

## ✔ Congratulations! You passed!

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Retake the  
assignment in **7h**  
**53m**

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item**

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

1 / 1 point

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

✔ Correct

2. If I initialize a webcam object like this:

0 / 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.go();}async function init(){await webcam.go();}
```

☐

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

☐

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

☐

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

✘ Incorrect

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.input, outputs: layer.outputs});
```

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

✓ Correct

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

✓ Correct

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?

1/1 point

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

✓ 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?

1 / 1 point

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

✓ 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());`

☐ `1 tf.tidy(foo.predict());`

☐ `1 foo.predict(); tf.tidy();`

☐ `1 foo.predict(tf.tidy());`

✓ Correct

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

1 / 1 point

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

✓ Correct