

Foundations of Modern Technology:

Grace Hopper's Computer Compiler

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Junior Group Website

1200 student composed words

500 words in process paper

The story behind our project is that one of our partners enjoys computers and the aspects of coding. They mentioned it to the other two, who both agreed. We looked into Grace Hopper and the compiler and everything she did. It is an interesting topic because without the invention of the compiler we would not be able to use computers every day. Binary would have been the only way to read and code computer information. Our personal connection to the topic is we all have an interest in computers in a certain form, as well as each of us having an interest in wars and what happened surrounding them. One of our unique sources is *A Third Survey Of Domestic Electric Digital Computing Systems*; the book was on different models of computers in 1961. Our best source, Encyclopedia of Britannica, is our favorite because it is the website we used when finding most of our information. Our research plan was to have each of us look up a certain aspect of our topic; biography of Grace Hopper, history of coding and computers, and how the compiler was used.

We chose to create a website because we have experience in the website category, and it also relates to our topic of coding and compilers, as we custom-coded our website. Our formatting plan was to divide the subjects into smaller categories, and put each of the categories on a different page of our website. to write about each topic and have them connect to the main theme. Each section was divided so it would fit the word count that was provided to us, thus making it easier to divide the work among our group. We also wanted to show how exactly her invention of the compiler helped to make code easier to use. So, we coded our entire website by ourselves.

Grace Hopper broke many barriers with the compiler such as a communication barrier between people and technology. Computers used binary code, a system of ones and zeros, and it was difficult to communicate with computers in this way, unless one had high understandings of binary. Most people did not have this advanced understanding, and it rendered them unable to use and read binary and the other programs used at the time.

Grace Hopper's compiler is significant today because without the compiler, most people would not be able to use modern technology such as computers and smartphones. Hopper's Naval career began shortly after women were first allowed to join the military. Along with her being a woman, Hopper was older than most recruits and was almost prohibited from joining the Navy. Therefore, her work was even more impressive considering the prejudices against her for being a woman. Hopper's help in the progression of technological achievements broke gender barriers. as well as language

barriers, and it paved the way for the modern Information Age we live in today. Without Hopper's compiler, we would not have what we consider basic: smartphones and the internet.