



LAB 4

BIG DATA ANALYTICS

Lab4 Assignment

1. Enhance the Android App you developed from Lab 3 by adding the following features
 - a. Provide a Save File option once you invoke the HBASE Retrieval operation
 - b. Add an Activity Recognition option to generate a report. You can use the motion recognition Web

The following screenshot displays our android application used for both lab3 and lab4 requirements. For lab4, the following buttons provided to complete the gestures training and testing to generate a report:

- Train File: used to convert the input files into sequence files
- Test Data: will generate a gesture recognition report with probability values.



Figure 1. Application interface (lab3 and lab4)

After segmenting the input data files and converting them into sequence files, we added the activity recognition button to our application from lab3 to generate a report. The button calls the web service using the following links for three different input files:

- Bottom-To-Top gesture

<http://134.193.136.127:8080/HMMWS/jaxrs/generic/TrainFileOperation/-home-group4-GBTT.txt/-home-group4-GBTT.seq>

- Right-To-Left Gesture

<http://134.193.136.127:8080/HMMWS/jaxrs/generic/TrainFileOperation/-home-group4-GRTL.txt/-home-group4-GRTL.seq>

- Left-To-Right Gesture

<http://134.193.136.127:8080/HMMWS/jaxrs/generic/TrainFileOperation/-home-group4-GLTR.txt/-home-group4-GLTR.seq>

- Test File of different combined gestures

<http://134.193.136.127:8080/HMMWS/jaxrs/generic/TrainFileOperation/-home-group4-TestGharib.txt/-home-group4-TestGharib.seq>

Then the three input sequence files and the test sequence files are used in the following URL that provide the report web-service and recognizes different gestures with a probability report

<http://134.193.136.127:8080/HMMWS/jaxrs/generic/HMMTrainingTest/-home-group4-GBTT.seq:-home-group4-GRTL.seq:-home-group4-GLTR.seq/btp:rtol:ltor/-home-group4-TestGharib.seq>

...The End...