tf.losses.cosine_distance

```
cosine_distance(
    labels,
    predictions,
    dim=None,
    weights=1.0,
    scope=None,
    loss_collection=tf.GraphKeys.LOSSES,
    reduction=Reduction.SUM_BY_NONZERO_WEIGHTS
)
```

Defined in `tensorflow/python/ops/losses/losses_impl.py`.

Adds a cosine-distance loss to the training procedure.

Note that the function assumes that `predictions` and `labels` are already unit-normalized.

Args:

- `labels`: `Tensor` whose shape matches 'predictions'
- `predictions`: An arbitrary matrix.
- `dim`: The dimension along which the cosine distance is computed.
- `weights`: Optional `Tensor` whose rank is either 0, or the same rank as `labels`, and must be broadcastable to `labels` (i.e., all dimensions must be either `1`, or the same as the corresponding `losses` dimension).
- `scope`: The scope for the operations performed in computing the loss.
- `loss_collection`: collection to which this loss will be added.
- `reduction`: Type of reduction to apply to loss.

Returns:

Weighted loss float `Tensor`. If `reduction` is `NONE`, this has the same shape as `labels`; otherwise, it is scalar.

Raises:

- `ValueError`: If `predictions` shape doesn't match `labels` shape, or `dim`, `labels`, `predictions` or `weights` is `None`.

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