Adi Shankara
DIGITAL ACADEMY

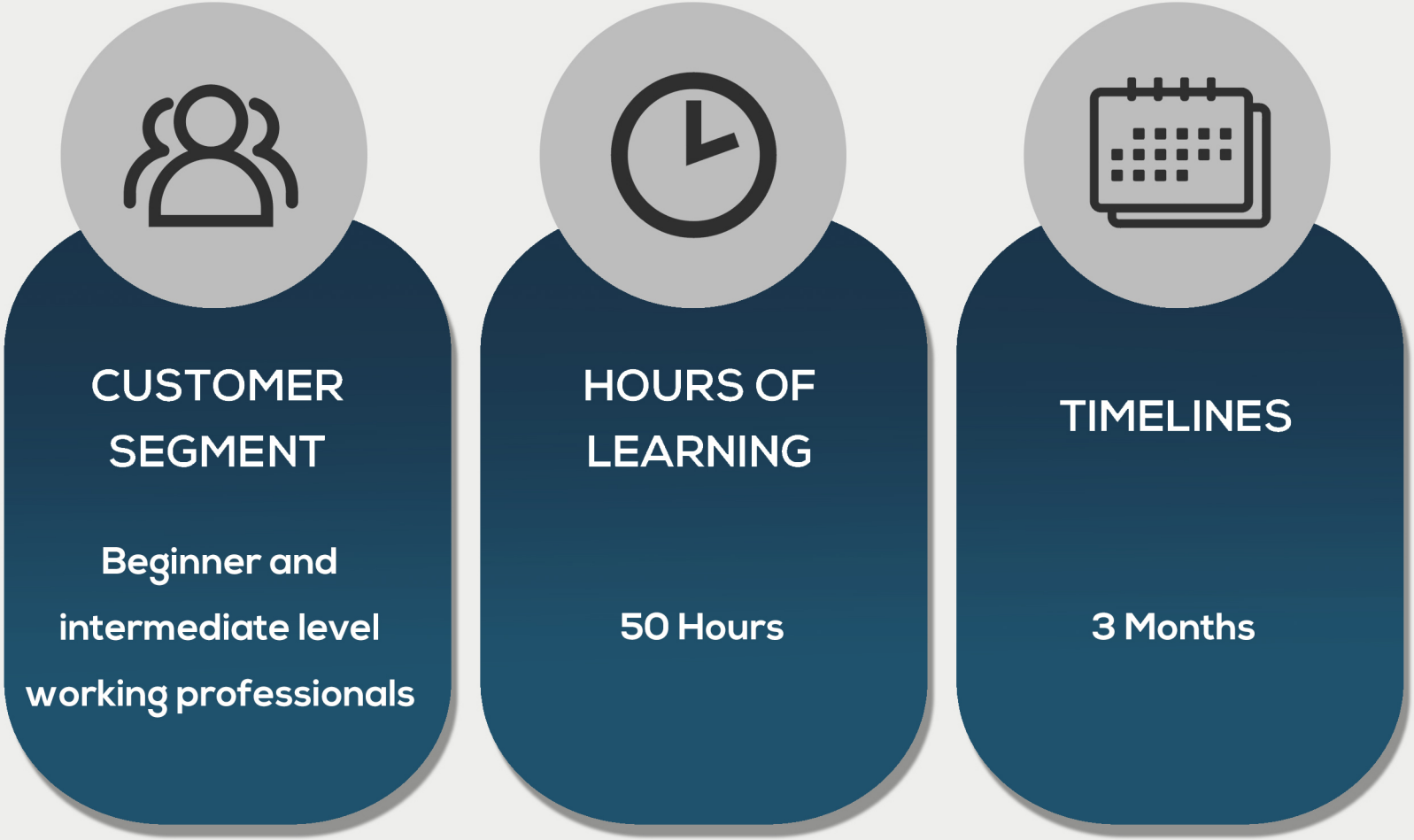
Cloud Computing

About

Cloud Computing has reshaped the IT industry by opening up the scope for unlimited & highly elastic scalability in the delivery of enterprise applications and software as a service (SaaS). Amazon cloud, Microsoft's Azure, Google cloud, IBM cloud, Oracle, Salesforce and many other cloud contributions provide software vendors and new start-ups the option to deploy their applications to systems of unlimited computational power with practically no initial capital investment and with modest operating costs proportional to the actual use.

As per the World Economic Forum, AI, IoT and cloud computing will play a significant role in the industrial revolution version 4. As per forecast, AI and cloud computing will complement each other along with IoT to upgrade technology and propel the growth of the IT industry. In 2019 alone, the worldwide cloud computing market size was valued at $266.0 billion and is expected to expand at a Compound Annual Growth Rate of 14.9% from 2020 to 2027. The growing digital transformation among industries, improving accessibility of internet services and mobile devices across the world, and increase in investments in big data infrastructure & IoT related services are the primary drivers that promote market growth in the cloud computing sector.

According to forecasts by Gartner, the global public cloud revenue growth will be 17% in 2020. Even though Infrastructure as a service (IaaS) gained the highest growth rate in 2020 due to data center consolidation, Software as a service (SaaS) will remain the largest market segment. The main focus of this course is to educate participants with the fundamental knowledge of cloud computing and various cloud computing related services. The course on diploma in cloud computing covers lectures and lab sessions related to virtualization techniques in cloud computing, overview of important cloud platforms like AWS, Azure and Google cloud and case studies & assignments in web hosting, big data analytics using Apache Hadoop and Apache Spark. The unique feature of this course is that the tutors will provide you live sessions to discuss the course modules and clear the doubts.


CUSTOMER SEGMENT
Beginner and intermediate level working professionals
HOURS OF LEARNING
50 Hours
TIMELINES
3 Months

CASE STUDIES & ASSIGNMENTS

a. Implementation of Virtualization using Oracle Virtual-Box.
b. Ubuntu Instance Creation Using Virtual-Box.
c. Networking between two OS instances.
d. Creating a Linux operating system instance in AWS and networking between two EC2 instances.
e. Connecting to Your Linux Instance using PuTTY in Windows.
f. Host a Static Website in Amazon AWS and deploy WordPress on AWS.
g. Run a sample Hadoop operation in a single node (Pseudo mode) in Virtual Box and deploy a multi-node Hadoop setup in AWS.
h. Deploy Spark sample applications.

DOUBT RESOLUTION MECHANISM

Participants can clarify the doubt via email.
Bi-weekly online video conference - 1hour.

CERTIFICATE PROFORMA

Certificate course on “cloud computing”

ASSESSMENT / GRADING / EXAM TERMS

5. Assessment: 8 online quizzes, 2 assignments and final assessment.

ACTIVITY	WEIGHTAGE
QUIZ-1	7.5%
QUIZ-2	10%
QUIZ-3	10%
QUIZ-4	NON-GRADED
QUIZ-5	10%
QUIZ-6	10%
QUIZ-7	10%
QUIZ-8	NON-GRADED
ASSIGNMENT-1	7.5%
ASSIGNMENT-2	NON-GRADED
ASSIGNMENT-3	10%
FINAL ASSESSMENT	25%

MODULES

I. Cloud Computing Fundamentals.
II. Amazon Web Services.
III. Existing Cloud Computing Providers and Certifications
IV. Cloud Computing Tools, Distributed Systems and Streaming Mechanism

PROGRAM COORDINATOR

Ramesh R

Assistant Professor, Department of CSE, ASIET, Kerala, India

Research Scholar, Department of Computer Applications, CUSAT, Kerala.

Fee **Rs. 1,950**