COBOL in 2020

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Why are we talking about this?

- "New Jersey needs volunteers who know COBOL, a 60-year-old programming language" CNBC, 6 April 2020
- "NJ seeking help from COBOL programmers in coronavirus fight" The Hill, 7 April 2020
- "Why N.J. wants coders fluent in a 60-year-old language in the middle of a pandemic" WHYY, 9 April 2020
Why are YOU talking about this?

• My background is as a distributed, cloud-native Linux Systems Administrator.
• I have participated in distributed environment "modernization" efforts. At the end, there was still a mainframe.
• Today I work as a Developer Advocate focused on Linux on IBM Z, and COBOL workloads on z/OS touch my work frequently.
COBOL is a modern language

• Yes, the first version of COBOL came out in 1959, but the first version of C came out in 1972!
• The current COBOL standard was refreshed in 2014, and a new standard is being developed now.
• COBOL supports handling of XML and JSON (check out https://developer.ibm.com/tutorials/parse-json-using-ibm-enterprise-cobol/)
COBOL on the mainframe

• Mainframes are big, s390x (zArchitecture) architecture, servers that have up to 190 processors and 40TB of RAM.

• The latest IBM mainframe came out in September 2019, the latest model of which came out in April 2020.

• Learning COBOL is not just about syntax, you have to understand the data and environment you're working in.
COBOL is not going anywhere

• "There are 240 billion lines of COBOL in operation, and another 5 billion new lines are added each year. $3 trillion of commercial transactions are processed by COBOL applications each day." (source: https://ibmsystemsmag.com/IBM-Z/10/2019/closing-cobol-programming-skills-gap)

• The reliability of COBOL on the mainframe remains unmatched elsewhere in the market.
Modern COBOL Development Environments

- IBM Z Open Editor for VS Code
  https://marketplace.visualstudio.com/items?itemName=IBM.zopenedit

- Zowe Explorer for VS Code

- IBM Wazi for Red Hat CodeReady Workspaces on OpenShift
Learning COBOL

• IBM Developer COBOL portal https://developer.ibm.com/technologies/cobol/
  • 10 minute Introduction to COBOL programming language video https://developer.ibm.com/technologies/cobol/videos/intro-to-cobol-write-your-first-program

• Open Mainframe Project
  • Resources: https://www.openmainframeproject.org/blog/2020/04/17/open-mainframe-project-launches-new-cobol-training-course
  • COBOL Training Course https://www.openmainframeproject.org/projects/coboltrainingcourse

• Coursera: COBOL programming with VS Code https://www.coursera.org/learn/cobol-programming-vscode