NEXT GEN PRO
Next Generation Professionals

NEXTGENPRO INNOVATIONS & EDUPARK PVT.LTD

DATA ANALYTICS

UNLEASH THE POWER OF DATA

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Kochi

ABOUT US

NextGenPro is a team of aim for developing next generation professional so we are welcome new ideas.Our main concept is work together and achieve together.We are also in the mission of creating skill people we believe everyone can achieve more than one skills means all are multi skill just need a support

WHY CHOOSE US ?

- ✓ Expert Trainers
- ✓ Live Projects
- ✓ Authorized Certificates
- ✓ Interview Assistance

WHO SHOULD ATTEND ?

Freelancers / Working Professionals

Self Employed / Start Ups

Students / Freshers

TABLE OF CONTENTS

DATA ANALYTICS

MS Office

MS WORD

- Text basics
- Text formatting and saving file
- Objects
- Header and footer
- Lists
- Tables
- Styles and content
- Merging document
- Proofing and printing

EXCEL

- Introduction to excel
- Home tab
- Perform calculations with functions
- Sort and filter data with excel
- Excel Chart
- Pivot Tables
- Pivot Charts
- VLOOKUP
- HLOOKUP
- If function
- Sumif, Sumifs, Count If
- Dash board
- Protecting the workbook
- Use macros to automate tasks
- Payroll
- Proofing and printing

POWER POINT

- Setting up PowerPoint environment
- Creating slides and applying themes
- Working with bullets and numbering
- Working with objects
- Hyperlink and action button

DATA ANALYTICS

Quality Management

Scope of quality management system

- Quality Planning
- Quality Control
- Quality Assurance
- Quality Improvement
- Supplier Quality Management
- Risk Management
- Customer Focus

Context of the organization

- Understanding the organization and its context
- Understanding the needs and expectations of interested parties
- Determining the scope of the quality management system

Quality management system and it's process

- Quality Planning
- Document Control
- Risk Management
- Supplier Management
- Training and Competence
- Corrective and Preventive Actions
- Measurement and Monitoring
- Internal Audits

LEADERSHIP

- Leadership and commitment
- Commitment to Quality
- Setting the Quality Vision
- Leading by Example
- Continuous Improvement
- Performance Monitoring and Accountability
- Building a Quality Culture

DATA ANALYTICS

PowerBI

01 |PREPARE THE DATA

👉 Connect to data source

- Identify and connect to a data source
- Change data source settings
- Select a shared dataset or create a local dataset
- Select a storage mode

👉 Clean, Transform and load data

- Basic Table Transformations
- Text, Number & Date Tools
- Resolve inconsistencies, unexpected or null values, and data quality issues
- Identify and create appropriate keys for joins
- Index & Conditional Columns
- Grouping & Aggregating Data
- Pivoting & Unpivoting
- Modifying, Merging & Appending Queries
- Connecting to Folders
- Defining Hierarchies & Categories

02 |MODEL THE DATA

👉 Design a data model

- **Define the tables**
- **Configure table and column properties**
- **Design and implement role- playing dimensions**
- **Define a relationship's cardinality and cross-filter direction**
- **Design a data model that uses a schema**
- **Create a common date table**

👉 Develop a data model

- **Create calculated tables**
- **Create hierarchies**
- **Create calculated columns**

👉 Create model calculations by using DAX

- **Create basic measures by using DAX**
- **Use CALCULATE to manipulate filters**
- **Implement Time Intelligence using DAX**
- **Replace implicit measures with explicit measures**
- **Use basic statistical functions**
- **Create semi-additive measures**
- **Use quick measures**

👉 Optimize model performance

- **Remove unnecessary rows and columns**
- **Identify poorly performing measures, relationships, and visuals**
- **Reduce cardinality levels to improve performance**

Power BI

DATA ANALYTICS

PowerBI

03 |VISUALIZE AND ANALYZE THE DATA

👉 Create reports

- Add visualization items to reports
- Choose an appropriate visualization type
- Format and configure visualizations
- Use a custom visual
- Apply and customize a theme
- Configure conditional formatting
- Apply slicing and filtering
- Configure the report page
- Use the Analyze in Excel feature
- Choose when to use a paginated report

👉 Enhance reports for usability and storytelling

- Configure bookmarks
- Create custom tooltips
- Edit and configure interactions between visuals
- Configure navigation for a report
- Apply sorting
- Configure Sync Slicers
- Group and layer visuals by using the selection pane
- Drilldown into data using interactive visuals
- Export report data

👉 Identify patterns and trends

- Use the Analyze feature in Power BI
- Identify outliers
- Choose between continuous and categorical axes
- Use groupings, binnings, and clustering
- Use AI visuals
- Use the Forecast feature
- Create reference lines by using the Analytics pane

