The 4th Generation (1980 - Present Day)

- The creation of Personal Computing.
- Similar to the minicomputers developed in 3rd Gen.
- Individual vs Corporation
- Microsoft and Windows OS (1975)
  - 1981 - MS-DOS (Microsoft Disk Operating System)
    - Non-graphical command line OS for IBM by Tim Paterson
    - Navigate, Open, and Manipulate Files (No GUI)
- Windows' Big impact on computing
- Apple had a huge success because it was user friendly
  - First system in 1984 (could run one app at a time)
- Nowadays we have computers everywhere
  - Personal, smartphones, ATM, motor vehicles, etc..
Microsoft - Windows

- 1985 Windows 1 - 1st true attempt at a graphical user interface in 16-bit
- 1987 Windows 2 - Windows could overlap each other, min/maximise
  - Microsoft Word and Excel - first appearance
- 1990 Windows 3 - First to require hard drive and challenger to Macintosh
  - Solitaire
- 1992 Windows 3.1 Required 1MB of RAM and 1st distribution on a CD
- 1995 Windows 95 - "plug and play concept" and 32 - bit environment and IE
- 1998 Windows 98 - Windows Driver Model for computer components
- 2000 Windows ME - last based on MS-DOS and last in the 9x line
- Windows 2000 - release of Microsoft’s automatic updating
- 2001 Windows XP - The best and the longest running version
- 2014 Windows 10 - unity of all windows platforms
The Evolution of Gaming

- 1983 - North American video game crash
- 1989 - Game Boy
- 1996 - Nintendo 64
- 2000 - PlayStation 2
- 2002 - Game Boy Advance

National Science Foundation Network (NSFNET)

- 1983
- Dennis Jennings
- Goal: To provide a network for research and education.
- 5 supercomputers
  - John von Neumann Center at Princeton University
  - San Diego Supercomputer Center
  - National Center for Supercomputing Applications at University of Illinois
  - Cornell Theory Center at Cornell University
  - Pittsburgh Supercomputing Center at Carnegie Mellon University
- Dissolved in 1995
World Wide Web (WWW)

- Tim Berners-Lee
- Goal: Place where documents are identified by URLs and connected by hypertext links (https).
- 1990 1st web page
- http://info.cern.ch/hypertext/WWW/TheProject.html

Resources

- http://mason.gmu.edu/~montecin/computer-hist-web.htm
- https://www.computerhope.com/jargon/m/msdos.htm
- https://www.theguardian.com/technology/2014/oct/02/from-windows-1-to-windows-10-29-years-of-windows-evolution