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**NPTEL** (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » **Google Cloud Computing Foundations**  
(course)



## Course outline

How does an NPTEL online course work?

**Week 0:**  
**Welcome to the Course**

**Week 1: What's the cloud anyway? Start with a solid platform**

**Week 2: Use GCP to build your apps**

**Week 3 : Where do I store this Stuff?**

**Week 4: There's an API for that! You can't secure**

# Assignment 8

The due date for submitting this assignment has passed.

**Due on 2020-11-11, 23:59 IST.**

**Assignment submitted on 2020-11-11, 23:44 IST**

1) Which of the following statements most accurately describes machine learning? **1 point**

- ☐ Machine learning has to do with the theory and methods to build machines that think and act like humans
- ☐ Machine learning uses algorithms that are applicable to a focussed group of datasets
- ☒ Machine learning is a way to derive predictive insights from data
- ☐ Machine learning is a way to generate data needed for analytics

Yes, the answer is correct.

Score: 1

Feedback:

*Machine learning is a way to derive 'predictive' insights from data. You do this using algorithms that are relatively general and applicable to a wide variety of datasets*

Accepted Answers:

*Machine learning is a way to derive predictive insights from data*

2) Which of the following statements best describes Cloud AutoML? **1 point**

- ☐ Enables users with no ML expertise to deploy models specific to their business needs
- ☒ Enables users with limited ML expertise to train models specific to their business needs
- ☐ Enables users with limited ML expertise to deploy pre-trained models specific to their business needs

**the Cloud right?****Week 5 : It helps to Network****Week 6 : It helps to Network (continued)****Week 7 : Let Google keep an eye on things. You have the data, but what are you doing with it****Let machines do the work**

- ☐ Introduction (unit?unit=112&lesson=113)
- ☒ Introduction to ML (unit?unit=112&lesson=114)
- ☒ ML and GCP (unit?unit=112&lesson=115)
- ☒ Building Bespoke ML models [With Lab] (unit?unit=112&lesson=116)
- ☒ Cloud AutoML [With Lab] (unit?unit=112&lesson=117)
- ☒ Googles Pre-trained ML APIs [With Labs] (unit?unit=112&lesson=118)
- ☒ Summary (unit?unit=112&lesson=119)

- ☐ Enables users with extensive ML expertise to train models specific to their business needs.

Yes, the answer is correct.

Score: 1

Feedback:

*Cloud AutoML is a suite of machine learning products that enables developers with limited machine learning expertise to train high-quality models specific to their business needs. It relies on Google's state-of-the-art transfer learning and neural architecture search technology. Cloud AutoML helps customers with limited ML experience to build models based on their data*

Accepted Answers:

*Enables users with limited ML expertise to train models specific to their business needs*

3) True or False. The Cloud Translation API supports language detection in cases where the source language is unknown. **1 point**

- ☒ True  
☐ False

Yes, the answer is correct.

Score: 1

Feedback:

*The answer is True. The Cloud Translation API can dynamically translate text between thousands of language pairs. The Cloud Translation API lets websites and programs to programmatically integrate with the translation service The Cloud Translation API supports language detection even in cases where the source language is unknown*

Accepted Answers:

*True*

4) Which of the following services can help you develop ML projects from ideation to production and deployment quickly using tools like tensorflow? **1 point**

- ☐ Google Machine Learning APIs  
☐ Cloud AutoML  
☐ Cloud Dataproc  
☒ AI Platforms

Yes, the answer is correct.

Score: 1

Feedback:

*AI platform is a service that can manage resources for the ML models you build using TensorFlow.*

Accepted Answers:

*AI Platforms*

5) Which statement best describes TensorFlow? **1 point**

- ☐ A proprietary language for building machine learning models  
☐ Scikit-learn at scale.  
☒ An open source language to build machine learning models.  
☐ Spark ML at scale

Yes, the answer is correct.

Score: 1

lesson=120)

☐ Google Cloud  
Computing  
Foundations  
Course : Week  
8 Feedback  
Form  
(unit?unit=112&  
lesson=121)

☒ Quiz :  
Assignment 8  
(assessment?name=132)

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Feedback:

*TensorFlow was developed by Google and has become the leading open-source tool for building ML models*

Accepted Answers:

*An open source language to build machine learning models.*

6) Which of the following video format annotations are supported in Cloud Video Intelligence API?

**1 point**

- ☒ .MOV  
☐ .MPEG4  
☐ .MP4  
☐ .AVI  
☐ All of the above

No, the answer is incorrect.

Score: 0

Feedback:

*The Cloud Video Intelligence API is similar to the Vision API, where it can perform a variety of actions including logo detection, facial recognition, text discovery, except the Cloud Video Intelligence API can provide this same feedback on video. The Video Intelligence API supports common video formats, including .MOV, .MPEG4, .MP4, .AVI, and the formats decodable by ffmpeg.*

Accepted Answers:

*All of the above*

7) There are two APIs that apply to speech. If you need to create a lifelike interaction with users to support a customer service application, which of the two

**1 point**

Speech APIs would you use?

- ☐ Cloud Text-to-Speech API  
☒ Cloud Speech-to-Text API

No, the answer is incorrect.

Score: 0

Feedback:

*With the Cloud Text-to-Speech API, you can create lifelike interactions with users that transform customer service, device interaction, and other applications*

Accepted Answers:

*Cloud Text-to-Speech API*

8) True or False. Machine learning uses standard algorithms because it allows you to use the same code on different datasets to generate different models.

**1 point**

- ☒ True  
☐ False

Yes, the answer is correct.

Score: 1

Feedback:

*The answer is True. ML allows for the use of standard algorithms for generating different models including classification, and linear regression models. The same code can be used on different*

*datasets promoting code reuse*

Accepted Answers:

*True*

9) You have a requirement to identify parts of speech from unstructured text. Which of the **1 point** following machine learning APIs should you use for this purpose?

- ☐ Cloud Translation API
- ☐ Cloud Speech-to-Text API
- ☐ Cloud Text-to-Speech API
- ☒ Cloud Natural Language API

Yes, the answer is correct.

Score: 1

Feedback:

*The Cloud Natural Language API can do syntax analysis, breaking down sentences into tokens, identifying nouns, verbs, adjectives, and other parts of speech, and figuring out the relationships among the words.*

Accepted Answers:

*Cloud Natural Language API*

10) True or False. Facial detection and facial recognition are the key capabilities of the Cloud Vision API used to detect what an image is and classify it. **1 point**

- ☐ True
- ☒ False

Yes, the answer is correct.

Score: 1

Feedback:

*The answer is False. While facial detection can detect when a face appears in photos, facial recognition isn't supported and Google doesn't store facial detection information on any Google server*

Accepted Answers:

*False*