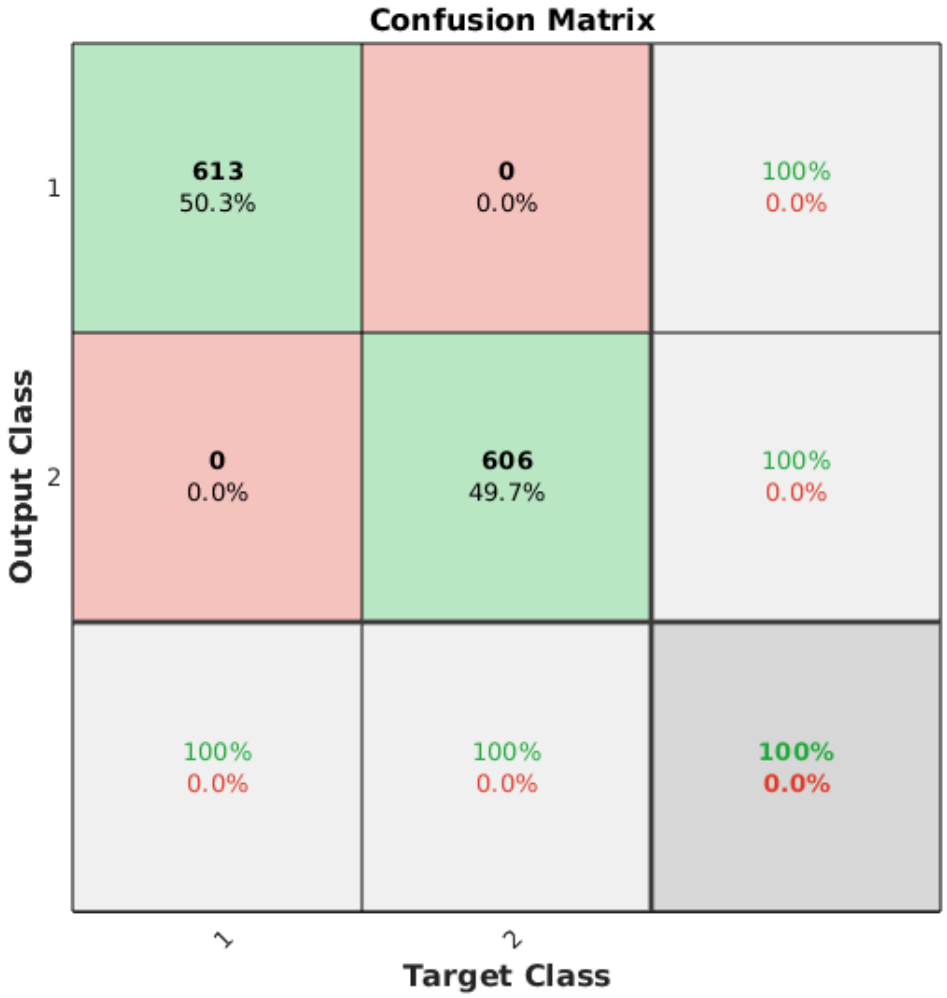
Final Exam Problem 2

Bryn Louise

```
% Load Data
X = load('mushrooms.mat');

% Define Targets
T = X.T;

% Define Data
X = X.X;

% Divide data and targets into Training and Testing sets
[m,n] = size(X);

P = 0.70;
idx = randperm(n);
XTrain = X(:, idx(1:round(P*n)));
XTest = X(:, idx(round(P*n)+1:end));

TTrain = T(:, idx(1:round(P*n)));
TTest = T(:, idx(round(P*n)+1:end));
```

Train a feedforward Network

```
% Create a 22-10-2 network
net = feedforwardnet([10]);
% Train network
net = train(net, XTrain, TTrain);
% Get outputs from test data
y = sim(net, XTest);
% Plot confusion matrix using testing set
plotconfusion(TTest, y);
```



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