

Programme on

ROLE OF MICRO SERVICES IN DEVELOPING SCALABLE APPLICATIONS

Coordinator: **Dr. V. Radha**

JUNE 24 - 28, 2024
(Offline Mode)



INSTITUTE FOR DEVELOPMENT AND RESEARCH IN
BANKING TECHNOLOGY, HYDERABAD
(ESTABLISHED BY RESERVE BANK OF INDIA)

Introduction

Majority of the business applications being in use were developed in the monolithic era (tightly coupled modules), using client-server architecture. This was an excellent choice when desktops ruled IT. But with the rise of mobile devices and the cloud, back-end data must always be available for a wide range of devices. At this point, the monolithic architecture is a major bottleneck, as whenever a change is made, the entire application has to be updated, opening up the possibility of new bugs. Most importantly, with everything tied to a single codebase, one can't scale a specific function or service independently; one has to scale up the entire application, leading to higher costs.

With microservices, application code is broken into independent decoupled services that run as separate entities in different servers. Output from one service is used as an input to another in an orchestration of independent, communicating services.

Unlike the monolithic architecture wherein a failure in the code in a module affects more than one service or function, there is minimal impact of a failure using microservices. Even when several systems are brought down for maintenance, users won't notice it.

Scalability is the key aspect of microservices. Because each service is a separate entity, one can scale up a single function or service without having to scale the entire application. Business-critical services can be deployed on multiple servers in load balancing mode for increased availability and performance.

Objective

The program aims to draw attention to the problems faced because of monolithic architectures and highlights the advantages of shifting to micro-services based architectures particularly in the context of scalability.

Contents

- ★ Introduction to Containers and Docker
- ★ Introduction to Service Oriented Architecture and Micro Services
- ★ Monolithic Architectures and their pros and Cons
- ★ Micro Services Architectures and their pros and cons
- ★ Deployment Models

Who can Participate?

IT officers and executives who are directly or indirectly involved in application development.

End Use

Participants would definitely appreciate the concepts of micro services and the benefits they bring in.

Fee Details

Domestic Participants from

- ★ RRBs & Coop. Banks: Rs. 59,000/- (Rs. 50,000/- + 18% GST)
- ★ All other Banks & Fis: Rs. 76,700/- (Rs. 65,000/- + 18% GST)

The fees for our programmes can be remitted through NEFT and the bank account details for fee payment are here under:

Account Name : IDRBT

Bank : Axis Bank Limited

Branch : Humayun Nagar (Mehdipatnam Ring Road) Branch, Hyderabad

Account Number: 426010100018823

IFSC Code : UTIB0000426

GSTIN : 36AAAAI0204K1Z4.

Nominations

Nominations should be sent to us latest by **JUNE 10, 2024** by email to program@idrbt.ac.in.

While nominating, please provide the details of the participants (Name, Designation, Bank, Mobile No / Phone No., email address) along with the nominating authority details (Name, Designation, Bank, Mobile No / Phone No., email address, Fees billing address, GST No. of the bank).

Accommodation

Participants will be provided Air Conditioned Single Occupancy room at IDRBT, Hyderabad, with all cafeteria facilities. The Participants can check-in on the evening of one day before the programme and can check-out after completion of the programme on the same day (or) in the morning of the next day of the programme.

Contact Us

Please contact our Programme Office for organizing Customized Programmes and/or any other queries related to programmes at program@idrbt.ac.in or call us on +914023294121/22/24/25.

Programmes Scheduled in June 2024

S. No.	Programme	Date	Coordinator
1	Emerging AI/ML Technologies for Smart Banking	03 - 07	Dr. Mridula Verma
2	Workshop on Registration Authority Operations	06 - 07	Dr. N. P. Dhavale
3	Emerging Technologies for Cyber Security	10 - 14	Dr. Dipanjan Roy
4	Micro-Services for Banking Infrastructure	19 - 21	Dr. Subhrendu C
5	Security in Cloud Computing	24 - 28	Dr. P. Syam Kumar
6	Cyber Defence	24 - 28	Dr. Rajarshi Pal
7	Role of Micro Services in Developing Scalable Applications	24 - 28	Dr. V. Radha

Please visit our website for more details at : <https://www.idrbt.ac.in/offline-programmes>.



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