

1. What HTML5 tag is used to show the contents of a webcam?

1 / 1 point

- ☐ <webcam>
- ☐ <pre>
- ☒ <video>
- ☐ <div>

✓ Correct

2. If I initialize a webcam object like this:

1 / 1 point

```
1  const webcam = new Webcam(document.getElementById('wc'));
```

Which code will then start the webcam feed to render in the page?

☒

```
1  async function init(){await webcam.setup();}
```

3. If I want to create a model that uses transfer learning, with everything in mobilenet up to layer 'foo', and my layers afterwards, how do I do it? Assume this code was used to find layer 'foo'

1 / 1 point

```
1  const layer = mobilenet.getLayer('foo');
```

☒

```
1  return tf.model({inputs: mobilenet.inputs, outputs: layer.output});
```

4. If I am transfer learning from a mobilenet, and I want to use my own dense layers after the mobilenet ones, what is the correct syntax to use at <INSERT CODE HERE>

1 / 1 point

```
1 model = tf.sequential({
2   layers: [
3     tf.layers.flatten(<INSERT CODE HERE>),
4     tf.layers.dense({ units: 100, activation: 'relu'}),
5     tf.layers.dense({ units: 3, activation: 'softmax'})
6   ]
7 });
```

- ☐ 1 `{inputShape: mobilenet.outputs[0].slice(1)}`
- ☒ 1 `{inputShape: mobilenet.outputs[0].shape.slice(1)}`

5. If I am using a mobilenet with my own DNN for transfer learning in TensorFlow.js, how do I get a prediction for an image?

- ☒ Get a set of prediction embeddings from mobilenet and pass them to your model
- ☐ Just pass the prediction to your own model, it already includes the mobilenet layers
- ☐ Get a set of prediction embeddings from your model and pass them to mobilenet
- ☐ Just pass the prediction to mobilenet, because you've already added your layers to it

✓ Correct

6. If you have a set of predictions returned from `model.predict(something)` and you want to take the one with the largest probability, how do you do it?

- ☒ `predictions.as1D().argMax()`, then look at the 0th element
- ☐ `predictions.argmax()` then look at the 0th element
- ☐ `predictions[0]` contains the one with the largest probability
- ☐ `predictions.sort()` then look at the 0th element

✓ Correct

7. If you already have a function called `predict()` in a class called 'foo' which captures a frame from the webcam and predicts it, what's the best way to call it, particularly if you plan to do continuous predictions?

1 / 1 point

☒ 1 `tf.tidy(() => foo.predict());`

✓ Correct

8. Why is transfer learning a huge advantage, particularly when training in the browser?

1 / 1 point

- ☒ It allows you to use already-learned convolutions for distinguishing features, saving training time
- ☐ It gives you a smaller model
- ☐ It allows you to use already-learned convolutions for distinguishing features, saving space
- ☐ It lets you skip training altogether

✓ Correct