

1. **Wirth cites the introduction of the personal workstation in 1975 as critical to the development of computing. Give two examples of post-1975 computing innovations that you think also profoundly affected computing, and explain why.**

- The affordability of so called “micro-computers” to be utilized by individuals in schools and homes. These were based on single-chip processors, compared to the ones in large institutions such as companies and universities. Due to these events, the demand for more complex software grew and as did many difficulties associated with it. These threatening and serious problems needed more computing power to find solutions.

- Computing allowed the commercialization of software to be more easily accessible to the public, such as a language compiler. This example of a text editor via file system and debugger was offered to the public at a starting cost of \$50.

2. **Wirth is very focused on certain aspects of software engineering. Based on your experience, what are two software engineering challenges or solutions that Wirth entirely ignores?**

- I believe the open source idea and trend was largely ignored or was not taken seriously by Wirth. The explosion in software making by individuals and the productivity of the industry increased significantly due to a higher number of languages, tool, framework, etc. Wirth argued that the industry is focused on “what sells” due to the profitability nature of companies. But the developers are focused on friendly source code in an open environment to get out of the forced and licensed or subscription based practices by such companies.

- Wirth focuses a lot on a software engineering explosion but largely ignores the ‘processes’ that go into software engineering to solve problems. Other engineering disciplines are highly dependent on the definition of processes and software engineering was also in need of such processes to take it further and be successful. Initially, the lack of effective and good processes in the space drove individuals to adopt other engineering fields’ practices. However, with the maturity of the software engineering field now, there are lots of techniques, such as in cloud computing and project management, to help developers solve large scale problems with effective processes.