claire, Dakota, Olha

Workshop Title: Good Design is Accessible: Accessibility in Technology

Faculty Advisor: Dr. Bhardwaj, Dr. Zufelt

<u>Please provide a working description of your workshop.</u> (The final version of your description will be included in the MLK Day program.)

Our workshop, "Good Design is Accessible: Accessibility in Technology" aims to raise awareness about the barriers that people with disabilities face when using technology. We will discuss the importance of accessibility in technology, and provide practical tips and tools for making technology more accessible—such as changing the interface of websites, considering screen reader text, having reasonable font sizes, and making it easier for website to load for those with less access to internet bandwidth. Participants will have the opportunity to learn about accessibility guidelines and checker tools, and to try out these tools for themselves. Through interactive activities and discussions, participants will gain a better understanding of the challenges that people with disabilities face when using technology, and how they can help to create a more inclusive and accessible digital world. This

workshop is designed for people of all levels of experience, and is suitable for anyone who is interested in learning more about accessibility in technology.

<u>Please provide a detailed outline of your workshop. You must provide a description of the content, workshop goals and workshop outcomes.</u>

The goal of our workshop is to extend the ethos of Haben Girma's ASM. We hope to explain how technology, websites, and the internet should prioritize the accessibility of their resources because it undeniably impacts the livelihoods of a large demographic.

Workshop goals/outcomes:

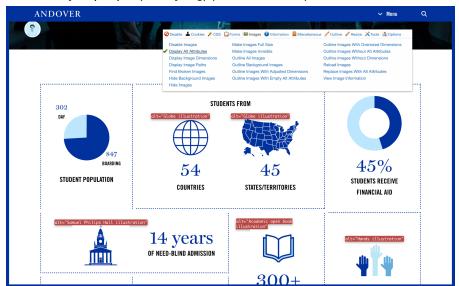
- 1. Increased awareness and understanding of the barriers that people with disabilities face when using technology, and the importance of accessibility in technology.
- 2. Practical knowledge of accessibility guidelines and checker tools, and the ability to use these tools to evaluate the accessibility of websites and applications.
- The development of skills and strategies for making technology more accessible, including
 design techniques, coding practices, and user testing methods. This will encourage students to
 consider ability and/or access when developing their projects.
- 4. The creation of a more inclusive and accessible digital world, through the implementation of accessibility best practices by individuals and organizations.
- The establishment of networks and connections among Andover students (especially those who
 are within the CS department), who can share knowledge, resources, and support for
 accessibility in technology. In addition, this can motivate more students to learn computer
 science.
- 6. A sense of empowerment and motivation to continue learning about accessibility in technology, and to advocate for the rights of people with disabilities in the digital world.

Outline:

- 1. <u>Introductions + distribution of pamphlet for terminology [5 minutes]</u>
 - a. Start out with Haben Girma as the framing → her ASM brought how much we've fallen short of disability accessibility.
 - **b. Disability Visibility** some anecdotes of how access has failed people (Have a few slides/quotes for people to read out loud.)
 - i. Disability as a part of diversity (emphasaize how much cool things disabled people can do if they are given access to resources)
- 2. What is accessibility, and why is it important in tech? [25 minutes]
 - a. Start with the <u>Ketchup survey</u> (the Ketchup survey is a very short ~1-minute survey that asks people where they put their Ketchup at home and basic questions like that) [2 minutes]
 - b. Show the Ketchup survey result and read this section of the <u>LA times article</u> [5 minutes]
 - i. "If you're trying to make the case at your company for diversifying your workforce, she said, your argument needs to be focused on "real business outcomes."

- Start-up culture is often centered around new ways of solving "problems"

 ride-sharing apps such as Lyft and Uber solve the problem of getting around town without a car, for example. The "ketchup question" shows how a slight difference in perspective can lead a coworker toward a completely different solution that might never occur to you. That extra perspective could lead to a fresh new idea that could take your company to the top.
- But without a diverse team? It's gonna be mayo every time.
- c. Define accessibility and what it is in tech (question + slide) [4 minutes]
 - i. Funkify Simulator → show how many website can be easily inaccessible to a wide variety of people (funkify.org) (show, don't tell)



^ use a tool like web developer and do a live demonstration/evaluation of the website of choice. Check out the alt text on each image and see whether they are actually helpful or filled in. This introduces UI/UX choices for accessibilities

we usually don't notice.

ii.

