Congratulations! You passed!

Grade received 100% **Latest Submission Grade** 100% **To pass** 80% or higher

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1. If I put a dropout parameter of 0.2, how many nodes will I lose? 1 / 1 point

- (●) 20% of them
- ( ) 2% of them
- ( ) 20% of the untrained ones
- ( ) 2% of the untrained ones

Correct
Spot on!

2. Why is transfer learning useful? 1 / 1 point

- ( ) Because I can use all of the data from the original training set
- ( ) Because I can use all of the data from the original validation set
- (●) Because I can use the features that were learned from large datasets that I may not have access to
- ( ) Because I can use the validation metadata from large datasets that I may not have access to

Correct
Exactly!

3. How did you lock or freeze a layer from retraining? 1 / 1 point

- ○ tf.freeze(layer)
- ○ tf.layer.frozen = true
- ○ tf.layer.locked = true
- ◉ layer.trainable = false

Correct
Well done!

4. How do you change the number of classes the model can classify when using transfer learning? (i.e. the original model handled 1000 classes, but yours handles just 2) 1 / 1 point

- ○ Ignore all the classes above yours (i.e. Numbers 2 onwards if I'm just classing 2)
- ○ Use all classes but set their weights to 0
- ◉ When you add your DNN at the bottom of the network, you specify your output layer with the number of classes you want
- ○ Use dropouts to eliminate the unwanted classes

Correct
Good job!

5. Can you use Image Augmentation with Transfer Learning Models? 1 / 1 point

- ○ No, because you are using pre-set features
- ◉ Yes, because you are adding new layers at the bottom of the network, and you can use image augmentation when training these

Correct
Correct!

6. Why do dropouts help avoid overfitting? 1 / 1 point

- ◉ Because neighbor neurons can have similar weights, and thus can skew the final training
- ○ Having less neurons speeds up training

Correct
That's right!

7. What would the symptom of a Dropout rate being set too high? 1 / 1 point

- ◉ The network would lose specialization to the effect that it would be inefficient or ineffective at learning, driving accuracy down
- ○ Training time would increase due to the extra calculations being required for higher dropout

Correct
Indeed!

8. Which is the correct line of code for adding Dropout of 20% of neurons using TensorFlow

1 / 1 point

- ○ tf.keras.layers.Dropout(20)
- ○ tf.keras.layers.DropoutNeurons(20),
- ◉ tf.keras.layers.Dropout(0.2),
- ○ tf.keras.layers.DropoutNeurons(0.2),

✓ Correct
You've got it!