## Week 3 Quiz

latest submission grade 100%

1.	If I put a dropout parameter of 0.2, how many nodes will I lose?	1/1 point
	<ul><li>20% of them</li></ul>	
	2% of them	
	20% of the untrained ones	
	2% of the untrained ones	
	✓ Correct	
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	

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	
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	

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	
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	
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	
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	