EXPONENT
IT TRAINING & SERVICES
Knowledge is The Best Investment

- C/ C++
- JAVA FULL STACK
- PYTHON
- DSA
- HADOOP
- DATA SCIENE
- DATA ANALYTICS
- REACT
- MERN/ MEAN
- MANUAL, AUTOMATION & TESTING
- AWS LINUX & DEV-OPS
- TABLEAU
- POWER BI
- SERVICE NOW

100% PLACEMENT RECORD

Top Rated On Google

5.0 ★★★★★ 272 Google reviews
Software training institute in Pimpri Chinchwad, Maharashtra

- Live Project Work
- Hand On Session
- Learn From Industry Experts.
- 100% Interactive Sessions.
- Interview Preparation.
- One To One Interaction .
- Offline And Online Support.
- 100% Industry Oriented Training.

996-090-8543
986-074-8543
exponent_it_training_services
www.exponent-it.com
Shop 10, Q Building Dhruv Darshan society Near PCCOE College

HADOOP

COURSE CONTENTS

- VMware installation
- MySQL database
- Core Java
- BIGDATA
- HADOOP
- Tools
- Apache Spark
- Ecommerce Project (Product based web application)
- Single node Installation of Hadoop
- Multimode Installation of Hadoop

HADOOP syllabus

VMware installation

MySQL database

Core Java
- Types Of Variables
- Types Of Data Types
- Types of Modifiers
- Types of Constructors
- Object Oriented Programming in Java

BIGDATA
- Introduction To Big Data
- Characteristics Of Big Data Of Data Types
- Examples of Big data
- Types of data
- Sources of Big data
- What is Streaming data?
- Batch Streaming data
- Big Data Hadoop opportunities

HADOOP
- Hadoop Introduction And HDFS Introduction
  - Hadoop Architecture
  - Hadoop Versioning And Configuration
  - Single Node Hadoop Installation On Ubuntu
  - Hadoop Configuration
  - HDFS Cluster Architecture(Production Environment) And Block Placement
  - Modes In Hadoop I.E. Local, Pseudo Distributed, Fully Distributed
  - Hadoop Daemons I.E. Master Components [Name Node, Secondary Name Node, Job Tracker], Slave Components[Job Tracker, Task Tracker]
  - Task Instance
  - Hadoop HDFS Commonds
  - HDFS Access
- Map Reduce Introduction
  - Understanding Map Reduce Framework
  - What is Map Reduce Base?
  - Map Reduce Data Processing
  - What is Partitioner And Types
  - Relationship Between Input Splits And HDFS Blocks
  - Mapreduce Combiner & Partitioner
  - Hadoop Specific Data Types
  - Mapreduce Data Flow Through Analytics
  - Types Of Mappers And Reducers
  - Developing Mapreduce Programs Using Eclipse
  - Analyzing Dataset Using Mapreduce
  - Running Mapreduce In Local Mode
- Mapreduce On Yarn(2.x)
  - How Mapreduce Works
  - Mapreduce Application Job
  - Submission & Initialization Of Mapreduce Job
  - Assigning & Execution Of Tasks
  - Monitoring Progress Of Mapreduce Job
  - Completion Of Job
  - Handling Of Mapreduce Job
  - Task Failure
  - Task Tracker Failure
  - Job Tracker Failure
- Advanced Topic For Mapreduce Performance
  - Shuffle Optimization
  - Job Scheduling
  - In Depth Shuffle And Sorting
  - Speculative Execution
- Output Committers
- JVM Reuse In MR
- Configuration And Performance Tuning
- Advanced Mapreduce Algorithm
- File Based Data Structure
  - Sequence File
  - Map File
- Default Sorting In Mapreduce
  - Secondary Sort
  - Partial Sorting
- Data Lookup Strategies
  - In Map Files
- Sorting Algorithm
  - Total Sort
  - Input Sampler
  - Secondary Sort

01

- Mapreduce Data Types And Formats
- Serialization In Hadoop
- Hadoop Writable And Comparable
- Hadoop Raw Comparator And Custom Writable
- Mapreduce Types And Formats
- Understand Difference Between Block And Input Split
- Raw Or Record Reader
- File Input Format
- Combine File Input Format And Processing Whole File Single Mapper
- Each Input File As A Record
- TextOnly Valued Input Format
- Binary Input Processing
- Multiple Inputs Format
- Database Input And Output

Tools
- Apache Sqoop
  - Introduction To Sqoop
  - How Does Sqoop Work
  - Sqoop JDB Connor And Connectors
  - Sqoop Import Tools To Import Data
  - Table Import
  - Binary Data Import
  - Incremental Import
  - Filtering Import
  - Export Data Sqoop Function
  - Sqoop Database Commonds Using Eval Function
- Apache Hive
  - What is Hive ?
  - Architecture Of Hive
  - Hive Metastore
  - Hive Clients
  - How Hive Differs From Traditional RDBMS
  - Hive Data Manipulation
  - Hive Types And File Formats In Hive
  - File Encoding
  - Common Problems While Working With Hive
  - Introduction To HiveQL
  - Hive Partitioning Tables
  - Understand Storage Formats
  - Querying Data
  - Sorting And Aggregation
- Hive Introduction In Query
- Joins, Sub Queries And Views
- Writing User Defined Functions (UDFs)
- Hive Analytics Functions
- Querying Data
- Sorting Data
- User Defined Functions
- Apache Hbase
  - Introduction To Hbase
  - Usage Scenarios Of Hbase
  - Use Of Hbase In Search Engine
  - Hbase Data Model
  - Hbase Data Model
  - Column Family And Column Qualifier
  - Cell And Its Versioning
  - Hbase Client Interfaces Overview
  - Hbase Delegating Tables
  - Hbase Data Coordinates
  - Versions And Hbase Operation
  - Get/Scan
  - Put
  - Delete
- Apache Zookeeper
  - Cluster Monitoring
  - Cluster Management

Apache Spark
- Introduction To Scala
  - Getting Started With Scala
  - Scala Background
  - Scala Vs Java
  - Scala Interpreter / REPL
  - Types Of Data Types
  - Types Of Variables
  - Types Of Functions
- Introduction To Spark
  - Hadoop Ecosystem And What Is Its Purpose?
  - Components Of The Spark Unified Stack
  - Resilient Distributed Dataset (RDD)
  - Downloading And Installing Spark Standalone
  - Scala And Python Overview
- Resilient Distributed Dataset And Data Frames
  - How To Create Parallelized Collections
  - Resilient Distributed
  - Work With Resilient Distributed Dataset (RDD) Operations

02

- Spark SQL
  - Introduction To Apache Spark SQL
  - Data Frames
  - Importing And Saving Data
  - Processing The Text Files, JSON And Parquet Files
  - Data Frames
  - Hive Tool
- Spark ML lib
  - Introduction To Machine Learning
  - Supervised Learning
  - Introduction To Spark MLL lib Algorithms
  - Machine Learning Data Types And Working With ML lib
- Spark Graphs
  - What Is Graphs?
  - What Are Property Graph?
  - How To Create A Simple Using Graphs

Ecommerce Project (Product based web application)

Single node Installation of Hadoop

Multimode Installation of Hadoop

03

Embark on Your Learning Journey :

Discover the exciting world of technology as you embark on a learning journey that opens doors to endless possibilities.

- Experienced Faculty
- Hands-On-Learning
- Flexible Scheduling
- Real-World Projects
- Career Support
- Comprehensive Curriculum
- Mock Interview Sessions
- Lifetime Access

04

OUR RECENTLY PLACED STUDENTS

100% PLACEMENT RECORD