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1年間無料アップデート

Exam : **D-GAI-F-01**

Title : Dell GenAI Foundations Achievement

Version : DEMO

1.What are the three key patrons involved in supporting the successful progress and formation of any AI-based application?
A. Customer facing teams, executive team, and facilities team
B. Marketing team, executive team, and data science team
C. Customer facing teams, HR team, and data science team
D. Customer facing teams, executive team, and data science team
Answer: D
Explanation:
Customer Facing Teams: These teams are critical in understanding and defining the requirements of the AI-based application from the end-user perspective. They gather insights on customer needs, pain points, and desired outcomes, which are essential for designing a user-centric AI solution.
Reference: "Customer-facing teams are instrumental in translating user requirements into technical specifications." (Forbes, 2022)
Executive Team: The executive team provides strategic direction, resources, and support for AI initiatives. They are responsible for aligning the AI strategy with the overall business objectives, securing funding, and fostering a culture that supports innovation and technology adoption.
Reference: "Executive leadership is crucial in setting the vision and securing the resources necessary for AI projects." (McKinsey & Company, 2021)
Data Science Team: The data science team is responsible for the technical development of the AI application. They handle data collection, preprocessing, model building, training, and evaluation. Their expertise ensures the AI system is accurate, efficient, and scalable.
Reference: "Data scientists play a pivotal role in the development and deployment of AI systems." (Harvard Business Review, 2020)

2.What is the difference between supervised and unsupervised learning in the context of training Large Language Models (LLMs)?
A. Supervised learning feeds a large corpus of raw data into the AI system, while unsupervised learning uses labeled data to teach the AI system what output is expected.
B. Supervised learning is common for fine tuning and customization, while unsupervised learning is common for base model training.
C. Supervised learning uses labeled data to teach the AI system what output is expected, while unsupervised learning feeds a large corpus of raw data into the AI system, which determines the appropriate weights in its neural network.
D. Supervised learning is common for base model training, while unsupervised learning is common for fine tuning and customization.
Answer: C
Explanation:
Supervised Learning: Involves using labeled datasets where the input-output pairs are provided. The AI system learns to map inputs to the correct outputs by minimizing the error between its predictions and the actual labels.
Reference: "Supervised learning algorithms learn from labeled data to predict outcomes." (Stanford University, 2019)
Unsupervised Learning: Involves using unlabeled data. The AI system tries to find patterns, structures, or relationships in the data without explicit instructions on what to predict. Common techniques include

clustering and association.
Reference: "Unsupervised learning finds hidden patterns in data without predefined labels." (MIT Technology Review, 2020)
Application in LLMs: Supervised learning is typically used for fine-tuning models on specific tasks, while unsupervised learning is used during the initial phase to learn the broad features and representations from vast amounts of raw text.
Reference: "Large language models are often pretrained with unsupervised learning and fine-tuned with supervised learning." (OpenAI, 2021)

3.What are the three broad steps in the lifecycle of AI for Large Language Models?
A. Training, Customization, and Inferencing
B. Preprocessing, Training, and Postprocessing
C. Initialization, Training, and Deployment
D. Data Collection, Model Building, and Evaluation
Answer: A
Explanation:
Training: The initial phase where the model learns from a large dataset. This involves feeding the model vast amounts of text data and using techniques like supervised or unsupervised learning to adjust the model's parameters.
Reference: "Training is the foundational step where the AI model learns from data." (DeepMind, 2018)
Customization: This involves fine-tuning the pretrained model on specific datasets related to the intended application. Customization makes the model more accurate and relevant for particular tasks or industries.
Reference: "Customization tailors the AI model to specific tasks or datasets." (IBM Research, 2021)
Inferencing: The deployment phase where the trained and customized model is used to make predictions or generate outputs based on new inputs. This step is critical for real-time applications and user interactions.
Reference: "Inferencing is where AI models are applied to new data to generate insights." (Google AI, 2019)

4.What impact does bias have in AI training data?
A. It ensures faster processing of data by the model.
B. It can lead to unfair or incorrect outcomes.
C. It simplifies the algorithm's complexity.
D. It enhances the model's performance uniformly across tasks.
Answer: B
Explanation:
Definition of Bias: Bias in AI refers to systematic errors that can occur in the model due to prejudiced assumptions made during the data collection, model training, or deployment stages.
Reference: "Bias in AI systems can result from biased data or biased algorithmic processes." (AI Now Institute, 2018)
Impact on Outcomes: Bias can cause AI systems to produce unfair, discriminatory, or incorrect results, which can have serious ethical and legal implications. For example, biased AI in hiring systems can disadvantage certain demographic groups.

Reference: "Bias in AI systems can perpetuate and even amplify existing societal biases." (National Institute of Standards and Technology, 2020)
Mitigation Strategies: Efforts to mitigate bias include diversifying training data, implementing fairness-aware algorithms, and conducting regular audits of AI systems.
Reference: "Addressing AI bias requires comprehensive strategies including diverse data and fairness audits." (Ethics in AI, Oxford University, 2021)

5.What is one of the positive stereotypes people have about AI?
A. AI is unbiased.
B. AI is suitable only in manufacturing sectors.
C. AI can leave humans behind.
D. AI can help businesses complete tasks around the clock 24/7.
Answer: D
Explanation:
24/7 Availability: AI systems can operate continuously without the need for breaks, which enhances productivity and efficiency. This is particularly beneficial for customer service, where AI chatbots can handle inquiries at any time.
Reference: "AI's ability to function 24/7 offers significant advantages for business operations." (Gartner, 2021)
Use Cases: Examples include automated customer support, monitoring and maintaining IT infrastructure, and processing transactions in financial services.
Reference: "AI enables round-the-clock operations, providing continuous support and monitoring." (Forrester, 2020)
Business Benefits: The continuous operation of AI systems can lead to cost savings, improved customer satisfaction, and faster response times, which are critical competitive advantages.
Reference: "Businesses benefit from AI's 24/7 capabilities through increased efficiency and customer satisfaction." (McKinsey & Company, 2019)