

Lab report for assignment 10

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1. Question:

Audio collection based on the tags (related to your project)

a. Training Datasets (audio data from smart devices or online sound repositories such as

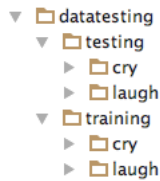
<https://www.freesound.org/>)

b. Testing Datasets (audio data from smart devices)

Description:

Here, we defined two categories: laugh and cry. Training datasets and testing data were gotten from <https://www.freesound.org/>. These file were put into folder “datatesting”

Screenshots:



2. Question:

Audio Classification based on the categories related to your project.

Description:

Audio Classification was done by weka feature extraction.

Screenshots:

```
===== Evaluating on filtered (training) dataset =====
Correctly Classified Instances      8           57.1429 %
Incorrectly Classified Instances    6           42.8571 %
Kappa statistic                     0
Mean absolute error                 0.4945
Root mean squared error            0.5336
Relative absolute error             100 %
Root relative squared error        106.9196 %
Total Number of Instances          14

=== Detailed Accuracy By Class ===
          TP Rate  FP Rate  Precision  Recall  F-Measure  ROC Area  Class
          0         0         0           0         0         0.417  cry
          1         1         0.571       1         0.727   0.417  laugh
Weighted Avg.   0.571   0.571   0.327     0.571   0.416   0.417

===== Confusion Matrix =====
0.0  6.0
0.0  8.0
@relation AudioSamples

@attribute Zero_Crossings numeric
@attribute LPC numeric
@attribute class {cry,laugh}

@data
5020,-0.986652,7
===== Classified instance =====
Class predicted: laugh
```

3. Question:

Notification to smartphone/smartwatch.

Description:

When the testing data is classified, the result will be sent to the device.

Screenshots:

