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

- ○ Pass the parameter 'history=true' to model.fit
- ◉ Create a variable 'history' and assign it to the return of model.fit
- ○ Download the model and inspect it
- ○ Use model.fit to train the model

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

2. If my image is sized 150x150, and I pass a 3x3 convolution over it, what size is the resulting image? Assume you're using the default settings of the Conv2D layer just like in the lectures. 1 / 1 point

- ○ 450x450
- ○ 150x150
- ○ 153x153
- ◉ 148x148

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

3. What does the image_dataset_from_directory utility allow you to do? Select the best answer. 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

Correct
That's right! It can do all the things mentioned above.

4. When exploring the graphs, the validation accuracy leveled out at about .75 after 2 epochs, but the training 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
- ○ A bigger training set would give us better training accuracy
- ○ A bigger validation set would give us better training accuracy

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

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

- ○ 300x300
- ○ 148x148
- ○ 149x149
- ◉ 75x75

Correct

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

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

- ○ The model.images API
- ◉ The model.layers API
- ○ The model.pools API
- ○ The model.convolutions API

Correct

7. Suppose you want to evaluate a model's performance on unseen data. Why is validation accuracy a better metric 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 wasn't trained on, and thus a better indicator of how the model will perform on new images.
- ○ 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.