Congratulations! You passed!

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Retake the assignment in 7h 59m

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1. What does flow_from_directory give you on the ImageDataGenerator? 1 / 1 point

- The ability to easily load images for training
- The ability to pick the size of training images
- The ability to automatically label images based on their directory name
- All of the above (selected)

Correct
That's right! The flow_from_directory method takes the path to a directory & generates batches of augmented data.

2. If my Image is sized 150x150, and I pass a 3x3 Convolution over it, what size is the resulting image? 1 / 1 point

- 450x450
- 153x153
- 150x150
- 148x148 (selected)

Correct
Nailed it! Applying a 3x3 convolution would result in a 148x148 image.

3. If my data is sized 150x150, and I use Pooling of size 2x2, what size will the resulting image be? 1 / 1 point

- 75x75 (selected)
- 300x300
- 149x149
- 148x148

Correct
Nailed it! Applying 2x2 pooling would result in a 75x75 image.

4. If I want to view the history of my training, how can I access it? 1 / 1 point

- Use a model.fit_generator
- Create a variable 'history' and assign it to the return of model.fit or model.fit_generator (selected)
- Download the model and inspect it
- Pass the parameter 'history=true' to the model.fit

Correct
Exactly! The History.history attribute is a record of training loss values and metrics values at successive epochs.

5. What's the name of the API that allows you to inspect the impact of convolutions on the images? 1 / 1 point

- The model.layers API (selected)
- The model.convolutions API
- The model.images API
- The model.pools API

Correct

6. When exploring the graphs, the loss levelled out at about .75 after 2 epochs, but the accuracy climbed close to 1.0 after 15 epochs. What's the significance of this? 1 / 1 point

- There was no point training after 2 epochs, as we overfit to the validation data
- There was no point training after 2 epochs, as we overfit to the training data (selected)
- A bigger training set would give us better validation accuracy
- A bigger validation set would give us better training accuracy

Correct
Correct! Those values indicate overfitting to the training data.

7. Why is the validation accuracy a better indicator of model performance than training accuracy? 1 / 1 point

- It isn't, they're equally valuable
- There's no relationship between them
- The validation accuracy is based on images that the model hasn't been trained with, and thus a better indicator of how the model will perform with new images. (selected)
- The validation dataset is smaller, and thus less accurate at measuring accuracy, so its performance isn't as important

Correct

8. Why is overfitting more likely to occur on smaller datasets? 1 / 1 point

- Because in a smaller dataset, your validation data is more likely to look like your training data

- ○ Because there isn't enough data to activate all the convolutions or neurons
- ○ Because with less data, the training will take place more quickly, and some features may be missed
- ◉ Because there's less likelihood of all possible features being encountered in the training process.

Correct
Undoubtedly! A smaller size decreases the likelihood that the model will recognize all possible features during training.