tf.contrib.estimator.multi_label_head

```
multi_label_head(
    n_classes,
    weight_column=None,
    thresholds=None,
    label_vocabulary=None,
    name=None
)
```

Defined in `tensorflow/contrib/estimator/python/estimator/head.py`.

Creates a `_Head` for multi-label classification.

Multi-label classification handles the case where each example may have zero or more associated labels, from a discrete set. This is distinct from `multi_class_head` which has exactly one label per example.

Uses `sigmoid_cross_entropy` loss averaged over classes. Expects labels as a multi-hot tensor of shape `[batch_size, n_classes]`, or as an integer `SparseTensor` of class indices.

Args:

- `n_classes`: Number of classes, must be greater than 1 (for 1 class, use `binary_classification_head`).
- `weight_column`: A string or a `_NumericColumn` created by `tf.feature_column.numeric_column` defining feature column representing weights. It is used to down weight or boost examples during training. It will be multiplied by the loss of the example.
- `thresholds`: Iterable of floats in the range `(0, 1)`. Accuracy, precision and recall metrics are evaluated for each threshold value. The threshold is applied to the predicted probabilities, i.e. above the threshold is `true`, below is `false`.
- `label_vocabulary`: A list of strings represents possible label values. If it is not given, that means labels are already encoded as integer within [0, n_classes) or multi-hot Tensor. If given, labels must be SparseTensor string type and have any value in `label_vocabulary`. Also there will be errors if vocabulary is not provided and labels are string.
- `name`: name of the head. If provided, summary and metrics keys will be suffixed by `"/" + name`.

Returns:

An instance of `_Head` for multi-label classification.

Raises:

- `ValueError`: if `n_classes` or `thresholds` is invalid.

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