tf.contrib.gan.losses.wargs.least_squares_discriminator_loss

```
least_squares_discriminator_loss(
    discriminator_real_outputs,
    discriminator_gen_outputs,
    real_label=1,
    fake_label=0,
    real_weights=1.0,
    generated_weights=1.0,
    scope=None,
    loss_collection=tf.GraphKeys.LOSSES,
    reduction=losses.Reduction.SUM_BY_NONZERO_WEIGHTS,
    add_summaries=False
)
```

Defined in `tensorflow/contrib/gan/python/losses/python/losses_impl.py`.

Least squares generator loss.

This loss comes from `Least Squares Generative Adversarial Networks` (https://arxiv.org/abs/1611.04076).

L = 1/2 * (D(x) - `real`) **2 + 1/2 * (D(G(z)) -** `fake_label`**)** 2

where D(y) are discriminator logits.

Args:

- `discriminator_real_outputs`: Discriminator output on real data.
- `discriminator_gen_outputs`: Discriminator output on generated data. Expected to be in the range of (-inf, inf).
- `real_label`: The value that the discriminator tries to output for real data.
- `fake_label`: The value that the discriminator tries to output for fake data.
- `real_weights`: Optional `Tensor` whose rank is either 0, or the same rank as `discriminator_real_outputs`, and must be broadcastable to `discriminator_real_outputs` (i.e., all dimensions must be either `1`, or the same as the corresponding dimension).
- `generated_weights`: Same as `real_weights`, but for `discriminator_gen_outputs`.
- `scope`: The scope for the operations performed in computing the loss.
- `loss_collection`: collection to which this loss will be added.
- `reduction`: A `tf.losses.Reduction` to apply to loss.
- `add_summaries`: Whether or not to add summaries for the loss.

Returns:

A loss Tensor. The shape depends on `reduction`.

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