Power BI

DATA ANALYTICS

SQL

1 SQL-Overview

- What is SQL?
- SQL Process
- SQL Commands

2 SQL-RDBMSConcepts

- WhatisRDBMS?
- SQLConstraints
- DataIntegrity
- DatabaseNormalization
- Database–First Normal Form(1NF)
- Database–Second Normal Form(2NF)
- Database–Third Normal Form(3NF)

3 SQL-RDBMS Databases

- MySQL
- MSSQL Server
- ORACLE
- MSACCESS

4 SQL–Syntax

- Various Syntax in SQL

5 SQL-Data Types

6 SQL–Operators

- What is an Operator in SQL?
- SQL Arithmetic Operators
- Arithmetic Operators–Examples
- SQL Comparison Operators
- Comparison Operators–Examples
- SQL Logical Operators
- Logical Operators–Examples

7 SQL–Expressions

- Boolean Expressions
- Numeric Expressions
- Date Expressions

8 SQL–CREATE Database

9 SQL-DROP or DELETE Database

10 SQL-SELECT Database,USE Statement

11 SQL-CREATE Table

- SQL-Creating a Table from an Existing Table

12 SQL-DROP or DELETE Table

13 SQL-INSERT Query

14 SQL-SELECT Query

15 SQL-WHERE Clause

16 SQL-AND&OR Conjunctive Operators

- The AND Operator
- The OR Operator

17 SQL-UPDATE Query

18 SQL-DELETE Query

19 SQL-LIKE Clause

20 SQL-TOP,LIMITor ROWNUM Clause

21 SQL-ORDER BY Clause

22 SQL-Group By

DATA ANALYTICS

SQL

Python

- Introduction
- Python Installation
- Python virtual environment Setup
- Python Syntax, Variables, Comments
- Numbers, Strings, Boolean Values, Operators
- Type Casting, Data Types
- List, Tuple, Set, Dictionary
- Conditional Statements
- IF, IF..ELSE
- NESTED..IF, IF..ELIF Ladder
- Short Hand IF, Short Hand IF..ELSE
- Iterators
- Break and Continue, Pass
- Try....Except
- Looping Statements
- For loop
- While loop
- Do..while loop
- Nested loops
- Functions
- Lambda Functions
- Scope of Variables
- Python Modules and Packages
- In-Built Modules

- User-Defined Modules
- In-Built Packages
- User-Defined Packages
- Python Oops Concept- Class, Object ,Abstraction,
- Encapsulation, Inheritance, Polymorphism
- Classes and Objects
- Python JSON
- Regular Expressions
- User input, String Formatting
- File Handling- Create, Write, Read, Delete
- PIP

Python ML & AI

- Python Basics
- Python Functions and
- Packages
- Working with Data
- Structures, Arrays,
- Vectors & Data Frames
- Jupyter Notebook –
- Installation & function
- Pandas, Numpy,
- Matplotlib, Seaborn
- Machine Learning
- Supervised Learning
- Linear Regression
- Multiple Variable Linear Regression
- Logistic Regression
- Naïve Bayes Classifiers
- K-NN Classification

- Support Vector
- Machines
- Unsupervised Learning
- K-means Clustering
- Hierarchical Clustering
- Dimension Reduction-PCA
- Statistical Learning
- Descriptive Statistics
- Probability & Conditional Probability
- Hypothesis Testing
- Inferential Statistics
- Probability Distributions
- Ensemble Techniques
- Decision Trees
- Bagging
- Random Forests
- Boosting

- Recommendation
- Systems
- Introduction to
- Recommendation
- Systems
- Popularity based model
- Content based
- Recommendation
- System
- Collaborative Filtering
- (User similarity & Item
- similarity)
- Hybrid Models
- Artificial Intelligence
- Introduction to
- perceptron & Neural
- Networks
- Activation and Loss
- functions

- Gradient Descent
- Batch Normalization
- TensorFlow & Keras for
- Neural Networks
- Hyper Parameter
- Tuning
- Computer vision
- Introduction to
- convolutional Neural
- Networks
- Convolution, Pooling,
- Padding & its
- mechanisms
- Forward Propagation &
- Backpropagation for
- CNNs
- CNN architectures like
- AlexNet, VGGNet,
- InceptionNet

DATA ANALYTICS

WEB ANALYSIS

- Introduction and understanding of web analytics
- Google Analytics.
- Web analytics process.
- Conversion and behavior analysis.
- Acquisition and audience analysis.
- Search Engine Statistics
- Conversion Funnels.
- Data segmentation.