- d. Statistics on diversity and accessibility within the field [6 minutes]
 - i. A study by the <u>Ruderman Family Foundation</u> found that only 19% of people with disabilities are employed, compared to 65% of the general population.
 - ii. A 2018 survey by the National Center for Women & Information Technology found that only 25% of professional computing occupations were held by women. These statistics highlight the need for increased diversity and accessibility in the technology industry.
 - iii. A study by the National Council on Disabilities found that only 7% of websites were fully compliant with web accessibility standards. Additionally, a 2019 survey by the Ruderman Family Foundation found that only 20% of websites were accessible to people with disabilities.
- e. Real-life examples of problems caused by a lack of perspective within the tech company/development team [5 minutes]
 - i. The racist soap dispenser (https://www.youtube.com/watch?v=YJjv OeiHmo)

- ii. AFB (American Foundation for the Blind) did a research into how workplace technology accommodates for blind people
 https://www.afb.org/research-and-initiatives/workplace-tech-study/executive-summary
 - 1. "About 25% of participants reported that they could not fully access trainings required for their jobs."
 - 2. "Most participants requested accommodations from their employer, including purchase of assistive hardware, software, or both. There was tremendous variability in the accommodations request process and outcome, with some participants receiving accommodations easily and quickly, while others reported long waits for accommodations, denied requests, or even job reassignment or termination."
 - "About one in five participants (21%) reported that they considered not requesting a needed accommodation because they were worried about backlash from their employer, coworkers, or clients."
 - 4. Even if you can get the resources/accomodations, it takes much time and effort to request them/establish the system that works for disabled people.
- f. Discussions/Questions [3 minutes]
- 3. How to tackle the lack of diversity [25 minutes]
 - a. Education [8 minutes]
 - i. https://code.org/diversity

Among young women, those who try AP Computer Science in high school are 10 times more likely to major in computer science. Black and Hispanic/Latino students who try AP Computer Science in high school are 7-8 times more likely to major in computer science (source).

ii. https://bootstrapworld.org

Organizations like BootstrapWorld develop curricula with diversity and accessibility in mind and provide workshops to help teachers settle into the new CS-integrated classes. They specifically look into the language used in lessons, the relatability of the examples raised, and how error messages are presented in the programming languages. These non-profits enable more schools to be able to provide a basic computer science education without having to hire new personnel.

- b. Company-wide [10 minutes]
 - Have audience members brainstorm ideas. Some ideas we will encourage are:
 - Conducting regular accessibility audits: Companies can conduct regular audits of their technology and websites to identify potential accessibility issues and take steps to fix them. This can be done through the use of automated testing tools, as well as manual testing by individuals trained in accessibility principles.
 - Providing accessibility training for employees, so that they are better equipped to create and maintain accessible technology and websites.

- Using accessibility standards and guidelines: Companies can use accessibility standards and guidelines, such as the <u>Web Content</u> <u>Accessibility Guidelines (WCAG) 2.0</u>, to ensure that their technology and websites meet certain accessibility criteria.
- Incorporating accessibility into the design process: Companies can incorporate accessibility into the design process for their technology and websites, so that accessibility is considered from the outset rather than as an afterthought.
- PEAT, which is funded by the U.S. Department of Labor's Office of Disability Employment Policy, offers a range of resources for employers interested in making their workplaces more technology accessible. These include:
 - <u>Staff Training Toolkit</u>: find information on <u>digital accessibility basics</u>, <u>making virtual presentations</u> and <u>documents</u> accessible and more.
 - <u>Buy IT! Guide</u>: learn about purchasing accessible information technology (IT).
 - <u>TalentWorks</u>: employers and human resources (HR) professionals can
 use this online tool to ensure their organization's eRecruiting
 technologies, including those used for <u>virtual interviews</u>, are accessible.
 - <u>TechCheck:</u> use this online self-assessment tool to evaluate whether your organization's technology is accessible.
 - <u>Telework and Accessibility</u>: get information on creating accessible online content and resources to ensure online hiring and recruiting efforts are accessible for everyone, including people with disabilities.
 - Al and Disability Inclusion: learn about the benefits and risks of using artificial intelligence (AI) in the workplace, and how to ensure AI tools, policies and procedures are inclusive of people with disabilities.

i.

