

Mastering the Cloud: Leveraging Infrastructure as Code for Advanced Infrastructure Management and Optimization

Lecturer: Marco Cello, *Chief Technology Officer at webidoo*,
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Duration: 20 hours (6 credits)

PhD: TBD

Language: English/Italian

Aim

In this course, we delve into the world of cloud infrastructure management and explore the power of Infrastructure as Code (IaC). Throughout this course, you will gain a deep understanding of how IaC empowers organizations to design, provision, and manage scalable and reliable cloud architectures. By adopting IaC principles, you will discover the ability to automate infrastructure deployment, streamline workflows, and achieve significant time and cost savings. From provisioning complex cloud resources to ensuring security considerations, we will explore the full spectrum of advanced infrastructure management and optimization. By the end of this course, you will be equipped with the knowledge and skills to confidently design, deploy, and optimize cloud infrastructures using Infrastructure as Code, enabling you to maximize efficiency and deliver exceptional value in the rapidly evolving world of cloud computing.

Contents

- Overview of IaC and its benefits in cloud infrastructure management
- Designing Scalable and Reliable Cloud Architectures
- Automating Infrastructure Deployment and Provisioning
- Workflow Optimization and Efficiency with IaC
- Cost Optimization and Resource Utilization Strategies
- Security Considerations in Cloud Infrastructure
- Advanced Infrastructure Management Techniques
- Real-world Applications and Case Studies

Exam: Multiple-choice questions and hands-on lab/practical exam.

Time schedule: Around July-December 2024. Schedule to be defined after agreement with the students.

Lesson calendar: TBD

Room: TBD

For all the interested students, please send me an email (marco.cello@hotmail.com) so I collect the interests and accordingly fix the Lesson calendar and time schedule.