This guide assumes that new results data is being imported into the workbook for testing purpose.

NOTE: if working with a i5, 3.5GHz processor equivalent or lower, it is useful to disable automatic calculation updates (Formulas-ribbon > Calculation Options > Manual)

TRANSFER DATA

1. In Scenarios-worksheet, clear all data in columns A through H. Do not delete headers.
2. Ensure that incoming data has at least the following attributes:
   1. User
   2. Song
   3. Recommended Song
   4. Applicable threshold (confidence, probability, rank)
   5. Actually Played (as binary variable where 1 indicates “played”)
3. Ensure that all incoming data are aligned with A through H and past in the new data as values (Home-ribbon > Paste Special > Values). Be careful not to overwrite columns I onwards.

TREAT DATA

1. Concatenate User and Recommended Song in column A (“PK”, primary key). NOTE: it is advisable to then copy column A and paste it in column A as values so that the values remain but Excel no longer has to treat these data as formulae.
2. Sort data on PK [Ascending]; Actually Played [Largest to Smallest].
3. Update column J (“Recommendations Made”) to specify the correct column in which the threshold is located and the appropriate relationship with the threshold (“>”, “>=”, “<”, “<=”)
4. Copy-down the formulae in columns I and J so that they cover the full range of the data
5. Create reference column for False Negatives:
   1. Copy column A (“PK”) into a new worksheet.
   2. Remove all duplicates (Data-ribbon > Data Tools Panel > Remove Duplicates)
   3. In FalseNegatives\_Scenarios-worksheet, clear out data in column A and paste in data from step 7 b.
   4. Update the VLOOKUP formula in Column B to reference the correct number of rows in Scenarios-worksheet
   5. Copy-down the VLOOKUP formula in Column B to cover the entire range of the data in Column A of the FalseNegatives\_Scenarios-worksheet
6. Update the formula in False Negative box on the confusion matrix (Scenarios-worksheets, cell O4), with the correct number of unique User-Song combinations that had been fed to the algorithm (this figure will be derived from the Driver Table used in the process of generating the testing results).

NOTE: depending on the rules generated by an algorithm, not every song would have had a recommendation generated for it. Therefore, this number cannot be derived by finding the unique User-Song combinations in the results set that has been imported here (Steps 1 through 3) as it might understate the number of unique User-Song combinations fed to the algorithm)

GENERATE SCENARIO OUTPUT

NOTE: if automatic calculation updates had been disable, it is advisable to update calculations at this stage to ensure that there are no errors found.

1. Update the Minimum Threshold (Scenarios-worksheet, cell M16) to the desired value (and commit the calculation if needed). The values in the confusion matrix and column M will update.