

CAMUNDA BPMN WORKSHOP

By Dr. Vishwanath Rao

Introduction to BPM and Workflow Automation:

- Overview of Business Process Management (BPM) concepts
- Importance of workflow automation in modern enterprises
- Introduction to the Camunda platform and its capabilities

Getting Started with Camunda:

- Installing and configuring the Camunda platform
- Exploring the Camunda Modeler for process modeling
- Creating and deploying simple BPMN (Business Process Model and Notation) diagrams

Modeling Business Processes with BPMN:

- Understanding BPMN elements and notation
- Modeling sequential and parallel process flows
- Handling events, gateways, tasks, and subprocesses in BPMN diagrams

Process Execution and Orchestration:

- Executing BPMN processes using the Camunda engine
- Understanding process instance lifecycle and execution semantics
- Monitoring and managing running process instances

Task Management and User Interfaces:

- Defining user tasks and human interactions in BPMN diagrams
- Configuring task forms and user interfaces in Camunda
- Implementing task assignment, escalation, and delegation strategies

Integration and External Service Calls:

- Integrating external systems and services with Camunda processes
- Invoking REST APIs, web services, and external tasks from BPMN processes
- Implementing service tasks and connectors for service invocation

Error Handling and Compensation:

- Handling errors and exceptions in BPMN processes
- Implementing error boundaries, error events, and compensation handlers
- Managing retries, compensating actions, and error logging

Process Monitoring and Analytics:

- Monitoring process performance and KPIs using Camunda Cockpit
- Generating reports and dashboards for process analytics

- Implementing custom monitoring and reporting solutions

Advanced Topics in Camunda:

- Customizing and extending Camunda using Java, Spring, or other frameworks
- Implementing asynchronous processing, event-driven architectures, and message correlation
- Scaling and deploying Camunda for high availability and performance

Best Practices and Case Studies:

- Best practices for BPMN modeling, process design, and implementation
- Real-world case studies and success stories of Camunda implementations
- Tips and tricks for optimizing performance, scalability, and maintainability

Hands-On Labs and Exercises:

- Practical exercises and hands-on labs to reinforce concepts learned
- Building end-to-end BPMN processes and workflows using Camunda
- Troubleshooting common issues and debugging process executions