Congratulations! You passed!

TO PASS 80% or higher

Keep Learning

Retake the assignment in **7h 59m**

GRADE
100%

Graded Quiz: Test your Project understanding

LATEST SUBMISSION GRADE

100%

1. When creating a custom layer class, we inherited the Keras' Layer class. Which function needs to have the layer's main logic? — 1 / 1 point

- ○ compute_output_shape()
- ◉ call()
- ○ build()

Correct

Correct! The call function needs to have the main logic of the layer.

2. The trainable parameters can be added in the build() function. True or False? — 1 / 1 point

- ◉ True
- ○ False

Correct

Correct! For example, we added the alpha parameter in the build function.

3. Let's say we want to create a similar layer to what we implemented in the hands on project, but we want to have different alpha values for each of the nodes (hidden units) from the preceding layer (which, we know, is a dense layer). Select the option that achieves this: — 1 / 1 point

○
```
def build(self, input_shape):
    self.alpha = self.add_weight(name='alpha', shape=(1,), initializer='zeros',
      trainable=True )
    super(ParametricRelu, self).build(input_shape)
```

◉
```
def build(self, input_shape):
    self.alpha = self.add_weight(name='alpha', shape=(input_shape[1],),
      initializer='zeros', trainable=True )
    super(ParametricRelu, self).build(input_shape)
```

Correct

Correct! We need to use the second dim of input_shape to find out the number of nodes from preceding layer. This way, alpha is going to be a n-dim vector where n is the number of nodes from the preceding layer.

4. The custom layer that we implemented in the hands on project (ParametricRelu) can be used in a Keras model as: — 1 / 1 point

```
model = tf.keras.models.Sequential()
model.add(tf.keras.layers.Dense(16, activation='relu', input_shape=(32,)))
model.add(ParametricRelu())
```

True or False?

- ○ False. The activation function is already set in the Dense layer and we can't set it again with the ParametricRelu layer.

- [x] True

Correct

Correct. The activation in the Dense layer is set to linear, which simply means that there is no activation function.

5. Does our implementation of Parametric ReLU perform better or worse than ReLU? **1 / 1 point**

- [ ] Worse
- [x] Can't say
- [ ] Better

Correct

Correct. It's not necessarily better or worse than ReLU