GUIDANCE POINT:- PUNE'S PREMIER EDUCATION HUB

Welcome to Guidance Point, your ultimate destination for comprehensive education and professional development! At Guidance Point, we believe in empowering individuals to unlock their full potential through accessible and high-quality education. With a vast array of courses covering all domains, from technology to arts, business to sciences, we strive to cater to the diverse learning needs of our users. Whether you're a student looking to enhance your academic performance, a professional aiming to upskill or reskill, or an enthusiast eager to explore new interests, Guidance Point is here to guide you every step of the way. What sets us apart is our commitment to excellence. We meticulously curate our course offerings, partnering with the best institutes and industry experts to ensure that you receive top-notch education that is both relevant and practical. Our platform leverages cutting-edge technology and innovative teaching methodologies to deliver engaging and immersive learning experiences.

BENEFITS:-

1. Comprehensive Course:

   Our comprehensive course ensures thorough coverage of essential topics, equipping you with a well-rounded understanding of your subject matter, setting a strong foundation for your future endeavors.

2. Top Institute Partnerships:

   Through our partnerships with leading institutes, you gain access to world-class resources, expert guidance, and prestigious

certifications, empowering you to excel in your field and stand out among your peers.

3. Advanced Learning Technology:

   Leveraging advanced learning technology, we offer dynamic and interactive learning experiences, incorporating simulations, virtual labs, and multimedia resources to enhance comprehension and retention of complex concepts.

4. Supportive Community:

   Join our vibrant and supportive community of learners, mentors, and industry professionals, where you can collaborate, seek advice, and find encouragement, fostering a conducive environment for growth and success.

5. Personalized Learning Paths:

   Tailor your learning journey to suit your unique needs and goals with our personalized learning paths, allowing you to progress at your own pace and focus on areas that align with your interests and career aspirations.

6. Quality Assurance Standards:

   Rest assured that our courses adhere to rigorous quality assurance standards, ensuring that you receive high-quality instruction, updated curriculum, and valuable resources that meet industry benchmarks and standards.

7. Interactive Learning:

   Engage in dynamic and interactive learning experiences through our immersive course content, live sessions, quizzes, and discussions, promoting active participation, collaboration, and deeper understanding of the material.

8. Career Opportunities:

   Explore abundant career opportunities and pathways in your chosen field, supported by our comprehensive curriculum, industry partnerships, and career services, empowering you to pursue your dream job and achieve professional success.

SYLLABUS

1: INTRODUCTION TO DATA MINING CONCEPTS

- Understanding the fundamentals of data mining
- Exploring the data mining process: Data exploration, preprocessing, modeling, evaluation, and deployment
- Learning about different types of data mining tasks: Classification, clustering, association rule mining, and anomaly detection

2: DATA PREPROCESSING TECHNIQUES (CLEANING, TRANSFORMATION, REDUCTION)

- Data cleaning: Identifying and handling missing values, outliers, and inconsistencies in the data
- Data transformation: Converting data into a suitable format for analysis, including normalization and discretization
- Data reduction: Techniques for reducing the dimensionality of datasets, including feature selection and extraction

3: ASSOCIATION RULE MINING

- Understanding association rule mining and its applications
- Apriori algorithm: Generating association rules from transactional datasets
- Evaluation metrics for association rules: Support, confidence, and lift
- Advanced association rule mining techniques and algorithms

4: CLASSIFICATION AND PREDICTION

- Introduction to classification and prediction tasks in data mining
- Decision tree algorithms: ID3, C4.5, CART
- Naive Bayes classifier
- Evaluation metrics for classification models: Accuracy, precision, recall, F1-score
- Ensemble methods: Bagging, boosting, random forests

5: CLUSTERING TECHNIQUES

- Understanding clustering and its applications
- K-means clustering algorithm
- Hierarchical clustering algorithms: Agglomerative and divisive clustering
- Evaluation metrics for clustering: Silhouette coefficient, Davies-Bouldin index
- Density-based clustering: DBSCAN algorithm

6: INTRODUCTION TO DATA WAREHOUSING

- Understanding the concept of data warehousing and its role in decision support systems
- Architecture of data warehouses: Data sources, extraction, transformation, loading (ETL), and storage

- Data warehouse schema: Star schema, snowflake schema
- Tools and technologies for building and managing data warehouses

7: DIMENSIONAL MODELING AND OLAP (ONLINE ANALYTICAL PROCESSING)

- Introduction to dimensional modeling: Fact tables, dimension tables, and star schemas
- Multidimensional data models and OLAP cubes
- OLAP operations: Roll-up, drill-down, slice, dice, and pivot
- Implementing OLAP using tools like Microsoft SQL Server Analysis Services (SSAS) and Oracle OLAP