

Quiz for Class 2-Module 2

⋮ Tags	Module-1
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⌵ Course Name	MLOps with Cloud
📅 Created Date	@September 30, 2024
⌵ Module Name	Introduction of MLOps
⋮ Related Topics	ml-systems-design mlops maturity levels mlops with cloud mlops-fundamentals
⌵ Resource Type	quiz

1. How does MLOps relate to DevOps?

- a) MLOps eliminates the need for DevOps in machine learning projects.
- b) MLOps borrows principles from DevOps, aiming to automate and bring continuous delivery to ML projects.
- c) MLOps and DevOps are completely separate with no overlapping principles.
- d) MLOps replaces the need for collaboration in ML model deployment.

▼ Check Answer:

b) MLOps borrows principles from DevOps, aiming to automate and bring continuous delivery to ML projects.

2. Why is deploying ML models more complex than deploying static software code?

- a) ML models do not rely on code.
- b) ML models constantly learn and adapt as data changes, making them dynamic.
- c) Static software code requires constant updates, while ML models do not.
- d) ML models never need to be monitored once deployed.

▼ Check Answer:

b) ML models constantly learn and adapt as data changes, making them dynamic.

3. What is a common cause of model performance degradation in ML?

- a) Bugs in the code
- b) Changes in data distributions over time
- c) Hardware failure
- d) Incorrect hyperparameter tuning

▼ Check Answer:

b) Changes in data distributions over time

4. How does MLOps contribute to responsible AI?

- a) By automating all human decisions in the process.
- b) By ensuring accountability, transparency, and fairness in model deployment.
- c) By making models less complex and easier to explain.
- d) By removing the need for governance frameworks.

▼ Check Answer:

b) By ensuring accountability, transparency, and fairness in model deployment.

5. Which of the following techniques is used to detect performance degradation in ML models?

- a) Model overfitting
- b) Ground truth evaluation and input drift detection
- c) Hyperparameter optimization
- d) Increasing batch size

▼ **Check Answer:**

b) Ground truth evaluation and input drift detection

6. What are the phases organizations go through in MLOps implementation?

- a) From manual data processing to developing real-time data streams
- b) From data collection to model evaluation and deployment
- c) From ad-hoc model development to fully automated ML pipelines with CI/CD integrated into each stage
- d) From basic machine learning algorithms to deep learning models

▼ **Check Answer:**

c) From ad-hoc model development to fully automated ML pipelines with CI/CD integrated into each stage

7. The choice of choosing the right deployment strategy depends on what factors?

- a) The number of users, the speed of the model, and the size of the dataset
- b) The model's complexity, the need to minimize downtime, and the sensitivity of the application
- c) The software version, the developer's preferences, and the type of hardware used
- d) The accuracy of the model, the size of the deployment team, and the model's runtime environment

▼ **Check Answer:**

b) The model's complexity, the need to minimize downtime, and the sensitivity of the application

8. What is the primary purpose of the MLOps maturity model?

- A) To eliminate the need for machine learning in production
- B) To clarify MLOps principles and practices
- C) To introduce new machine learning algorithms
- D) To minimize the use of data in machine learning

▼ **Check Answer:**

B) To clarify MLOps principles and practices