Robert Herriott Undergraduate Machine Learning Spring 2014 Candidate Elimination

Version space from one of the folds(The program will show you the version space of the final fold every time you run it):

- <?, Warm, Normal, Weak,?,?>
- <?, Warm,?, Weak,?,?>
- <?, Warm, Normal, ?, ?, ?>
- <?, Warm,?,?,?,?>

Running the program is the same as my previous ones, just execute the jar and follow the instructions. There are no special library requirements or anything.

My approach was to just follow the algorithm exactly, I started like you suggested by building small functions like those to check consistency with positives and negatives, then some to generate generalizations and specializations, and some to check consistency between hypotheses in the middle of the version space and those in the boundaries, in the end I encapsulated enough so that my algorithm looks extremely similar to the one in the power point.

My program frequently scores 100/100 on all 10 of the randomly picked folds, but sometimes 99/100's do show up, so the average accuracy is somewhere around .999, the confusion matrix for the results of all 10 folds of a run of my program is as follows, on this time with the randomly picked folds it managed to score all 100/100's.

Guessed Positive	Guessed Negative	
474	0	True Positive
0	526	True Negative

I didn't have any problems I was unable to solve, it seems to work just fine.