Google Data Analytics Certificate - Module 7

Overview

Module 7, *Data Analysis with R Programming*, focuses on using R for data analysis and visualization. It introduces R programming concepts and tools like RStudio. Designed for beginners, this module requires approximately 25 hours to complete and includes videos, readings, assignments, and quizzes.

Key Components

- **R Programming Basics**: Syntax, data structures (e.g., vectors, data frames), and functions in R.

- **Data Analysis with R**: Cleaning, transforming, and analyzing data using R packages (e.g., dplyr, tidyr).

- **Data Visualization with R**: Creating visualizations using ggplot2.

- **RStudio Environment**: Navigating RStudio for coding and analysis.

- **Transferable Skills**: Applying technical skills (e.g., Linux Homelab experience) to learn R programming.

Delivery and Assessment

The module includes videos, readings, assignments (e.g., writing R scripts for analysis), and quizzes, delivered by Google instructors. It is self-paced and includes activities like creating visualizations in R. Assessments include quizzes on R programming and data analysis.

Learning Outcomes

Participants will learn to use R for data cleaning, analysis, and visualization. They will gain proficiency in RStudio and key packages, preparing for the capstone project.

Conclusion

Module 7 equips learners with R programming skills for data analysis and visualization, aligning with industry standards. It prepares them for the capstone project in the final module.