The ENIAC Six:

How Six Women Programmers Shattered Technological Barriers and the Glass Ceiling

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After learning that this year's theme was *Breaking Barriers in History*, I knew I wanted to explore a topic related to science and technology because I am passionate about these subjects. My father told me that he learned about a computer called the ENIAC in college and suggested I investigate this topic further. After doing preliminary research, I learned that six women, known as the ENIAC Six, broke technological barriers and the glass ceiling when they programmed the ENIAC during World War II. I also found out that their contributions were hidden for fifty years before historians began to publicize their pioneering work. This inspired me to explore the ENIAC Six story for my topic.

I began my research by reviewing secondary sources that provided historical context for my topic. I found books about the ENIAC at the public library and website articles that provided details on what inspired the development of the ENIAC during World War II and the technological barriers that existed at the time. I used books that I purchased and several online journal articles to learn about "human computers" and the computing glass ceiling. Next, I used both primary and secondary sources to find evidence supporting how they shattered both technological and gender barriers. These sources included computing books, online journal articles, online magazine articles, and website articles. Finally, I used the research links found on the NHD website to locate many helpful primary sources, including photographs, documents, technical reports, and downloadable multimedia.

I chose the website category because it would allow me to use images, quotes, and multimedia to tell the story of how the ENIAC Six broke barriers in an interactive and engaging way. I learned how to use NHDWebCentral by reviewing the instructional materials available on the NHD website. Before building my website, I created mockups of each web page that included the general layout and the specific information and media I wanted to add to each page. My father taught me how to resize images and display certain quotes as images. After finishing an initial draft of the website, I reviewed each page and made any necessary corrections or changes.

My topic relates to this year's theme of *Breaking Barriers in History* because the ENIAC Six's programming contributions to the ENIAC allowed them to break significant barriers that existed at the time. First, the ENIAC Six broke technological barriers by demonstrating that a computer could be programmed. This led to the evolution of modern computers and paved the way for stored-program computing. Also, the ENIAC Six broke gender barriers that prevented women from advancing in the computing field. Women progressed in the computing industry for forty years after the ENIAC Six broke this barrier. By these breaking barriers, the ENIAC Six made history and left behind a lasting legacy.