- c. Personal level/Tools to determine accessibility for individuals [7 minutes]
 - i. https://www.w3.org/WAI/test-evaluate/preliminary/ pretty good benchmarks for evaluating websites
 - ii. WAVE: This web-based tool allows users to check the accessibility of their websites by providing a visual representation of the website's accessibility features, such as alt text for images and proper headings.
 - iii. aXe: It is a browser extension that allows users to test the accessibility of their websites by providing a list of potential accessibility issues and suggestions for fixing them.
 - iv. Lighthouse: This tool is part of the Chrome DevTools and allows users to audit the accessibility of their websites, as well as other performance metrics.
 - v. Siteimprove: This tool provides a range of accessibility testing options, including automated checks, manual testing, and integration with assistive technology.
 - vi. Accessibility Insights: This tool is a browser extension that allows users to test the accessibility of their websites by providing a list of potential accessibility issues and suggestions for fixing them.
- 4. Conclusion [5 minutes]

Who is the intended audience of your workshop (introductory, intermediate, advanced level)?

Our workshop requires no background knowledge and just requires some basic computer literacy. Everyone who is interested in learning how to make technology more accessible can join, as well as those who want to learn about how the internet and digital objects can have real world implications.

What are the main takeaways of your workshop?

There are many ways to increase accessibility within technology and to promote equal access for all users. Some of the best ways to do this include:

- Designing products and services with accessibility in mind: This means incorporating
 accessibility features and considerations into the design process from the beginning, rather than
 adding them as an afterthought. This can include things like using large, easy-to-read fonts,
 providing alternative text for images, and using clear and simple language.
- 2. Making use of assistive technologies: Assistive technologies, such as screen readers and speech-to-text software, can help people with disabilities access digital content and services more easily. By incorporating these technologies into products and services, companies and organizations can make their offerings more accessible to a wider range of users.
- 3. Providing training and support: Many people who could benefit from assistive technologies are not aware of their existence or how to use them. Providing training and support to help people learn about and use these technologies can increase accessibility and promote equal access.
- 4. Ensuring compliance with accessibility regulations and standards: Many countries have laws and regulations that require companies and organizations to make their products and services accessible to people with disabilities. Ensuring compliance with these regulations can help to increase accessibility and promote equal access.

One of the biggest problems facing equal access in technology today is the lack of awareness and understanding about the needs of people with disabilities. Many people and organizations are not aware of the challenges that people with disabilities face when using technology, and as a result, they may not prioritize accessibility in their products and services. This can create barriers for people with disabilities, limiting their ability to access and use digital content and services.

How does your workshop connect to the legacy of Dr. King and the Civil Rights Movement?

Our workshop, "Good Design is Accessible: Accessibility in Technology," connects to the legacy of Dr. King and the Civil Rights Movement in several ways. First, the workshop addresses an important issue that is closely related to the goals of the Civil Rights Movement - ensuring that people with disabilities have equal access to the opportunities and resources that are available to others. Like other marginalized groups, people with disabilities often face barriers and discrimination that limit their ability to participate fully in society. By raising awareness about these barriers and providing tools for addressing them, our workshop seeks to advance the cause of social justice and equality that Dr. King fought for.

Second, our workshop is designed to empower and inspire participants to take action on issues of accessibility in technology. This aligns with Dr. King's belief in the power of individual action to bring about positive change. By providing participants with the knowledge, skills, and motivation to advocate for accessibility in technology, our workshop encourages them to become active agents of change in their own communities.

By providing Andover students with information and resources about accessibility in technology, our workshop can help to educate and inspire a new generation of advocates for accessibility and inclusion. In this way, our workshop connects to the legacy of Dr. King and the Civil Rights Movement by helping to foster a commitment to social justice and equality among young people.

Any special requests (i.e. room preference, number of students in the group, or technology requirements)? Makerspace Data Lab