DATA ANALYTICS

DIGITAL MARKETING

1

Introduction to Digital marketing

- *Digital Marketing Process*
- *Benefits of Digital Marketing over traditional Marketing*
- *Digital Marketing Tools and Techniques*
- *Latest trends in Digital Marketing.*

2

Social Media Marketing

- *Importance of Social Media Marketing*

3

Digital marketing Tools in Website

4

Search Engine Marketing

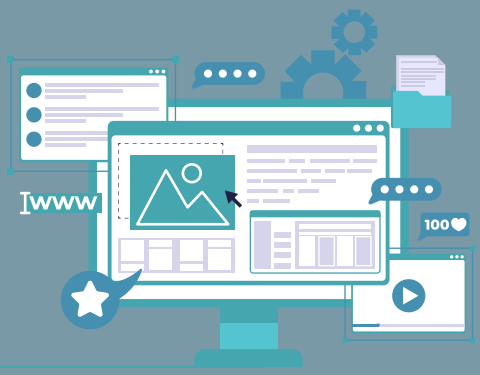
5

Search Engine Optimization SEO

- *Google Analytics*
- *Google Adwords/Ads*
- *Google Adsense*

DATA ANALYTICS

Tableau (Optional)



1 TABLEAU COURSE MATERIAL

- Start Page
- Show Me
- Connecting to Excel Files
- Connecting to Text Files
- Connect to Microsoft SQL Server
- Connecting to Microsoft Analysis Services
- Creating and Removing Hierarchies
- Bins
- Joining Tables
- Data Blending

2 LEARN TABLEAU BASIC REPORTS

- Parameters
- Grouping Example 1
- Grouping Example 2
- Edit Groups
- Set
- Combined Sets
- Creating a First Report
- Data Labels
- Create Folders
- Sorting Data
- Add Totals, Sub Totals and Grand Totals to Report

3 LEARN TABLEAU CHARTS

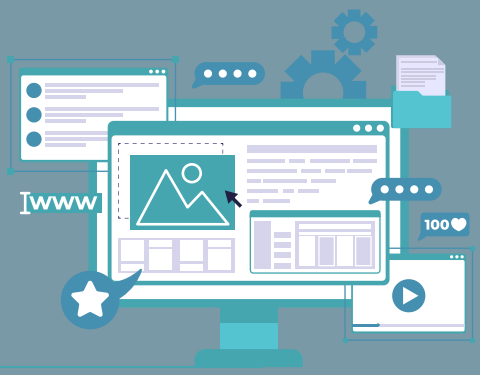
- Area Chart
- Bar Chart
- Box Plot
- Bubble Chart
- Bump Chart
- Bullet Graph
- Circle Views
- Dual Combination Chart
- Dual Lines Chart
- Funnel Chart
- Pie Chart
- Scatter Plot
- Stacked Bar Chart
- Line Chart
- Gantt Chart
- Pareto Chart
- Heatmap
- Highlight Table
- Histogram
- Cumulative Histogram
- Traditional Funnel Charts
- Lollipop Chart
- Grouped Bar or Side by Side Bars Chart
- Word Cloud
- Waterfall Chart
- Geographic map
- Combines axis
- Motion chart
- Reference lines
- Tree Map
- Crosstab
- Text Label
- Filled map

4 CUSTOM SQL

- Convert to Custom SQL

DATA ANALYTICS

Tableau (Optional)



5 LEARN TABLEAU ADVANCED REPORTS

- Dual Axis Reports
- Blended Axis
- Individual Axis
- Add Reference Lines
- Reference Bands
- Reference Distributions
- Symbol Map
- Use Google Maps
- Mapbox Maps as a Background Map
- WMS Server Map as a Background Map

6 LEARN TABLEAU CALCULATIONS & FILTERS

- Calculated Fields
- Basic Approach to Calculate Rank
- Advanced Approach to Calculate Rank
- Calculating Running Total
- Filters Introduction
- Quick Filters
- Filters on Dimensions
- Conditional Filters
- Top and Bottom Filters
- Filters on Measures
- Context Filters
- Slicing Filters
- Data Source Filters
- Extract Filters

7 LEARN TABLEAU DASHBOARDS

- Create a Dashboard
- Format Dashboard Layout
- Create a Device Preview of a Dashboard
- Create Filters on Dashboard
- Dashboard Objects
- Create a Story

8 TABLEAU DATA SERVER

- Physical architecture overview
- User access
- Component functions & processes
- Tableau server on-premises
- Tableau reader
- Tableau online v tableau server

9 TABLEAU SERVER UI

- Users
- Groups
- Tasks
- Tableau server menu
- Schedules
- Site roles
- Tableau server user interface
- Content display options