**1.**

**Question 1**

Static datasets are used for production ML modeling.

**1 / 1 point**



False



True

**Correct**

That's it! Dynamic real-world data is used.

**2.**

**Question 2**

In production ML, the design priority is fast training.

**1 / 1 point**



No



Yes

**Correct**

Correct! Fast training and choosing a high-performance algorithm are the design priorities for prototypes or research ML.

**3.**

**Question 3**

Developers adhere to modern software development to produce low-maintenance software, and to address project evolution. Select all the key aspects of modern software development (Check all that apply):

**0.75 / 1 point**



Fast Training



Monitoring

**Correct**

 Right on! The deployed model's performance is properly evaluated.



Testability

**Correct**

Yes! The data entering the system is continuously monitored and tested.



Best practices

You didn’t select all the correct answers

**4.**

**Question 4**

Model-performance needs to be continuously monitored, and new data, ingested and re-trained.

**1 / 1 point**



Yes



No

**Correct**

Good job! After deployment, it’s necessary to continuously evaluate the model's performance.

**5.**

**Question 5**

ML pipeline workflows are almost always DAGs.

**1 / 1 point**



True



False

**Correct**

Well done! The components of an ML pipeline are scheduled based on dependencies defined by a DAG.

**6.**

**Question 6**

TensorFlow Extended (TFX) is an end-to-end platform for deploying production ML pipelines.

**1 / 1 point**



No



Yes

**Correct**

You got it right! TFX is used to build and manage ML pipelines in production.

**7.**

**Question 7**

Production machine learning combines which two key disciplines?

**1 / 1 point**



Software testing



Modern software development

**Correct**

Keep it up! Well-designed software that adheres to best practices is key for the success of a production grade machine learning system.



Machine learning development

**Correct**

Nice going! ML Development focuses on specific issues related with data and model predictions quality.



Feature selection and engineering

**8.**

**Question 8**

What are the unique challenges to overcome in a production-grade ML system? (Check all that apply)

**1 / 1 point**



Building integrated ML systems.

**Correct**

Very well! ML systems perform all operations starting from ingesting the data into the system to deployment.



Assessing model performance.



 Deploying the model to serve requests.



Training the model on real world data.



Handling continuously changing data.

**Correct**

Indeed! Data will change over the life cycle of a production system, which can harm its performance.



Continually operating while in production.

**Correct**

Right on track! ML systems need to be flexible to operate while the system stages or modules are being changed or redesigned.



Optimizing computational resources and costs.

**Correct**

Absolutely! You want your ML system to be as frugal as possible.

**9.**

**Question 9**

**Production grade machine learning** challenges are addressed by implementing an important concept:

**1 / 1 point**



Machine learning pipelines



Directed Acyclic Graphs (DAGs)



Orchestrators



Tensorflow Extended (TFX)

**Correct**

Spot on! ML pipelines provide support for automating, monitoring and maintaining a model as you continue to train it over its lifetime.

**10.**

**Question 10**

TensorFlow Lite is a deep learning framework to deploy TFX pipelines into:

**1 / 1 point**



Mobile devices



Web browser



Servers

**Correct**

That’s it! Tensorflow Lite is the tool for deploying TFX pipeline into mobile and IoT devices.